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A Descriptive Study Of Adolescent Coping

by

Michael W. Huston

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled, "A Descriptive Study Of Adolescent Coping" submitted by Michael W. Huston in partial fulfillment of the requirements for the degree of Master of Science.

B. Hiebert

Dr. Bryan Hiebert, Supervisor
Department of Educational Psychology

K. Magnusson

Dr. Kris Magnusson
Department of Educational Psychology

K. Skau

Dr. Kathy Skau
Faculty of Education

Date: February 25, 1992

ABSTRACT

This study explores adolescents' experience of the demands they face and the ways they attempt to cope with those demands. In all, 278 secondary students enrolled in Career and Life Management 20 (CALM 20) participated. In response to the Important Situations Questionnaire (ISQ), participants described the most demanding situations they faced, the feelings they experienced in these situations, their thoughts about why the situations they listed were demanding, how they attempted to cope both with the situations and the associated feelings, their perceptions of the effectiveness of coping efforts, and their attributions regarding the effectiveness or ineffectiveness of coping efforts. In addition, participants completed the Coping Resources Inventory for Stress (CRIS), a standardized measure of individuals' perceptions of their own coping resources.

Of all the situations perceived to be most demanding, school related problems were listed most frequently, followed by situations related to family, part-time job, social-life, relationships, sports, other, future, money, concerns about self, clubs, and death. The feelings most commonly experienced in these situations were gradients of anger, fear, and sadness. The main reasons cited for why the situations were demanding emphasized demand characteristics, especially the size and unpleasantness of the demands faced. Attempts to cope with situations emphasized stressor

management strategies whereas those directed at feelings emphasized stress management strategies. Overall, attempts at coping tended to be perceived as effective and nonattempts tended to be perceived as ineffective. In appraising the effectiveness of coping attempts, adolescents seemed to be particularly concerned with the outcome associated with their efforts. Group results for the CRIS suggested that the sample had low coping resources in areas useful for managing numerous and overwhelming demands.

Overall results support the use of focused coping interventions to help adolescents deal more effectively with the demands they face.

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TABLE OF CONTENTS

	Page
APPROVAL PAGE.....	ii
ABSTRACT.....	iii
ACKNOWLEDGEMENTS.....	v
TABLE OF CONTENTS.....	vi
LIST OF TABLES.....	viii
LIST OF FIGURES.....	ix
Chapter One Introduction.....	1
The Problem.....	2
Chapter Two Literature Review.....	4
Adolescent Stress Research:	
An Historical Context.....	4
Demands Of Adolescence.....	5
Developmental Changes.....	6
Biological development.....	6
Cognitive development.....	7
Social development.....	8
Common Problems Of Adolescents.....	9
Stress And Coping.....	11
Stress.....	11
Demands and resources.....	13
Appraisal mechanisms.....	13
Coping.....	15
Stress And Adolescence.....	17
Research Methodology.....	18
Implications of the transactional model for intervention and research with adolescents.	20
Research Questions.....	22
Chapter Three Methodology.....	23
Sample.....	23
Dependent Measures.....	24
The Important Situations Questionnaire.....	24
The Coping Resources Inventory for Stress..	25
Validity and reliability of the CRIS.....	26
Procedure.....	27
Test administration.....	27
Data reduction.....	27
ISQ Coding Taxonomy.....	28
Demands.....	28
Perceptions about demands.....	30
Feelings.....	31

Coping.....	31
Perceptions about coping.....	33
CHAPTER FOUR RESULTS.....	36
Coping Resource Effectiveness.....	36
Important Situations Questionnaire.....	38
Demands Faced By Adolescents.....	38
Adolescent Coping.....	44
Summary Of Results.....	50
Research Question 1.....	50
Research Question 2.....	50
Research Question 3.....	50
Research Question 4.....	51
Research Question 5.....	52
Research Question 6.....	53
CHAPTER FIVE DISCUSSION.....	56
Implications.....	57
Strengths and Limitations Of This Study.....	60
Directions For Future Research.....	61
Summary.....	62
REFERENCES.....	64
APPENDICES.....	70
A. Important Situations Questionnaire.....	71
B. Teacher Consent Form.....	77
C. Parental Consent Form.....	80
D. Frequencies For ISQ Categories.....	83

LIST OF TABLES

TABLE	TITLE	PAGE
1	Sample Description: Crosstabulation of Age by Gender, Ethnicity, and Grade.....	24
2	CRIS Scale Means and Standard Deviations for Male (n = 113) and Female (n = 128) Adolescents.....	37
3	Frequency of Demands Cited by 262 Adolescents.....	39
4	Percentage of 262 Adolescents Citing Specific Demands.....	40
5	Frequency of Feelings Associated With Particular Situations.....	41
6	Adolescent Attributions about Why Situations Are Demanding.....	43
7	Frequency and Percentage of Strategies Used to Cope with Situations and Feelings.....	45
8	Frequency and Mean Effectiveness of Adolescent's Attempts at Coping with Demands.....	48
9	Adolescent Rationale For Coping Effectiveness/ Ineffectiveness.....	49

LIST OF FIGURES

FIGURE	TITLE	PAGE
1	ISQ Coding Categories.....	34

Chapter One

Introduction

Prior to the last 25 years, the study of adolescence has been subject to relative scientific neglect (Adelson & Doehrman, 1980). Recently however, interest in the study of adolescence has increased immensely and has resulted in increasing amounts of research (Berzonsky, 1983; Gfeller & Hundleby, 1990; Lerner, 1981). It is not surprising therefore to find an increasing emphasis on adolescent stress and coping.

The increasing study of adolescent stress and coping is timely. The role of life demands as an important factor in the development of stress related symptoms is well documented in adults (Lazarus & Folkman, 1984; Selye, 1974; Thoits, 1983). Adolescents living in today's world face greater numbers of stressors (Santrock, 1990) and manifest more stress related symptoms than their predecessors (Kaplan, Grossman, Landa, Shenker, & Weinhold, 1986). The ability of today's adolescent to cope with stress is of concern because stressful experiences tend not to disappear with the beginning of adulthood. In addition, early patterns of responsiveness to stress tend to be predictive of responsiveness at later ages (Petersen & Spiga, 1982). The same predictive relationship exists between earlier and later utilization of coping strategies (Berg, 1989). Therefore, educational interventions for adolescents are likely not only to aid adolescents in coping more effectively with the

demands they face, but the results of interventions made during adolescence are likely to be of some benefit to people of all ages.

Background knowledge about the demands typical adolescents face and the coping strategies that can be effective with these demands is a prerequisite for generating appropriate and effective intervention strategies. Thus, significant contributions to this topic are likely to be made by research which investigates the experience of typical adolescents. Acquiring more information about the nature of typical adolescent demands and respective coping efforts will increase the effectiveness of educational interventions aimed at helping adolescents cope more effectively with the demands they face.

The Problem

While the prevalence of research concerning adolescent stress and coping has increased recently, much of the research is somewhat problematic and many questions remain unanswered. Specifically, since stress research has emphasized adult experience, research on adolescents has, for the most part, emphasized adult-defined and, for adolescents, non-normative life experience (Stark, Spirito, Williams, & Guevremont, 1989). Life events normally encountered by typical adolescents and the ways in which adolescents attempt to cope with such events have been ignored to date. With respect to interventions, very little attention has been directed at helping adolescents cope with a wide range of

stressors or at preventing stress related problems (Hains & Szyjakowski, 1990; Segal, 1983). A prerequisite for designing such interventions is a thorough knowledge of the demands and coping strategies currently in place. In order to better assess and treat typical adolescents, research must attend both to the problems encountered and to the coping strategies utilized.

The study presented in this thesis attends to this research deficit. The study examines the demands adolescents face, the feelings experienced with the demands, and the ways such demands and feelings are coped with. In addition, adolescent's perceptions about the nature of such demands and respective attempts at coping are examined. Lastly, adolescent resources for dealing with demands are assessed using a standardized coping inventory.

This chapter has provided a brief context for those that follow. A review of the literature concerning adolescent stress and coping is presented in chapter two along with a statement of the research questions guiding this study. A description both of the sample and the methodology used in collecting and analyzing the data is provided in chapter three. The results of the study are presented in chapter four. A discussion of the results and conclusions arising therefrom are presented in chapter five. Implications for future research and educational interventions appear in the same chapter.

Chapter Two

Literature Review

The purpose of this chapter is to provide a review of literature relevant to adolescent stress and coping. A discussion of the historical context of adolescent stress research is presented first, followed by separate sections presenting current perspectives on adolescence and stress. A final section presents the implications of current perspectives on stress for research and intervention with adolescents. The chapter concludes by listing the research questions guiding this study.

Adolescent Stress Research: An Historical Context

Two main conceptions of adolescent stress have been offered over the years. Early explanations descended from a tradition which viewed adolescence as a period of inevitable "storm and stress" occurring in a predictable developmental sequence (e.g., Blos, 1962; Erikson, 1950; Hall, 1904). More recent theorists suggest that while adolescence poses different demands than other stages in the life cycle, it is not inherently more stressful than any other period (Bandura, 1964; Mitchell, 1989). Advocates of the storm and stress view cite the results of clinical studies which show adolescence to be a time of immense turmoil. Those opposed to this perspective suggest such results are attributable to a number of factors including: the misinterpretation of youth fads, the global acceptance of stereotypical mass media images, the generalization of results from research with

deviant adolescent populations, an over-emphasis on biological determinism, the imposition of prescriptive developmental stages, and the normalization of the status-quo by labelling adolescent behavior as deviant (Bandura, 1964; Mitchell, 1989). Lastly, the interpretation of developmental tasks and normative life events as overly traumatic occurrences has perpetuated traditional, stereotypic notions about the nature of adolescence (Mitchell, 1989).

Most scientific data are inconsistent with the idea that adolescence is inherently stressful (Bush & Simmons, 1987; Lerner & Galambos, 1984). Contemporary researchers view adolescence as a period posing unique and previously unexperienced demands for individuals with a developing, but perhaps still marginal repertoire of coping resources (Compas, 1987). Therefore, the need for continued research on conceptual issues in adolescent stress and coping is well recognized (Compas, 1987; Compas, Howell, Phares, Williams, & Ledoux, 1989; El-Shiekh, Klaczynski & Valiak, 1989; Matheny, Aycock, Pugh, Curlette, & Cannella, 1986; Patterson & McCubbin, 1987). This thesis is intended to address this need.

Demands Of Adolescence

Adolescents, like any other identifiable group, are susceptible to demands based on their gender, ethnicity, minority status, and in some cases their physical or mental disabilities. In addition, adolescents face certain developmental demands not present in other segments of the

population. These include biological, cognitive and social demands resulting from the adolescents particular stage of the life cycle. These developmental and life demands result in an identifiable array of problems commonly cited in the literature. This section will discuss the developmental demands faced by adolescents and then outline the common problems reported by adolescents.

Developmental Changes

Adolescents face a variety of developmental changes. These changes include handling rapid physical and psychological development, attaining increased independence from parents and family, integrating their social role with same and opposite sexed peers, achieving academic competence, orienting and possibly committing themselves to a career direction, and evolving a stable set of values which will guide them in adulthood (Mechanic, 1983; Patterson & McCubbin, 1987; White, 1989). Developmental tasks can be grouped into three categories: biological, cognitive, and social.

Biological development. Some portion of the adolescent transition is marked by considerable changes in hormone levels which result in an almost doubling of the normal bodily growth rate (Freiberg, 1987; Schiamberg, 1985). In this phase, adolescents experience numerous physical changes including an increase in body size, changes in body composition, and rapid development of reproductive organs and secondary sex characteristics. While the timing of these

changes varies from individual to individual, it is generally observed that girls start the growth spurt sooner than boys. Individuals facing these changes must not only deal with changes in their own body image, but with changing and sometimes unsupportive responses from family and peers as well. Growth spurts that occur much later or earlier than those of ones peers are likely to provoke even greater peer and family reaction, thereby providing even greater demands for the individual experiencing these changes (Santrock, 1990). In sum, physical changes constitute demands for adolescents because they require the individuals experiencing them to adapt both to the changes themselves, and to the reactions of others.

Cognitive development. Adolescence has been viewed as the period in which most individuals make a transition in cognitive style from the concrete operational stage to the formal operational stage (Schiemberg, 1985). This transition is marked by the emergence of new ways of processing information. Specifically, the metacognitive processes characteristic of the formal stage allow adolescents to think about their own thoughts and the thoughts of others (Santrock, 1990). Such awareness, because it permits adolescents to critically appraise their own and others' thoughts, often becomes a source of self-preoccupation, idealism, value conflicts, self-evaluation, and egocentrism. While knowledge of the transition to formal operations is widespread, it often is not thought of as a demand to which

adolescents must adjust. Further, it is important to note that research suggests that many individuals do not ever reach a formal operational stage of thinking (Lefrancois, 1976; Schiamberg, 1985), or if they do, it may not be until quite late in adolescence or early in adulthood (for reviews see Petersen & Spiga, 1982; Santrock, 1990; Schiamberg, 1985). Thus, adolescents may find friends and acquaintances who shared common ways of thinking may no longer be 'on the same wavelength', thus affecting the amount of social support a given adolescent may receive.

Social development. A number of changes in the adolescent's social world correspond with the changes in physical and cognitive development. The adolescent's enhanced cognitive sophistication may lead to an increase in parent-adolescent conflict (Santrock, 1990). For example, the adolescent is more likely to critically analyze and point out deficiencies in parental reasoning. Such analysis may lead to exchanges uncharacteristic of relationships between parents and younger children. In addition, parents are likely to be evaluated in comparison to adolescent notions of the ideal parent, thereby increasing the likelihood of parent/adolescent conflict.

At the same time parent-adolescent conflict is peaking, the role of the adolescent's peer group is also changing. The peer group functions both as a source of social comparison and as a source of information outside the family (Santrock, 1990). In an effort to attain and maintain peer

popularity, adolescents tend to conform to the norms established by their peers. While conformance can be the inspiration for negative or positive behavior, it is often a further source of parent-adolescent conflict. Other changes in the adolescent social world include the greater roles that friendships and dating play in individual lives.

Adolescence is undoubtedly a period wherein individuals face numerous developmental demands. Physically, the body changes, requiring individuals to form and integrate new self-images. Thought patterns tend to change so that individuals are increasingly aware of inconsistencies in their environment, especially with respect to their parents. Socially, the outside world, particularly the peer group, tends to replace the parents as a source of reference. All of these changes require some form of adaptation on the part of the individual experiencing them. Moreover, these changes tend to be experienced simultaneously, not only within individuals but by adolescents as a group. The universality of adolescent demand experience is supported by research investigating this topic.

Common Problems Of Adolescents

Adolescent problems emerging most frequently in contemporary research tend to be of an immediate, day to day nature. The most frequently cited demands are concerns about school, parents, friends, and boy/girl friends (Allen, 1989; Spirito, Overholster, & Stark, 1989; Stark et al., 1989). Autonomy, personal concerns (e.g., health, appearance, time,

money) and concerns about the future (e.g., career) are also commonly experienced (Allen, 1989; Posterski & Bibby, 1988; Violato & Holden, 1989). Results of recent studies in this area show that the concerns and problems of adolescents are more likely to be within their immediate tangible world and less likely to emphasize global issues like nuclear war, overpopulation, and pollution (Violato & Holden, 1989).

As mentioned previously, in addition to the developmental demands and the common problems that most adolescents experience, some individuals are likely to face certain demands due to their membership in other identifiable groups. Examples of these demands include such things as discrimination based on one's ethnicity, gender, or minority status, and extra or exacerbated demands due to one's physical or mental disability. Like changes in body image, discrimination is demanding not only because it entails coping with the reactions of others, but because it effects the way individuals think and feel about themselves.

Summary

Adolescents have historically been viewed as enduring a stage of immense and dysfunctional turmoil. Current perspectives view adolescence as a stage posing unique and previously unexperienced demands for individuals whose coping abilities are still developing. Specifically, adolescents face unique developmental demands which relate to changes in their biological, cognitive, and social functioning. In

addition, some individuals are likely to face other demands stemming from their membership in other identifiable groups.

Stress And Coping

As described in the previous section, adolescents face many unique demands. However, whether or not the demands are experienced as stressful by a particular individual depends on a number of factors. The transactional perspective of stress and coping provides a useful framework for understanding individual differences in stress experience. This section presents a transactional perspective on stress and coping. A comprehensive definition of the transactional model of stress is followed by a discussion of coping.

Stress

While many definitions of stress are possible (Mason 1975; Snyder, 1989) the transactional perspective of stress and coping is accepted by most writers in this area (Bailey & Clarke, 1989). This definition views stress as a multimodal response which has cognitive, behavioral, and physiological components. The transactional view suggests that stress arises when individuals perceive that the demands of a situation exceed their coping resources (Hiebert, 1987, 1988; Lazarus & Folkman, 1984; Matheny et al., 1986). Lazarus (Lazarus & Folkman, 1984) points out that the model is transactional in that an exchange takes place between the person and the environmental situation. A person perceives a situation, reacts to it, and by virtue of the reaction, changes the situation, which necessitates a further change in

the person's reaction, and so on. According to this definition, cognitive appraisal plays a critical role in mediating stress (Matheny et al., 1986). 'Cognitive appraisal' is the assessment of the demands one is facing, one's resources for coping with these demands, and the consequences associated with coping outcome. If individuals appraise the demands they are facing as exceeding their ability to cope, they will experience stress.

In accordance with this model, a thorough definition of stress must necessarily include: a) internal or external demands placed on the person, b) appraisal of the seriousness of the demands, the consequences of not coping with the demands, and the adequacy of one's resources or options for coping with the demands, and c) a multimodal response including cognitive, behavioral, and physiological components (Hiebert, 1988; Matheny et al., 1986).

There are several positive consequences for adopting the transactional perspective (Hiebert, 1988). This perspective suggests that stress resides neither in the environment nor in the person but in a relationship between the two. Accordingly, no environment is inherently stressful all the time or for all individuals. Moreover, such a perspective suggests logical avenues for controlling stress. Individuals can control stress by reducing the imbalance between demands and coping resources or by dealing directly with their behavioral, cognitive, or physiological responses. From this

perspective, there is no need to view individuals as passive victims of stress (Hiebert, 1988).

Demands and resources. A demand is a requirement that an organism adapt in some way to the environment (Lazarus & Folkman, 1984). In this sense, demands may include such things as an individual's desire for achievement or control, marriage, death of a relative or friend, or a change in occupational or academic status. Demands become stressors when individuals perceive a negative balance between the demands and coping resources for dealing with them.

Resources "...include those aspects of the self,...and social environment that facilitate or make possible successful adaptation to [demands]" (Compas, 1987; p. 394). Examples of resources include cognitive skills, social support, physical health, previous success in coping with stressors, optimism, sense of control, hardiness, availability of assistance in dealing with a situation, self-esteem, and life skills such as assertiveness and parenting skills.

Appraisal mechanisms. Appraisal of demands and resources is critical in determining whether or not a demand will become a stressor. Using information from past experience and the current situation, stimuli are evaluated as either irrelevant, benign, or negative (Lazarus & Folkman, 1984; Snyder, 1989). Irrelevant stimuli are those which have little or no consequence for the individual. Benign stimuli are those which are in some way beneficial, or at least not detrimental to the organism. Negative stimuli are those

which are perceived to have the potential to harm the individual in some way. A stimulus is more likely to elicit a stress response when one appraises it as negative (Hiebert, 1988; Lazarus & Folkman, 1984). Further, demands are likely to become stressors when one's appraisal mechanism either magnifies demands or diminishes resources (Matheny et al., 1986). The perception of a negative balance between demands and coping resources will result in the stress response even if coping resources actually are more than adequate for dealing with the demands one faces (Hiebert, 1988). When individuals are not able to cope with the demands they face but they perceive themselves as coping adequately, they are not likely to experience stress.

Individual appraisal mechanisms are affected by person and situation factors. Two important person factors are commitments and control beliefs (Lazarus & Folkman, 1984). Commitments are goals, activities, persons, and organizations etc., that an individual values and considers important. The more a commitment is valued, the more stress the individual is likely to face when it is threatened. Beliefs about control effect appraisal of situations. Persons with a strong sense of control over a situation tend to experience less stress. Stress levels are exacerbated when individuals feel they lack control and that any effort at coping would be futile.

Situational factors that effect stress are the predictability and timing of demands (Snyder, 1989).

Predictability is knowledge about when an event will occur. Individuals are less threatened by predictable events because they are more able to prepare for them. In addition, appraisal is influenced by the imminence, duration, and frequency of demands. As the temporal deadline of stressors (demands perceived as exceeding coping resources) moves closer, they tend to become more threatening and to elicit more stress (Lazarus & Folkman, 1984; Snyder, 1989). Similarly, individuals exposed to higher frequencies and durations of demanding stimuli will tend to experience more stress. In situations where stress levels are exacerbated, the accuracy of cognitive appraisal tends to decrease as stress levels increase (Hiebert, 1988). Accordingly, individuals experiencing greater levels of stress will tend to appraise events as more threatening and their coping resources as less adequate than they would otherwise (Hiebert, 1988).

Coping

Like stress, one of the major problems with defining coping is the number of definitions available (Krohne, 1986). Only a definition congruent with the transactional model will be presented here. Coping entails engaging in cognitive and behavioral actions in order to manage a demand (Hiebert, 1988; Lazarus & Folkman, 1984). One definition views coping as "any effort, healthy or unhealthy, conscious or unconscious, to prevent, eliminate or weaken stressors, or to tolerate their effects in the least hurtful manner" (Matheny

et al., 1986; p. 509). Viewed in this way, coping is the process of attempting to manage an experienced or perceived imbalance of demands and coping resources and is independent of its effectiveness in managing this imbalance (Krohne, 1986; Lazarus & Folkman, 1984).

Coping efforts can be categorized as either problem-focused or emotion-focused (Lazarus & Folkman, 1984). Problem focused coping is directed at the stressor and emotion-focused coping is directed at the emotions associated with the stressor. Most attempts at coping include both problem- and emotion-focused strategies (Lazarus & Folkman, 1984).

Individuals tend to demonstrate habitual styles in the ways they attempt to cope. These individual differences in responding to demands results not only from idiosyncratic appraisal mechanisms but from habitual styles of approaching situations as well. A coping style is a response pattern characteristic of an individual's typical way of responding to events either across time or across different situations (Compas, 1987).

To summarize, coping includes the behavioral and cognitive efforts implemented to manage demands. Such efforts are recognized as coping irrespective of their effectiveness in managing the demands individuals face. Individuals tend to develop and maintain habitual patterns of coping that are consistent across situations.

Summary

The transactional model of stress and coping presents stress as an interaction between the individual and the environment. Individuals experience stress when they perceive that their coping resources are insufficient for dealing with the demands they face. Coping includes the strategies, styles, and resources individuals use to manage the demands they face and the cognitive, physiological, and behavioral reactions associated with those demands. Cognitive appraisal plays a central role in determining the nature of demands, adequacy of coping resources, and therefore, likelihood of experiencing stress in any given situation.

Stress and Adolescence

The study of adolescent stress is timely. Today's adolescents face a greater number of demands and demonstrate more stress related symptoms than any of their predecessors (Kaplan et al., 1986). However, until recently, the majority of studies have referenced adult-based notions of stress and coping (Compas, 1987). Thus, while a great deal is known about the stress experience of adults, relatively little is known about the ways adolescents experience and cope with the demands they face (Brown, O'Keefe, Sanders, & Baker, 1986; Compas, 1987). A major problem with investigating adolescent stress experience has been the development of a reliable instrument with which to measure adolescent experience (Compas, Davis, Forsythe & Wagner, 1987). Life Event

Checklists and open-ended questionnaires have each been used in this area of research.

Research methodology. From the 'life-events' perspective, individuals are assumed to experience the specific stress levels associated with the particular events they are facing. A major problem with this approach is its inherent assumption that individuals are passive victims of their environment and therefore destined to experience stress levels fully correlated with the particular events they experience (Hiebert, 1988). Accordingly, different individuals experiencing the same life events are thought to experience the same level of stress. The problem with this assumption is that it ignores the roles that individual differences and idiosyncratic tendencies for appraisal and coping play in mediating individual stress experience. In addition, this method is inappropriate for research with adolescents because instruments designed to measure life events contain items generated by research with adults which, as a consequence, are unlikely to measure adolescent experience accurately (Compas et al., 1987). Furthermore, this approach fails to take account of the daily hassles and minor events demonstrated to have significant effects on the stress experience and adjustment of adolescents (Compas, Davis, & Forsythe, 1985). Daily hassles have recently been shown not only to contribute substantially to adult stress levels, but to predict far better than life events the psychological and somatic symptoms in adults (Lazarus & Folkman, 1984). Thus,

it is reasonable to at least allow the possibility that daily hassles might have a similar relationship to adolescent stress experience. As such, life events checklists appear to be an inappropriate choice for research investigating adolescent stress and coping.

A less used but more promising approach to investigating adolescent stress and coping is the open-ended questionnaire (Compas, 1987). This method has been used as a rich source of information for the development of reliable inventories of adolescent stressors (Beall & Schmidt, 1984; Compas, et al., 1987). Other researchers have effectively used the questionnaire to obtain information about the demands adolescents face (Omizo, Omizo, & Suzuki, 1988) and the coping attempts used in dealing with demands (Compas, Malcarne, & Fondacaro, 1988). Further, this methodology is more likely to capture the experience of adolescents as the data obtained is based on the self-reported experience of the individual filling out the questionnaire. Thus, unlike life-events checklists, the open-ended questionnaire is congruent with the transactional perspective on stress and coping because it accounts for individual perceptions of demands and coping resources.

Given the wide acceptance of the transactional perspective and the current status of adolescent stress research, the open-ended questionnaire is an appropriate means of furthering the investigation of adolescent stress experience.

Implications of the transactional model for intervention and research with adolescents. The transactional model is the most widely accepted and supported conceptualization of stress and coping (Bailey & Clarke, 1989). According to the transactional model stress control can occur by reducing the imbalance between demands and coping resources (stressor management) or by reducing cognitive, physiological, and behavioral reactions to the demand (stress management) (Hiebert, 1988). From a stressor management perspective, individuals who wish to reduce their stress level can either change or reduce the demands they are facing to fit their coping capabilities or increase their resources and skills for dealing with the demands. From a stress management perspective, effort is directed at reducing cognitive, physiological, and behavioral correlates of the emotional responses to the demands one is facing.

Adolescents face a number of demands, developmental and otherwise, which may tax their ability to cope. A transactional perspective provides a useful framework for exploring adolescent stress and coping. Adolescent stress research congruent with a transactional perspective will investigate: a) the demands individuals face, b) their emotional reactions to these demands, c) individual coping resources including both the specific coping attempts directed at particular demands and the attempts to cope with the concomitant emotional reactions, and d) individual perceptions about both the demands faced and the coping

efforts used to deal with them. Information obtained from this research would be used to determine not only which situations adolescents find most demanding, but how appropriate their efforts at coping are for managing these demands. Stress research providing knowledge of individual demands, coping attempts, and coping resources would be especially useful in designing appropriate and effective interventions for helping adolescents to deal more effectively with the demands they face.

Summary

Adolescence may be a demanding time, but need not necessarily be a stressful time. Individual experience of demands depends on the extensiveness and nature of coping repertoires and how effective coping attempts are perceived to be. If adolescent demands are discovered for which they have limited coping resources, then educators (parents, teachers, community leaders) can respond by creating curriculum to teach more effective coping approaches. The design of appropriate and effective interventions entails thorough knowledge and understanding of the demands adolescents face, their perceptions and emotional experience of the demands, the ways they attempt to cope with particular demands, and their perceptions about their coping efforts.

Research Questions

The foregoing discussion naturally gives rise to the research questions that provided the framework for this study. Specifically, this study sought to address the following research questions:

1. What situations do adolescents perceive to be most demanding?
2. What feelings do adolescents experience in the demanding situations they face?
3. What are adolescent perceptions about the demanding situations they face?
4. How do adolescents attempt to cope both with the demanding situations they face and with the feelings associated with these situations?
5. What are adolescent perceptions about the adequacy of their coping efforts?
6. Generally, how adequate are adolescent coping resources?
7. Of the demands that adolescents face , which are the best candidates for focused coping training?

Chapter Three

Methodology

This chapter presents the methodology used in this study. A description of the sample, dependent measures, and procedures used in conducting data collection and analysis is provided.

Sample

The individuals who participated in this study were 278 high school students from 5 public schools in Calgary, Alberta. All participants were students from Career and Life Management 20 (CALM 20) classes whose teachers had consented to participate. Initially, principals of eligible high schools were contacted and given a package of materials explaining the study. In cases where principal approval was obtained the materials were passed on to the CALM 20 teachers who contacted the researcher if they wished to participate. In all, 12 classes from five high schools agreed to participate in the study.

The sample was composed of 129 males and 149 females. (See Table 1) Age ranged from 15 to 19 years with 93.2 percent aged 16 or 17 years. Over 97 percent of the sample were grade 11 students. The majority of the sample were of white ethnic background.

Table 1

Sample Description:Cross Tabulation of Age by Gender, Ethnicity, and Grade

Variable	Age					Total
	15	16	17	18	19	
Gender						
male	0	52	68	8	1	129
	0.0%	18.7%	24.4%	28.8%	0.4%	46.4%
female	1	67	72	7	2	149
	0.4%	24.1%	25.9%	2.5%	0.7%	53.6%
Ethnicity						
N.Am.Indian	0	0	2	2	0	4
	0.0%	0.0%	0.7%	0.7%	0.0%	1.4%
Black	0	0	2	0	0	2
	0.0%	0.0	0.7%	0.0%	0.0%	0.7%
Hispanic	0	2	3	0	0	5
	0.0%	0.7%	1.1%	0.0%	0.0%	1.8%
Oriental	0	5	6	1	0	12
	0.0%	1.8%	2.16%	0.4%	0.0%	4.4%
White	1	98	89	11	1	200
	0.4%	35.3%	32.0%	4.0%	0.4%	71.9%
Other	0	5	12	0	1	18
	0.0%	1.8%	4.3%	0.0%	0.4%	6.5%
Unknown	0	9	26	1	1	37
	0.0%	3.2%	9.4%	0.4%	0.4%	13.3%
Grade						
10	1	0	0	0	0	1
	0.4%	0.0%	0.0%	0.0%	0.0%	0.4%
11	0	118	136	14	2	270
	0.0%	42.4%	48.9%	5.0%	0.7%	97.1%
12	0	1	4	1	1	7
	0.0%	0.4%	1.4%	0.4%	0.4%	2.5%
Total	1	119	140	15	3	278
	0.4%	42.8%	50.4%	5.4%	1.1%	100.0%

Dependent Measures

The two measures used in this study were the Important Situations Questionnaire (ISQ) (researcher developed) and the Coping Resources Inventory for Stress (CRIS) (Curllette, Aycock, Matheny, Pugh, & Taylor, 1988).

The Important Situations Questionnaire. The ISQ is composed of a series of open questions soliciting information

about the demands individuals face and the coping efforts they utilize in dealing with the demands. Specifically, the ISQ asks adolescents to list the three most demanding situations they face and, for each situation, to describe: 1) the situation; 2) the feelings usually associated with the situation; 3) what it is about the situation that they find demanding; 4) how they have attempted to cope both with the demand and the feelings associated with the demand and; 5) why they think the attempt at coping with the feeling or demand was as effective or ineffective as it was. In addition, students were to rate the effectiveness of their coping efforts on a five point Likert-type scale (See Appendix A).

The Coping Resources Inventory For Stress. The CRIS is a 280 item inventory designed to "assess an individual's stress coping resources and to identify habits and conditions which interfere with a healthy lifestyle (Curlette et al., 1988, p. 2)". As a practical device, the CRIS can be used to pinpoint areas in which skill acquisition or behavior change would enhance an individual's overall coping effectiveness.

The CRIS yields a number of different scores indicative of individual coping resources. The CRIS produces scores for 12 primary scales measuring specific coping resources (self-disclosure, self-directedness, confidence, acceptance, social support, financial freedom, physical health, physical fitness, stress monitoring, tension control, structuring, problem solving). In addition, scoring also yields three

composite scales (cognitive restructuring, functional beliefs, social ease) and 16 wellness inhibiting items. The composite scales are indicative of thinking patterns and attitudes which tend to reduce individual vulnerability to stress. Wellness inhibiting items measure the existence of behaviors and conditions (e.g., smoking, dieting, terminal illness) which tend to increase individual vulnerability to stress. The overall summary score is known as 'Coping Resource Effectiveness' (CRE), a composite score indicative of an individual's overall coping resource effectiveness.

Validity and reliability of the CRIS. The validity of the CRIS is demonstrated not only by the agreement between the content of the inventory and contemporary stress literature, but by the instrument's ability to discriminate between dysfunctional groups and those that are functioning adequately (Curlette et al., 1988). CRIS items were selected with respect to their ability to differentiate groups groups assumed to have greater coping resources from those with fewer coping resources (e.g., individuals with anger management or substance abuse problems and long-term psychiatrically disabled individuals). The reliability of the CRIS is supported by measures of subscale internal consistency which range from 0.84 to 0.97 (Chronbach's Alpha). The test-retest reliability of the CRIS is supported by correlations ranging from 0.76 to 0.95 (Pearson's r) for the primary and composite scales when administered to 34 undergraduates at a 4 week interval.

Procedure

Test administration. Participating teachers were required to complete a Teacher Consent Form (See Appendix B). In addition, students over the age of 18, and parents of those under 18, were required to complete consent forms prior to participation in the study (See Appendix C).

The CRIS and the ISQ were administered in two separate class periods within the same week. The CRIS required 45-60 minutes to complete. Administration of the ISQ required only 30 minutes of class time. The order in which the inventories were administered was reversed in half of the classes. Student names were placed only on a master list and not attached to any of the data.

Data reduction. All CRIS forms were computer scored and summary results computer coded for further analysis.

The scoring of the ISQ entailed the development of the coding taxonomy including both the category labels and the set of criteria or decision rules for including responses in particular categories. Initially, a subset of 10 forms was used to create a coding taxonomy that would accommodate the student responses for each ISQ question. Wherever possible, categories in the coding taxonomy were labelled with descriptors derived from contemporary literature on stress and coping. Care was taken to develop a coding taxonomy that was true to participant responses that did not force participant responses into an existing framework. Therefore, when a response was encountered that did not fit the existing

coding scheme, a new category was developed to accommodate that response. Using a method of constant comparison (Blase, 1986), uncoded responses were compared with previously coded responses. In this method, uncoded responses were coded with respect to their similarities and differences with the previously coded responses. New categories were created when responses could not logically be placed in any of the existing categories. When new categories were created or inclusion criteria were modified, previously coded responses were re-examined to determine the appropriateness of including them in the new category. The end result of this process is a coding schema derived from participant responses with explicit decision rules for categorizing individual responses.

Two additional coders were utilized to test the accuracy of the coding taxonomy. Subsets of five to ten forms were recoded at different points during the development of the coding taxonomy. Decision rules were modified, where necessary, until acceptable levels of interrater reliability were obtained. Across three separate reliability checks, percentage agreement ranged from 65.2 and 72.1 on the first to 83.0 and 86.1 on the third.

ISO Coding Taxonomy

Demands. Coding procedures resulted in a demand taxonomy separating responses into the following categories:

1. School related problems: Homework, needing good grades to advance, problems understanding the work,

exams, lack of interest/boredom, teacher's authority, public speaking.

2. Family related concerns: Parental expectations, family fights, divorce/separation, behavior of certain members (e.g., alcoholism).
3. Part-time job: Requires too much time, necessity to perform adequately, needing to work to be financially independent, disliking the work itself.
4. Social life: Friends take too much time, peer pressure/acceptance, uncertainty about friendships, trying to be a good friend, friends behavior/problems, meeting new people/shyness, dating.
5. Relationships/sexuality: Relationship takes too much time, fights with boyfriend/girlfriend, uncertainty about the future of a relationship, ending a relationship, wanting a relationship.
6. Sports: Requires too much time, necessity to perform adequately, behavior or attitude of other players.
7. Other: Driving, living alone, being a single parent, dissatisfaction with life, organizing events, trouble with police or school authority, fighting, pets.
8. Future: Planning for university, career planning, concerns about the future.
9. Money:
10. Club/Organization membership: Volunteer, drama, church, music.

11. Concerns about self: Concerns about appearance, being tired, serious illness, smoking, feeling inadequate.

12. Concerns about Death: Death of parents, family members, or self.

Perceptions about demands. The ISQ asked participants to explain why the situations they faced were demanding.

Responses to this question were coded according to the following taxonomy.

1. Physical. Responses were included in this category when they described the demand as too large (e.g., coping would be possible if the demand were smaller), too unpleasant, or generally demanding because of the situation itself.
2. Other persons involved. Responses were included in this category if they described situations as demanding because of the role other persons were playing. Subcategories include other behavior (what they are doing), other cognitions (thoughts, values, beliefs, and attitudes), other affect, and other uncodeable (definitely involving other persons but not codeable in the above categories).
3. Self. Responses included in this category referred to situations as demanding due to individual behavior, thoughts, or feelings. As above, subcategories include self behavior (what the individual is doing), self cognition (thoughts, values, beliefs, and

attitudes, self affect, and self-uncodeable
(definitely related to individual experience but not
codeable in the above categories.

4. Combinations of one, two, and three.

5. Uncodeable.

Feelings. The ISQ asked participants to describe the feelings usually associated with the demands they face. A feeling taxonomy was adapted from existing feeling vocabularies (Carkuff & Anthony, 1979; Cormier & Cormier, 1985) to accommodate participant responses. The major categories are as follows: strong happiness, moderate happiness, weak happiness, strong sadness, moderate sadness, weak sadness, strong fear, moderate fear, weak fear, strong uncertainty, moderate uncertainty, weak uncertainty, strong anger, moderate anger, weak anger, strong strength/potency, moderate strength/potency, weak strength/potency, strong weakness/inadequacy, moderate weakness/inadequacy, weak weakness/inadequacy, guilty, bored, uncodeable, and affection.

Coping. Participants were asked to describe how they deal both with the demanding situations and with the feelings associated with the situation. Responses were coded according to the following categories and subcategories.

1. Reduce demands. Reducing other demands, substituting demands, sharing tasks, assertive responses, avoidance/withdrawal, suppression/denial, keeping feelings to one's self (prevents other reactions).

2. Increase coping resources. Time management/structuring, prioritizing activities, efficient use of time, spacing activities and effort, not avoiding activities, goal setting, doing things one step at a time, saving money, looking for a job, budgeting, borrowing money, working more hours, preparation, preparation for a test, studying, practice, tutoring, social support, talking to employer, talking to boyfriend/girlfriend, talking to family, talking to friends, withdrawing from situation until arousal subsides, doing best work, try harder, leaving work until last minute, problem solving/decision making skills, seeking counselling.
3. Other stressor management. Reframing demand or resources, monitoring tension (to prevent problems), exercise (to enhance aerobic capacity), nutrition, sleep.
4. Physiological strategies. Relaxation techniques, exercise, play/hobbies, drugs/alcohol, sleep, listening to music, watching television, smoking, medication, stress monitoring.
5. Cognitive strategies. Ignore situation, ignore feelings, distraction, cognitive restructuring, try to keep an open mind, positive self-talk, accepting situation, try to forget.
6. Behavioral strategies. Social withdrawal, slowing down.

7. Other stress management. Self-disclosure, crying, screaming.
8. Other coping. Getting very upset, praying, physical violence.
9. No attempt at coping.

Perceptions about coping. Participants were asked to describe why their attempt at coping with the situation and the related feelings was effective or ineffective. Responses to this question were categorized as either effort (coping was perceived as effective or ineffective because of individual effort irrespective of outcome) or outcome (coping was perceived as effective or ineffective because of the outcome for situation, self, or other). The major categories of effort and outcome include the following subcategories: self behavior, cognition, or affect; other behavior, cognition, or affect; general effort; and general outcome.

Figure 1 summarizes the aforementioned coding taxonomy and illustrates the variety of responses that are possible for any given demand.

Summary

Participating high school students were invited to complete a standardized coping resources inventory and an open-ended questionnaire soliciting information about the demands they face and how they cope with them. Data from each measure was analyzed such that individual and group results could be further examined. The results of this study are presented in the following chapter.

Chapter Four

Results

This chapter presents the results obtained in this study. The CRIS results are presented first and followed by those of the ISQ.

Coping Resource Effectiveness

The Coping Resources Inventory for Stress (CRIS) (Curlette et al., 1988) was used to answer the research question 'Generally, how adequate are adolescent coping resources?' CRIS results are presented in Table 2. The Coping Resource Effectiveness score and the scores on the subscales are all somewhat lower than the norm group of military personnel, graduate students, teachers, and managers used to develop the inventory. Accordingly, it appears that as a group the sample has less developed coping resources than the reference group.

As indicated by the scale scores, the sample's greatest coping resources are in the areas of Self-directedness, Physical Health, Physical Fitness, and on the composite scale, Functional Beliefs. The lowest scores were on the primary scales of Problem solving, Structuring, and Social support.

Table 2

CRIS Scale Means (and Standard Deviations) for Male (n = 113)
and Female (n =128) Adolescents

Scales	Total	Male	Female	p
<u>Coping Resource Effectiveness</u>	46.7 (24.9)	50.6 (23.3)	43.2 (25.8)	.02
1. Self-disclosure	48.9 (29.0)	43.4 (26.7)	53.8 (30.1)	<.01
2. Self-directedness	59.7 (28.1)	64.2 (26.2)	55.6 (29.1)	.02
3. Confidence	50.0 (26.0)	57.3 (23.4)	43.5 (26.6)	<.01
4. Acceptance	54.1 (27.3)	55.2 (26.9)	53.2 (27.8)	.58
5. Social Support	42.0 (28.9)	42.6 (27.1)	41.5 (30.4)	.78
6. Financial Freedom	54.1 (27.6)	51.8 (29.2)	56.1 (25.9)	.23
7. Physical Health	57.1 (30.0)	64.1 (28.6)	51.0 (30.0)	<.01
8. Physical Fitness	58.9 (27.9)	69.0 (23.4)	49.9 (28.5)	<.01
9. Stress Monitoring	47.9 (28.1)	50.7 (26.1)	45.4 (29.7)	.13
10. Tension Control	50.9 (25.6)	54.7 (24.2)	47.6 (27.6)	.03
11. Structuring	42.4 (25.9)	42.4 (23.8)	42.4 (27.7)	.98
12. Problem Solving	38.3 (26.8)	39.9 (26.3)	36.9 (27.2)	.38
<u>Composite Scales</u>				
13. Cog. Restructuring	47.6 (25.7)	53.1 (23.8)	42.8 (26.3)	<.01
14. Functional Beliefs	56.8 (27.3)	59.2 (26.9)	54.6 (27.6)	.19
15. Social Ease	49.2 (26.6)	48.6 (30.0)	49.8 (27.2)	.72

To assess differences between males and females a two factor multivariate analysis of variance (MANOVA) was performed. The results suggested significant differences in the coping patterns of males and females ($F(1,239) = 1.26, p = 0.05$) Post hoc univariate analyses indicated that males in this sample had better coping resources than females in the areas of self-directedness ($F(1,239) = 1.24, p = 0.017$), confidence ($F(1,239) = 1.28, p = 0.001$), physical health ($F(1,239) = 1.10, p = 0.001$), physical fitness ($F(1,239) = 1.49, p = 0.001$), tension control ($F(1,239) = 1.19, p = 0.033$), and cognitive restructuring ($F(1,239) = 1.24, p = 0.002$), while females had greater coping resources in the area of self-disclosure ($F(239,1) = 1.27, p = 0.005$).

Important Situations Questionnaire

The responses to the ISQ were coded in the manner described in Chapter Three. The resulting frequencies for each item in the coding taxonomy are given in Appendix D. The results addressing specific research questions are elaborated below.

Demands Faced By Adolescents

To answer the research question, "What are the situations adolescents find most demanding?", the ISQ asked students to list and describe the three most demanding situations in their life. The frequencies and percentages for each category are listed in Table 3 as a percentage of the total number of demands listed. The most frequently listed demands were school, family, part-time job, and relationships,

respectively. Demands related to sports, 'other situations', future, concerns about self, money, club membership, and death were also listed but less frequently. Chi square analysis revealed that, when compared with males, female respondents listed more relationship concerns and fewer sports related concerns than would be expected by chance ($p=.05$).

Table 3

Frequency of Demands Cited by 262 Adolescents

Category	<u>Group</u>		<u>male</u>		<u>female</u>	
	(n)	%	(n)	%	(n)	%
School	(249)	34.4%	(116)	36.5%	(133)	32.8%
Family	(126)	17.7%	(51)	16.0%	(75)	18.5
Part-time job	(101)	14.0%	(50)	15.7%	(51)	12.6%
Social Life	(74)	10.2%	(30)	9.4%	(44)	10.9%
Relationship/ sexuality	(47)	7.3%	(13)	4.0%	(34)	8.4%
Sports	(28)	3.9%	(21)	6.6%	(7)	1.7%
Other	(30)	3.6%	(10)	3.1%	(20)	4.9%
Future	(21)	2.9%	(8)	2.8%	(13)	3.2%
Self-concerns	(14)	2.9%	(4)	1.3%	(10)	2.4%
Money	(20)	2.8%	(11)	3.5%	(9)	2.2%
Clubs	(10)	1.1%	(4)	1.2%	(6)	1.5%
Death	(2)	0.03%	(0)	0.0%	(2)	0.5%
Totals	(723)	100.0%	(318)	100.0%	(405)	100.0%

The structure of the ISQ permitted respondents to list a demand from the same category for more than one of their three possible responses. Table 4 lists the percentage of respondents who listed the demand category at least once among their responses.

Table 4

Percentage of 262 Adolescents Citing Specific Demands.

<u>Category</u>	<u>% of cases (n)</u>	
School	84.7%	222
Family	47.3%	124
Part-time job	36.3%	95
Social life	27.1%	71
Relationships	17.9%	47
Sports	10.7%	28
Other	10.3%	27
Future	7.6%	20
Money	7.6%	20
Concerns about self	6.9%	18
Clubs	3.8%	10
Death	0.8%	2

Of the 262 students who completed the ISQ, 84.7% listed a school related demand as one of the most demanding situations they face. Similarly, family related concerns were listed by 47.3% of the respondents. Part-time jobs were listed by 36.3% of the respondents while concerns related to social

life and relationships were listed by 27.1% and 17.9% of the respondents, respectively. The remaining categories were listed less frequently (0.8% to 10.3% of respondents).

Adolescents were also asked to describe the feelings associated with the situations they find demanding. Table 5 summarizes the responses to this question.

Table 5

Frequency of Feelings Associated with Particular Situations.

Feelings	Situation												Tot
	Sch	Fam	Job	Soc	Rel	Oth	Spo	Fut	Mon	Self	Club	Dea	
S. Happiness	5	2	3	2	1	--	2	1	--	--	1	--	17
M. Happiness	45	19	20	21	12	6	6	3	2	2	5	--	141
W. Happiness	11	6	2	5	3	--	3	--	--	--	--	--	30
S. Sadness	35	27	15	17	24	3	3	3	5	7	--	--	139
M. Sadness	52	51	12	28	23	8	2	2	10	7	1	2	198
W. Sadness	6	7	2	2	--	1	2	--	1	1	--	--	22
S. Fear	38	12	11	14	7	5	6	6	4	2	--	--	105
M. Fear	222	95	73	57	19	25	34	17	13	10	7	1	573
W. Fear	81	30	25	30	7	13	12	5	6	4	1	--	214
S. Uncertainty	31	19	8	19	16	4	2	10	4	1	1	--	115
M. Uncertainty	6	1	3	3	1	--	1	1	--	--	1	--	17
W. Uncertainty	4	2	4	1	4	--	--	1	1	--	--	1	18
S. Anger	123	88	47	34	34	29	9	14	9	15	4	3	409
M. Anger	226	166	103	76	58	37	23	20	13	24	10	2	758
W. Anger	25	11	17	9	9	3	--	2	6	2	2	--	86
M. Strength	11	8	6	2	6	2	5	--	--	--	--	--	40
W. Strength	4	1	7	1	5	--	3	--	--	--	--	--	21
S. Weakness	18	9	8	3	5	5	--	1	--	3	--	--	52
M. Weakness	36	22	11	13	4	9	8	5	5	7	--	--	120
W. Weakness	43	20	18	16	6	6	6	5	1	3	5	--	129
Guilty	9	5	4	7	4	--	4	2	--	--	--	--	35
Bored	40	22	24	10	7	5	3	1	4	1	--	--	117
Uncodeable	60	35	25	15	12	4	12	2	9	1	8	--	183
Physiological	12	1	6	2	3	--	--	--	--	--	--	--	24
Affection	6	3	2	--	8	--	1	--	--	--	--	--	20

Note. S = Strong; M = Moderate; W = Weak; Sch = School related problems; Soc = Social life; Job = Part-time job; Fam = Family; Fut = Concerns about future; Self = Concerns about self; Spo = Sports; Mon = Money; Rel = Relationships/sexuality; Dea = Death; Oth = Other; Club = Clubs; Tot = Total.

The feelings most frequently cited across all situations were moderate anger, moderate fear, strong anger, weak fear, and strong sadness. This pattern was present across most of the demanding situations including those situations most frequently cited (e.g., school related problems, part-time job, social-life, and family concerns) (see Table 5).

To answer the research question "What are adolescent perceptions about the demands they face?" the ISQ asked participants to describe what it is about the individual situations that they find demanding. The responses to this question are summarized in Table 6. The majority of responses (63.3%) were categorized as attributing the demanding nature of the situation to the qualities of the demand itself. Of these responses, more than half (35.9% of the responses) described the situation as demanding because it was too large, stating or implying that the situation could be managed if it was smaller. A further 10.1% described situations as demanding because they were too unpleasant. Responses referring to the demand generally (i.e., referring to the situation but not specifying whether it was too large or too unpleasant) made up 17.1% of the total. The remaining responses were categorized as describing situations as demanding because of the roles that self (9.3% of the total) or other persons (18.8% of the total) were playing. Of these responses, most (10.3%) described situations as demanding due to 'other cognition'

including the perceived thoughts, beliefs, values, and attitudes of other persons.

Table 6

Adolescent Attributions about Why Situations Are Demanding

<u>Category</u>	<u>Percent of total responses</u>
1. Physical demand	
Too much	35.9%
Too unpleasant	10.1%
Uncodeable demand	17.3
Total	63.3%
2. Other persons involved	
Behavior	5.8%
Cognition	10.3%
Affect	0.6%
Uncodeable other	1.1%
Total	18.8%
3. Self	
Behavior	1.3%
Cognition	2.1%
Affect	4.7%
Other	1.3%
Total	9.3%
4. Combinations of 1, 2, and 3	8.5%
5. Uncodeable	1.5%
Total	100.0%

Some respondents found situations demanding due to the behavior of other persons (5.8% of the total) while others

referred to their own feelings in the situation (4.7% of the total). 8.5% of respondents attributed the demanding nature of a situation to combinations of demand, role of self, and role of other persons.

Adolescent Coping

To answer the research question 'How do adolescents attempt to cope with the demands they face, the ISQ asked respondents how they attempt to deal both with the situations they described and with the feelings associated with these situations. The responses to these questions are summarized in Table 7.

Overall, the most frequently listed coping strategies are those categorized as 'increasing coping resources'. Responses from this category accounted for 28.8% of the total responses, 38.7% of the responses for coping with situations, and 18.6% of the responses for coping with feelings. Cognitive strategies comprised 18.2% of the total responses and 21.2% of the responses for coping with feelings. Strategies categorized as 'reduce demands' made up 15.8% of the total responses and 21.3% of the responses for coping with situations. Strategies subsumed by the larger category, 'Stressor management' (reducing demands or increasing coping resources) composed 62.8% of the responses for coping with situations and 31.9% of the responses for coping with feelings. However, 'stress management' strategies compose 18.2% of the responses for coping with situations and 39.2% of the strategies for coping with feelings.

Table 7

Frequency and Percentage of Strategies used to cope with situations and feelings

Category	Situation		Feelings		Total	
	(n)	%	(n)	%	(n)	%
Stressor Management						
Reduce Demands	146	21.3%	66	10.0%	212	15.8%
Increase Coping Resources	265	38.7%	123	18.6%	388	28.8%
Other stressor management	19	2.8%	22	3.3%	41	3.0%
Total Stressor Management	430	62.8%	211	31.9%	641	47.6%
Stress Management						
Physiological Strategies	26	3.8%	69	10.4%	95	7.1%
Cognitive Strategies	87	12.7%	158	23.9%	245	18.2%
Behavioral Strategies	6	0.9%	9	1.3%	15	1.1%
Other Stress Management	4	0.6%	24	3.6%	28	2.1%
Total Stress Management	123	18.0%	260	39.3%	383	28.5%
Other	104	15.2%	143	21.2%	247	18.4%
No attempt at coping	27	3.9%	48	7.3%	75	5.6%
Totals	684	100.0%	662	100.0%	1346	100.0%

Of key interest in this study was an examination of which coping procedures were associated with which demands. These results are summarized in Table 8. Efforts made at coping with school related problems are highlighted because this was the most frequently reported demand. The most commonly employed coping strategies for coping with school related problems are those subsumed by the category 'increase coping resources' (40.3% of responses). Cognitive strategies (15.7% of responses), efforts aimed at reducing demands (11.2% of

responses), and 'other' strategies (12.7%) were also frequently utilized.

Perceptions about coping effectiveness. To answer the research question, "What are adolescent perceptions about the adequacy of their coping efforts?", Table 8 gives the mean effectiveness rating on a five point Likert-type scale ranging from one (very ineffective) to five (very effective) for each coping strategy associated with each demand. Across all of the strategies there was little difference in rated effectiveness other than those cases where no coping attempt was made. Overall, coping attempts tended to be rated as effective whereas non-attempts tended to be rated as ineffective.

Of interest also were the criteria adolescents used in judging the effectiveness of their coping attempts. To assess this participants were asked why they thought their approach was effective or ineffective. Responses to these questions are summarized in Table 9. As indicated on the 'total effort' and 'total outcome' rows, the large majority (95.7%) of responses perceived coping as effective or ineffective based on the outcome associated with coping effort. Only 4.6% of responses indicated coping was effective or ineffective because coping was attempted. Of the responses categorized as 'outcome', the largest group (32.7% of the responses) referred to outcome in terms of self-feeling. However, this category accounted for 47.8% of the responses for coping with feelings and for 18.2% of the

responses for coping with situations. 20.3% of the responses in the outcome group were categorized as 'self-general'. Responses included in this group referred to self-outcome but did not specify outcome in terms of self- affect, behavior, or cognition. This category accounted for 25.7% of the responses for coping with situations and 14.5% of the responses for coping with feelings.

Table 8

Frequency and Mean Effectiveness (ME) of Adolescent's Attempts at Coping with Demands.

Demand	Coping Strategies Implemented									
	RD	ICR	OSrM	Phys	Cog	Beh	OSM	Oth	NA	TME
Sch (ME)	3.40	3.47	3.25	3.44	3.29	4.00	--	3.35	1.55	3.37
(n)	15	139	4	9	21	3	0	17	11	219
Fam (ME)	3.50	3.78	--	2.00	3.60	--	4.00	3.09	2.33	3.37
(n)	4	19	0	2	10	0	1	10	3	60
Job (ME)	3.50	3.54	3.00	5.00	3.63	5.00	--	4.17	1.67	3.53
(n)	10	39	1	2	22	1	0	6	3	84
Soc (ME)	3.00	3.60	--	--	3.14	5.00	--	3.63	3.00	3.45
(n)	1	10	0	0	7	1	0	8	3	31
Rel (ME)	--	4.08	4.00	3.00	2.71	--	2.00	3.16	1.00	2.91
(n)	0	12	2	2	7	0	1	6	2	33
Spo (ME)	4.25	4.40	5.00	5.00	3.75	--	--	5.00	5.00	4.38
(n)	4	10	1	2	4	0	0	2	1	24
Oth (ME)	3.67	3.75	3.50	3.75	3.20	3.00	--	3.67	--	3.41
(n)	3	4	2	5	5	2	0	6	0	27
Fut (ME)	2.50	4.00	4.00	--	3.50	--	--	--	--	3.54
(n)	2	3	2	0	6	0	0	0	0	13
Mon (ME)	2.00	3.57	--	--	--	--	--	4.00	1.00	3.40
(n)	1	14	0	0	0	0	0	3	2	20
Self (ME)	4.00	3.67	3.33	1.00	3.67	--	--	--	--	3.36
(n)	1	3	3	1	3	0	0	0	0	11
Club (ME)	4.00	3.40	--	--	4.00	--	--	--	3.00	3.44
(n)	1	5	0	0	1	0	0	0	2	9
Dea (ME)	--	--	--	--	--	--	3.00	3.00	--	3.00
(n)	0	0	0	0	0	0	1	1	0	2
TME	3.47	3.59	3.60	3.51	3.40	4.00	3.00	3.52	2.21	3.42
(n)	42	258	15	23	86	7	9	59	24	533

Note. Sch = School related problems; Fam = Family; Job = Part-time job; Soc = Social life; Rel = Relationships/sexuality; Spo = Sports; Oth = Other; Fut = Concerns about future; Mon = Money; Self = Concerns about self; Club = Clubs; Dea = Death; TME = Total mean effectiveness; ME = Mean Effectiveness; RD = Reduce Demands; ICR = Increase Coping Resources; OSrM = Other Stressor Management; Phys = Physiological Strategies; Cognitive Strategies; Beh = Behavioral Strategies; OSM = Other Stress Management; Oth = Other; NA = No Attempt.

Table 9

Adolescent Rationale For Coping Effectiveness/Ineffectiveness

Category	Coping w/ Situation		Coping w/ Feelings		Total	
	n	%	n	%	n	%
<u>Effort</u>						
Feelings						
Self	4	0.6%	3	0.5%	7	0.5%
Other	1	0.1%	1	0.2%	2	0.1%
Situation						
Self-Behavior	6	0.9%	3	0.5%	9	0.7%
Self-Cognition	6	0.9%	4	0.6%	10	0.7%
Other-Behavior	3	0.4%	0	0.0%	3	0.2%
Other-Cognition	8	1.2%	1	0.2%	9	0.7%
Effort General	13	1.9%	9	1.4%	22	1.6%
Effort Total					62	4.6%
<u>Outcome</u>						
Feelings						
Self	124	18.2%	314	47.8%	438	32.7%
Other	11	1.6%	9	1.4%	20	1.5%
Situation						
Self-Behavior	59	8.7%	31	4.7%	90	6.7%
Self-Cognition	53	7.8%	63	9.6%	116	8.7%
Other-Behavior	25	3.7%	11	1.7%	36	2.7%
Other-Cognition	32	4.7%	6	0.9%	38	2.8%
Self-General	175	25.7%	95	14.5%	272	20.3%
Other-General	11	1.6%	3	0.5%	14	1.0%
Outcome-General	105	15.4%	54	8.2%	159	11.9%
Unicodeable	46	6.7%	48	7.3%	94	7.0%
Outcome Total					1277	94.6%
Total	682	100.0%	657	100.0%	1339	100.0%

Summary Of Results

Research Question 1:

What situations do adolescents perceive to be most demanding? As the results of the ISQ indicate, respondents perceived School related problems to be the most demanding situations they faced in their daily lives. School related problems were listed at least once by the majority (84.7%) of participants. Other most demanding situations, listed in descending frequency are family concerns, part-time job, social life, relationship/sexuality, other situations, sports, future, money, club/organization membership, and death.

Research Question 2:

What feelings do adolescents experience in the demanding situations they face? Across all of the situations described, the most frequently listed feelings were responses categorized as fear, anger, and sadness.

Research Question 3:

What are adolescent perceptions about the demands they face? The transactional model of stress and coping holds the view that individuals experience stress when they appraise the demands they are facing as exceeding their resources for dealing with the demand. Cognitive appraisal of both the demand and the resources is an important part of this process. When asked why they thought the demand they faced was demanding, most participants referred to the characteristics of the demand itself. The largest group of

responses were categorized as perceiving the demand to be too large to be adequately coped with; as if coping would be possible or easier if only the demand were smaller. Respondents also seemed to be concerned about the pleasantness (or lack thereof) of the demand they were facing. This is evident in the frequency of responses attributing demandingness to the unpleasantness of the situation.

A substantial number of participants perceived that the situations they experienced were demanding because of the role other persons played. Of these responses, the largest group were categorized as attributing the demanding nature of the situation to the thoughts, values, and attitudes they perceived other persons to hold. In these cases respondents found situations demanding because they perceived that other persons' perceptions were contingent on, or incongruent with, their behavior or performance in the specific situation.

Research Question 4:

How do adolescents attempt to cope with the demanding situations they face? Across all situations, students tended to favour strategies coded as 'increasing coping resources'. This category contained strategies intended to increase one's ability to cope without changing the demand characteristics of the situation (e.g., structuring skills, time management, tutoring, use of social support, etc.). Cognitive strategies were the next most favoured, including attempts at changing or eliminating one's thoughts through

positive self-talk, cognitive restructuring, distraction, and ignoring the situation or associated feelings.

Overall, the pattern of strategies for coping with situations was quite different from that for coping with feelings. Stressor management strategies, those which attempt to change the imbalance of the demand and available coping resources, composed the majority of responses for coping with situations. Efforts at increasing coping resources formed the largest portion of these responses while efforts at reducing the demand (e.g., reducing the demand, soliciting help, etc.) formed the second largest group.

Stress management strategies were favoured for dealing with feelings. Of this group, cognitive and physiological approaches were listed most frequently, respectively. Interestingly, stressor management strategies accounted for a substantial number of the attempts to deal with feelings.

Research Question 5:

What are adolescent perceptions about the adequacy of their coping efforts?. This question consists of two parts and asks not only how effective adolescents perceive their coping attempts to be, but also what attributions they make as to why particular coping attempts are effective or ineffective.

Coping tended to be rated at the same level of effectiveness across coping strategies except for those cases where coping was not attempted. For the most part, the

adolescents in this study tended to perceive their coping attempts as effective and their non-attempts as ineffective.

When addressing why they thought their attempts at coping were effective or ineffective, the large majority of responses were concerned with the outcome associated with coping effort. When coping with feelings, the largest portion of responses perceived coping as effective or ineffective based on how well their feelings had been managed by the coping effort. Few responses used coping effort irrespective of outcome (e.g., at least I tried to manage the situation) as an indicator of coping effectiveness.

Research Question 6:

How adequate are adolescent coping resources? The CRIS results indicated that the participants in this study tended to have somewhat lower coping resources than the adult sample on which the CRIS was normed. The students participating in this study scored lowest on scales measuring coping resources in the areas of problem solving, social support, and structuring. The problem solving and structuring scales are related in that they both index organizational skills. The problem solving scale measures skills associated with resolving personal problems including, "defining problems, approaching problems logically, obtaining information, finding workable solutions, considering alternatives, determining consequences, and evaluating the results of one's actions" (Curlette et al, 1988, p. 6). The structuring scale measures skills related to managing resources such as time

and energy including "planning, establishing goals and priorities, taking action on one's plans, setting limits, scheduling, and avoiding extreme shifts in activity by proper spacing of activities and pacing of one's efforts" (Curlette et al, 1988, p. 6).

The social support scale measures not only the availability of a support network to buffer the effects of stressful events, but also the ability to utilize such a network when it is available. The results tend to suggest that students in this study have relatively low coping resources in this area. This finding is noteworthy; of all the CRIS scales, individuals tend to score highest in the area of social support (Curlette et al, 1988).

Overall, the highest coping resource scores were found in scales emphasizing physical health (physical health and physical fitness) and positive self-regard (self-directedness, functional beliefs, and acceptance). Specifically, the sample scored highest on the scales of self-directedness, physical health, physical fitness, functional beliefs, financial freedom, and acceptance.

Gender differences were present on several of the scales. Males demonstrated coping strengths in the areas of self-directedness (the degree to which individuals respect their own judgment and wisdom as a guide to behavior), confidence (faith in one's ability to cope successfully with stressful situations), physical health, physical fitness, tension control (ability to lower arousal through relaxation

procedures and thought control), and cognitive restructuring (efforts to change one's thinking in order to reduce stress) (Curlette et al, 1988). Accordingly, the males in this sample demonstrate coping strengths in areas related to positive self regard, physical health, and stress management. Females demonstrated coping strengths in the area of self-disclosure (tendency to disclose one's thoughts and feelings freely). Although strengths in the area of self-disclosure tend to correlate with an increased social support network (Curlette et al., 1988), no gender difference is indicated for social support. Despite the differences present in these specific coping areas, no gender difference was found for overall Coping Resource Effectiveness (CRE). The gender differences reported above may reflect the influence of differential socialization for males and females. Further research would be necessary to address this hypothesis.

Chapter Five

Discussion

This chapter presents a brief summary of results which is followed by discussions of the implications of results, the strengths and weaknesses of this study, and recommendations for future research.

This study has produced a number of different findings. To briefly summarize, adolescents perceive the most demanding situations they face to be school related problems, family concerns, part-time job, social life, relationship concerns, sports, other situations, future, money, concerns about self, club/organization membership, and death, respectively. The feelings most frequently associated with these situations are moderate anger, moderate fear, strong anger, weak fear, and strong sadness. In describing why they thought situations were demanding, adolescents most often referred to the demand characteristics themselves, most often reporting that the demand was too large to be coped with adequately. Demandingness was also attributed to the unpleasantness of the demand and to the perceived thoughts, values, and attitudes of other persons, but less frequently. To cope with situations, stressor management strategies were favoured, especially attempts to increase coping resources. Stressor management strategies were also utilized to cope with feelings but less frequently than stress management strategies, of which cognitive strategies accounted for the largest group. Perceived effectiveness of coping strategies

tended not to vary across coping strategies. Coping tended to be rated as effective when it was attempted and ineffective when not attempted. In rating the effectiveness of coping strategies, adolescents appear to be most concerned with the outcome attached to their coping effort. CRIS results indicate that the sample, as a group, demonstrates lower coping resources in the areas of problem solving, social support, and structuring, than the norming sample.

Implications

A final research question asks, "If we intend to help adolescents to cope more effectively with the demands they face, what are likely targets for focused coping interventions?" The CRIS results indicate that participants tended (or perceived themselves) to be relatively unskilled in the areas of problem solving and structuring. The CRIS manual (Curlette et al., 1988) describes the subscales for these areas as indicative of coping abilities in the skills of defining problems, approaching problems logically, obtaining information, finding workable solutions, considering alternatives, determining consequences, evaluating the results of one's actions, planning, establishing goals and priorities, taking action on one's plans, setting limits, scheduling, and pacing one's efforts. In addition to, and perhaps because of, this coping deficiency, a substantial portion of the sample thought the demands they faced were too large to be adequately coped with. The aforementioned coping skills could play an

important role in helping individuals to cope more effectively with numerous and overwhelming demands.

Situations in which demands are perceived to exceed coping resources are prime candidates for coping interventions. By definition such situations are likely to be stressful for the individuals experiencing them (Hiebert, 1988; Lazarus & Folkman, 1984). In such cases, intervention can be directed at different points of the stress equation. To reduce stress, individuals have the option of reducing demands, increasing coping resources, or dealing with the stress reaction itself through physiological, cognitive, and behavioral approaches. The latter strategies are not usually implemented unless it is not possible to reduce demands or increase coping resources (Hiebert, 1988).

While it may be possible for the students in the sample to reduce the demands they face, increasing coping resources seems to be a more likely option given both the common demand experience (e.g., school related concerns) and the group coping deficiency. Accordingly, appropriate coping interventions for this group would entail teaching students the previously mentioned organizational skills.

Interestingly, the curriculum of the class from which the sample was taken was designed to address all of these coping skills (Bessert, Crozier, & Violato, 1988). However, presentation of content does not necessarily ensure acquisition of skills. Modeling, practice, and relevant feedback could greatly assist such skill acquisition. It is

possible that the students in this sample may have benefitted from earlier exposure and/or more rigorous instruction in the use of these skills.

Coping with particular demands could be enhanced by coping instruction emphasizing the skills relevant to specific demands themselves. For example, as the most commonly reported demands were school related problems, adolescents would likely benefit from interventions aimed at enhancing their resources for dealing with school related problems. Coping with school related problems would likely be aided by instruction in the skills related to the high frequency problems reported in Appendix D (i.e., too much work to do at one time, needing good grades to advance, being bored with school, and final exams). School related demands are perhaps the best candidate for this type of intervention because they were experienced by the majority of this sample.

In outlining logical possibilities for focused coping interventions, it makes sense to consider the setting where such interventions are to take place. The school system seems like the most feasible means of providing adolescents with focused coping interventions. The school provides both a curriculum and a context congruent with focused coping training. In addition, the results of this study suggest that most of the adolescent student population could benefit from coping training addressing the group of organizational skills mentioned previously and skills particularly useful for coping with school related problems.

Strengths and Limitations Of This Study

One of the main strengths of this study is its exploration of adolescent experience from the perspective of adolescents themselves. The majority of past investigations have sought to explore adolescent stress and coping from an adult-defined perspective and therefore have not likely captured the true experience of adolescents. The findings in this study are based on adolescents self-reported descriptions and are therefore likely representative of adolescent experience. In addition, as this study is descriptive in nature, it adds descriptive information to the literature on adolescent stress and coping that would not likely be produced using standard investigative approaches. Additional strengths are found in the size of the sample. The external validity and generalizability of results from this study are enhanced by its large sample size. There may be some concern that temporal factors influenced the types of demands that students expressed. Although this is possible, Allen (1989) collected data at a different point in the academic year and obtained results similar to those reported in this thesis. Therefore, temporal factors likely play a minor role in the nature of subjects responses. Accordingly, the findings in this study are likely generalizable to adolescents living in urban centres similar to Calgary.

The sample also poses some limitations for generalizability. As discussed earlier in this chapter, the sample is most representative of urban, white, 16 and 17 year

old grade 11 students. A sample of different demographic composition living in a different setting (e.g., a rural setting or a small town) might experience different demands and might cope differently as well. Thus, the generalizability of findings from this study to adolescents groups of different demographic composition is at least questionable.

While the study is a rich source of information about adolescent demand and coping experience, it was limited to soliciting information about the demands that adolescents themselves perceived to be most demanding. Those situations which may be demanding but are not perceived by adolescents as 'most demanding' were not included in this study. A comprehensive picture of adolescent stress and coping would include information on these less salient demands as well.

Directions For Future Research

To gather a more complete picture of adolescent stress and coping, studies surveying adolescents subjective experience might collect data across a variety of different categories. Such research would highlight the differences and similarities between subgroups and would provide information useful for designing more appropriate and effective global interventions such as curriculum based coping training. In addition, future research might examine thoroughly the specific demands and related coping attempts adolescents find demanding. For example, a future study focusing on the specific demands and coping attempts associated with school

related problems would provide useful information for designing interventions aimed at helping adolescents to cope better with school related problems. Lastly, there appears to be a need for research which evaluates the effect of specific coping interventions on adolescents ability to deal with specific demanding situations.

Summary

This study has investigated adolescent stress from the perspective of adolescents themselves. Specifically, the study solicited adolescent perceptions on a number of stress related topics including, the most demanding situations faced, the feelings associated with these situations, the attributions as to why these situations are demanding, the coping strategies used to deal both with the situation and the associated feelings, the perceived effectiveness of coping, and the attributions as to why coping was effective or ineffective.

The study produced a number of interesting findings. Students tended to attribute the demandingness of situations to the characteristics of the demands themselves. The feelings most commonly associated with the 'most demanding' situations were anger, fear, and sadness. Stressor management strategies were favoured for dealing with situations whereas stress management strategies were favoured for dealing with feelings. Attributions as to why coping was effective or ineffective tended to be based on the outcome associated with coping effort. Lastly, significant

gender differences were found across both demands faced and perceived coping resources.

Overall, the findings tend to suggest that the adolescents in this sample could benefit from focused coping interventions addressing both coping deficits and coping skills relevant to the demands experienced most frequently.

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APPENDICES

APPENDIX A

The Important Situations Questionnaire

University of Calgary
Department of Educational Psychology
Dr. Bryan Hiebert: 220-7770
Michael Huston: 220-8249 or 284-4257

Important Situations Questionnaire

Dear Student:

We are conducting a study which examines the way students deal with important situations. Your participation in this study requires the completion of an open ended questionnaire requiring 30-40 minutes of your class time. To assure confidentiality, completed questionnaires will be coded by identification numbers instead of student names. The questionnaires will be destroyed at the completion of the study.

Your participation in this study is completely voluntary. You may either decline to participate or withdraw from the study at any time without penalty. Results of the study will be available to you at its completion.

Thank You.

Michael Huston

5. Why do you think this approach for dealing with the situation was effective or ineffective?

6. Describe how you usually deal with the feelings you've described above. Rate the effectiveness of your approach. If you use more than one approach, discuss each separately.

Very				Very
InEffective				Effective
1	2	3	4	5
Circle appropriate answer				

7. Why do you think this approach for dealing with your feelings was effective or ineffective?

For situation B answer the following questions:

1. Identify (name) and describe the situation.

2. Describe your feelings usually associated with this situation.

3. What is it about the situation that you find demanding?

4. Describe how you most often attempt to deal with this situation. Rate the effectiveness of the approach you use. If you use more than one approach, discuss each separately.

Very InEffective Very Effective
1 2 3 4 5
Circle appropriate answer

5. Why do you think this approach for dealing with the situation was effective or ineffective?

6. Describe how you usually deal with the feelings you've described above. Rate the effectiveness of your approach. If you use more than one approach, discuss each separately.

Very InEffective Very Effective
1 2 3 4 5
Circle appropriate answer

7. Why do you think this approach for dealing with your feelings was effective or ineffective?

For situation C, answer the following questions:

1. Identify (name) and describe the situation.
2. Describe your feelings usually associated with this situation.
3. What is it about the situation that you find demanding?

4. Describe how you most often attempt to deal with this situation. Rate the effectiveness of the approach you use. If you use more than one approach, discuss each separately.

Very InEffective			Very Effective	
1	2	3	4	5
Circle appropriate answer				

5. Why do you think this approach for dealing with the situation was effective or ineffective?

6. Describe how you usually deal with these feelings. Rate the effectiveness of your approach. If you use more than one approach, discuss each separately.

Very InEffective			Very Effective	
1	2	3	4	5
Circle appropriate answer				

7. Why do you think this approach for dealing with your feelings was effective or ineffective?

APPENDIX B

Teacher Consent Form

University of Calgary
Department of Educational Psychology
Dr. Bryan Hiebert: 220-7770
Michael Huston: 220-8249 or 284-4257

Dear Teacher:

My name is Michael Huston and I am a graduate student in Educational Psychology at the University of Calgary.

Adolescents face a variety of demanding situations in their everyday life. In some cases the demands are dealt with successfully and in other cases less success is experienced. I am investigating the ways in which adolescents cope with the demands they face and which strategies work best in which situations. This project is part of my master's thesis and is being conducted under the supervision of Dr. Bryan A. Hiebert.

Student participation in this study entails the completion of an open ended questionnaire asking students about the nature of the demands they face and how they attempt to handle these demands. The questionnaire will take 30 minutes of regular class time to complete. In addition, students will complete a standardized inventory of coping resources which will take approximately 60 minutes to complete. To ensure the anonymity of students, all data will be coded by identification numbers instead of student names. The questionnaires will be destroyed at the completion of the study. Although participation in this study is completely voluntary, we hope that as many students as possible will take part so we can get a more complete picture of adolescent coping strategies. However, students may either decline to participate or withdraw from the study at any point without repercussion. Results of the study will be made available to all participating students at the completion of the study.

If you are willing to allow your class to participate in this study, please sign the bottom part of this form.

Thank You

Michael W. Huston

I have read the preceding description of this project. I am aware that student participation entails the completion of a questionnaire and a standardized coping inventory and that the anonymity of student participants is assured. In addition, I am aware that participation is completely voluntary and that I and my students may either decline to participate or withdraw from the study at any time without penalty. Having considered these details, I am in agreement with my class's participation in this study.

Name of Teacher: _____
(Please Print)

School: _____

Class: _____

Signature Of
Teacher: _____ Date: _____

APPENDIX C

Parental Consent Form

University of Calgary
Department of Educational Psychology
Dr. Bryan Hiebert: 220-7770
Michael Huston: 220-8249 or 284-4257

Dear parent or guardian:

My name is Michael Huston and I am a graduate student in educational psychology at the University of Calgary. Adolescents face a variety of demanding situations in their everyday life. In some cases the demands are dealt with successfully and in other cases less success is experienced. I am investigating the ways in which adolescents cope with the demands they face and which strategies work best in which situations. This project is part of my master's thesis and is being conducted under the supervision of Dr. Bryan A. Hiebert.

Student participation in this study entails the completion of an open-ended questionnaire asking students about the nature of the demands they face and how they attempt to handle these demands. In addition, students will complete a standardized inventory of coping resources. The questionnaire will take approximately 30 minutes of regular class time to complete. The inventory will require an additional 60 minutes. To ensure the anonymity of students, all data will be coded by identification numbers instead of student names. The questionnaires will be destroyed at the completion of the study. Although participation in this study is completely voluntary, we hope that as many students as possible will take part so we can get a more complete picture of adolescent coping strategies. However, students may either decline to participate or withdraw from the study at any point without repercussion. Results of the study will be made available to all participating students at the completion of the study.

If you are willing to allow your son or daughter to participate in this study, please sign the bottom part of this form.

I have read the preceding description of this project. I am aware that student participation entails the completion of a questionnaire and that anonymity of student responses is assured. In addition, I am aware that participation is completely voluntary and that my son/daughter may either decline to participate or withdraw from the study at any time without penalty. Having considered these details, I am in agreement with my son's/daughter's participation in this study.

Name of parent or guardian: _____
(Please Print)

Name Of student: _____
(Please Print)

Signature of parent or guardian: _____

Date: _____

APPENDIX D

Frequencies For ISQ Categories

Demands Faced by Adolescents

School related problems	
General	10
too much work to do at one time	86
public speaking/presentations	11
Lack of interest/bored	20
School requires too long a time commitment	3
Problems understanding	15
Needing good grades to advance	70
Teachers authority	4
tests	12
Final exams	18
Social life	
General	6
Friends take too much time	11
Uncertainty about friendships	9
Trying to be a good friend	7
Friends behavior	13
Peer pressure/ acceptance	19
Meeting new people	8
Dating	1
Part-time job	
General	5
Part-time job takes too much time	30
Necessity to perform adequately	46
Need job to be financially independent	11
Job interview	2
Dislike Job	7
Family	
General	9
Parent expectations that one behave in a particular way	51
Parents want you to spend more time with the family	7
Family fights	32
Divorce/separation	4
Family Behavior (e.g., drinking)	18
Feeling responsible for problems with guest	2
Moving	3
Future	
General	1
Worried about future	5
Going to university/deciding what to major in	6
Career planning	9
Concerns about self	
Feeling inadequate	5
Concerns about appearance	3
Serious illness	2
Smoking	1
Being Tired	3

Sports	
Sports general	3
Frustration about others not taking it seriously	1
Needing to perform adequately	22
Sports take too much time	2
Money	
Not enough money to do the things I want to do	20
Relationships/Sexuality	
General	4
Uncertain about the future of a relationship	16
Fights with boyfriend/girlfriend	9
Relationship takes too much time	10
Ending a relationship	6
Wanting a relationship	2
Death	
Concerns about death	1
Death of a family member	1
Other	
Other General	7
Driving a vehicle	13
Organizing events	1
Demands of living alone	2
Life is unpleasant	2
Getting in trouble (law, school authority)	1
Fights	1
Demands of being a single parent	3
Club Organization membership	
Club/ organization membership general	11

Feelings

Frequency of Feelings Associated with Particular Situations.

Feelings	Situation												Tot
	Sch	Fam	Job	Soc	Rel	Oth	Spo	Fut	Mon	Self	Club	Dea	
S. Happiness	5	2	3	2	1	--	2	1	--	--	1	--	17
M. Happiness	45	19	20	21	12	6	6	3	2	2	5	--	141
W. Happiness	11	6	2	5	3	--	3	--	--	--	--	--	30
S. Sadness	35	27	15	17	24	3	3	3	5	7	--	--	139
M. Sadness	52	51	12	28	23	8	2	2	10	7	1	2	198
W. Sadness	6	7	2	2	--	1	2	--	1	1	--	--	22
S. Fear	38	12	11	14	7	5	6	6	4	2	--	--	105
M. Fear	222	95	73	57	19	25	34	17	13	10	7	1	573
W. Fear	81	30	25	30	7	13	12	5	6	4	1	--	214
S. Uncertainty	31	19	8	19	16	4	2	10	4	1	1	--	115
M. Uncertainty	6	1	3	3	1	--	1	1	--	--	1	--	17
W. Uncertainty	4	2	4	1	4	--	--	1	1	--	--	1	18
S. Anger	123	88	47	34	34	29	9	14	9	15	4	3	409
M. Anger	226	166	103	76	58	37	23	20	13	24	10	2	758
W. Anger	25	11	17	9	9	3	--	2	6	2	2	--	86
M. Strength	11	8	6	2	6	2	5	--	--	--	--	--	40
W. Strength	4	1	7	1	5	--	3	--	--	--	--	--	21
S. Weakness	18	9	8	3	5	5	--	1	--	3	--	--	52
M. Weakness	36	22	11	13	4	9	8	5	5	7	--	--	120
W. Weakness	43	20	18	16	6	6	6	5	1	3	5	--	129
Guilty	9	5	4	7	4	--	4	2	--	--	--	--	35
Bored	40	22	24	10	7	5	3	1	4	1	--	--	117
Uncodeable	60	35	25	15	12	4	12	2	9	1	8	--	183
Physiological	12	1	6	2	3	--	--	--	--	--	--	--	24
Affection	6	3	2	--	8	--	1	--	--	--	--	--	20

Note. S = Strong; M = Moderate; W = Weak; Sch = School related problems; Soc = Social life; Job = Part-time job; Fam = Family; Fut = Concerns about future; Self = Concerns about self; Spo = Sports; Mon = Money; Rel = Relationships/sexuality; Dea = Death; Oth = Other; Club = Clubs; Tot = Total.

Perceptions about why situations are demanding

Physical

Too much, demand is too large	199
Too unpleasant	80
Definitely demand but not codeable	137

Other persons involved

Other behavior	46
Other cognition	82
Other affect	5
Other general	9

Self

Self behavior	10
Self cognition	17
Self affect	37
Self general	10

Combinations

Demand and other persons	26
Demand and self	10
Other persons and self	19

Other (not codeable)	6
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Coping strategies for dealing with situations

Reduce demands	
Problem solving(action directed towards immediate demand	25
Reducing other demands	10
Substituting demands(e.g., doing lighter work)	4
Sharing task with another	3
Assertive responses(straightforward expression of what one feels,thinks,wants)	45
Avoidance/withdrawal(remove oneself from situation)	39
Suppression/denial (remove demand by explaining it away)	3
Not codeable but definitely reducing demands	3
Pretending one is not reacting (reduces demand of dealing with other's reactions	14
Increase coping resources	
Time management/structuring general	6
Priorizing activities	11
Efficient use of time	11
Proper spacing of activities and effort	24
Not avoiding activities/ just doing them	45
goal setting	3
Doing things one step at a time	2
Saving money	4
look for a job	9
Money management	3
Borrowing money	1
working more	4
Preparation	9
Prep for a test	3
Studying	28
Practice	4
Tutoring/ask for help	3
Social support general	2
Talking to employer	4
Talking to boyfriend/girlfriend	5
Advice from family/spending time	10
Advice from friends/spending time	11
Withdrawing from sit until arousal subsides	5
Not codeable, definitely increasing coping resources but not codeable in any of the previous categories	2
Do my best work	22
Try Harder	24
Leave the work until the last minute	7
Problem solving decision making skills	2
Seeking counselling	1

Other stressor management

Cognitive restructuring: if reframing is directed at meaning of demand or ones resources for dealing with it	4
Resolve to do one's best	2
Nutrition	1
Not codeable above	6
Not doing the work	1
Sleep	5

Physiological approaches

Tension reduction general	2
Relaxation techniques	5
Exercise	4
Play/hobbies	3
drugs/alcohol	1
Sleep	2
Listen to music	7
Smoking	1
Medication	1

Cognitive approaches

Ignore Situation	31
Ignore feelings	4
Distraction	8
Cognitive Restructuring	6
Positive self-talk	29
Resignation	8
Try to forget	1

Behavioral Approaches

Social withdrawal	1
Slowing down, taking more time	6

Other stress management

Self-disclosure	3
Screaming	2

Other

Uncodeable	36
Physical violence	24
Sleep to avoid/situation	3
Humour	2
Show up for classes	3
Skip classes	2
"Doing as I please	2
Praying	2
Just try to be myself	3
Try to relax, calm down	3
Thinking about situation	9
Go along with others wishes	10
Keep my feelings/thoughts to myself	2
Spending time by myself	3
Doing an activity I feel competent at	1

No attempt at coping	27
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Rated effectiveness of attempts at coping with situations

1	49
2	88
3	199
4	242
5	110

Mean = 3.40

Perceptions about why coping with the situation was effective or ineffective

Effort

Self feelings	4
Other feelings	1
Self behavior	6
Self cognition	6
Other behavior	3
Other cognition	2
Physical elements in the situation (at least I tried)	1
Uncodeable effort	12

Outcome

Self feelings	125
Other feelings	11
Self behavior	61
Self cognition	52
Other behavior	25
Other cognition	32
Self general	174
Other general	12
Outcome general	103

Uncodeable 46

Coping with feelings

Reduce demands

Problem solving (action directed toward the immediate demand)	5
reducing other demands	3
Substituting demands	4
Sharing task with another	1
Assertive responses (saying what one thinks, feels, believes)	15
Avoidance/withdrawal	22
Suppression denial	3
Not codeable, but definitely reducing demands	4
Pretending one is not reacting (reduces demand of others)	9

Increase coping resources

Time management/structuring	1
Priorizing activities	1
Efficient use of time	1
Proper spacing of activities	12
not avoiding activities/ just doing them	12
Doing things one step at a time	1

Saving money	3
look for a job	1
money management/budgeting	1
borrowing	2
Work more	5

Studying	4
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Social support	
general	2
Talk to employer	4
talk to boyfriend/girlfriend	3
Advice from family/spending time	7
Advice from friends/spending time	35

Withdrawing from situation until arousal subsides	3
Not codeable but definitely increasing coping resources	1
Do my best work	9
Try harder	11
Leave the work until the last minute	1

Seeking counselling	1
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Other Stressor Management

general	2
Cognitive restructuring: if directed at demand or resources	8
Resolve to do one's best	1
Nutrition	1
Not codeable, but other stressor management	4
Not doing the work	1
Sleep	5

Physiological Approaches

Tension reduction (general)	5
Relaxation techniques	11
exercise	13
Play/ hobbies	6
Drugs/alcohol	1
Sleep	17
Listen to music	11
Watching television	2
Smoking	1
Medication	1

Cognitive Strategies

Ignore situation	31
Ignore feelings	19
Cognitive restructuring	13
Try to keep an open mind	1
Positive self-talk	42
Resignation, accepting situation	18
Try to forget	5

Behavioral strategies

Slowing down, taking more time, doing one thing at a time	9
---	---

Other Stress Management

Crying, getting upset	19
Uncodeable	41
Name calling, physical violence	26
Humour	2
Doing as I please	1
Eating	1
reading	1
Praying	7
Just try to be myself	2
Try to relax, calm down (no strategies listed)	34
Thinking about the situation	20
Keep my feelings to myself	9
Spending time by myself	3
Doing an activity I feel competent at	1

No attempt at coping	48
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Rated effectiveness of coping with feelings

1	58
2	79
3	183
4	236
5	106

Mean = 3.38,

Perceptions about why coping with feelings was effective of ineffective

Effort

Self affect	3
Other affect	1
Self behavior	3
Self cognition	5
Physical elements in the situation (at least I tried to change it)	1
Effort but not codeable above	8

Outcome

Self affect	312
Other affect	9
Self behavior	33
Other behavior	73
Other cognition	6
Self outcome general	95
Other outcome general	3
outcome general	54

Uncodeable 48