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Coping Strategies of Middle Adolescents

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COPING STRATEGIES OF MIDDLE ADOLESCENTS

by

Sheila Hennelly Parfenoff

A Dissertation Submitted to the Faculty of the Graduate
School of Loyola University of Chicago in Partial
Fulfillment of the Requirements for the Degree of
Doctor of Philosophy

May

1993

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VITA

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CHAPTER I
INTRODUCTION

Coping Strategies of Middle Adolescents

Coping is a process people use repeatedly in their daily lives in order to manage stressful events (Lazarus & Folkman, 1984). The coping process begins with an appraisal that the occurrence of a particular event is or has been stressful. Once the event is appraised as stressful, the individual must determine how he/she will cope with this event. Both the appraisal and the coping strategy are influenced by a number of person-environment factors: traits intrinsic to the person; what experience has taught the person about his/her own efficacy; the effectiveness of the coping strategy itself; and the situation in which the stressful event occurs. As adolescence is a period of significant cognitive, social, and physical change, it likely influences the relationship of person and environment characteristics, thus it is a period of great interest to our understanding of the coping process. This study will examine how adolescents cope with stressful events

will examine how adolescents cope with stressful events with a particular focus on describing the relationship of person and environment characteristics to these coping strategies.

Need for the Study

Lazarus and Folkman's theory of stress and coping asserts that stress is determined by the person; and in response to stress, the person will look for ways to alleviate that stress (Lazarus & Folkman, 1984). This theory is person-centered; that is, the person defines the stressor and how to cope with the stressor. This theory has been utilized as the theoretical framework within which to investigate adolescents' coping behavior. While several researchers (e.g., Compas, Malcarne, & Fondacaro, 1988; Ebata & Moos, 1989; Glyshaw, Cohen, & Towbes, 1989; Patterson & McCubbin, 1987; and Stark, Spirito, Williams, & Guevremont, 1989) have worked to develop a measure of adolescent coping, there are two problems with their efforts. First, the coping strategies described by these measures have not been generated by adolescents, but rather, the adult researchers have selected strategies and then asked adolescents whether or not they endorsed them. This method likely does not provide an accurate description of adolescent coping. For example, the list of strategies is likely to be incomplete. Adolescents may

use other strategies not considered by the researchers; or, the researchers may generate strategies that adolescents don't actually use. Second, of the two studies that did use adolescent-generated coping responses (Compas, Malcarne, & Fondacaro, 1988; Patterson & McCubbin, 1987) the subjects were White, rural, and from a middle socioeconomic background. Characteristics of one's family such as socioeconomic background, geographic location, and race may influence the person's daily living or account for adaptiveness of some coping strategies reflected in cultural differences (Compas, 1987). Therefore, in order to understand the development of and role of coping for adolescents, research must describe coping strategies generated by adolescents themselves and examine the coping strategies of adolescents from a more diverse demographic background. This study is designed to address both of these issues.

Additionally, research has identified certain person and situation characteristics that affect adults' choices of coping strategies. Specifically, the self-esteem of the person and the impact of a situation are two factors found to make a difference in the type of coping strategies utilized (Carver, Scheier, & Weintraub, 1989; Pearlin & Schooler, 1978). However, very little research has addressed the role these

factors play in the coping strategies used by adolescents (Forsythe & Compas, 1987).

The domain of the stressful event may also affect the person's selection of coping strategies. Research has found that for specific domains of stressful events (i.e., family relationships and academics), children and young adolescents (10 to 14 years) display more cross-situational consistency in their coping than do college-age adolescents and adults (Compas, Malcarne, & Fondacaro, 1988). This observation warrants further investigation because it raises questions about the influence of domains (other than family relationships and academics) on adolescent coping. Previous research has also not examined middle adolescents' coping across domains.

In summary, the purpose of this study is to describe coping strategies generated and reported to be used by middle adolescents. Middle adolescents are of particular interest because this period encourages a growing independence and development of identity, representing the heart of adolescence. Further, this study extends our investigation to a wider demographic range examined in previous research. Finally, this research will look at possible person and situation variables that may influence the type of coping strategies adolescents employ.

Description of the Study

This study will assess the coping strategies of adolescents using a semi-structured interview that allows adolescents to generate the types of strategies that they actually use in response to specific stressful events. These results will provide information relevant to several questions about adolescent stress and coping. First, the types of coping strategies employed by adolescents will be described according to the responses generated in the semi-structured interviews. Coping strategies will then be classified into subcategories or clusters of strategies that are conceptually similar. The subcategories will then be defined as problem- and/or emotion-focused, in order to describe coping strategies according to their function or "type".

In addition, these strategies will be examined along a range of demographic characteristics (i.e., age, gender, race, and socioeconomic status). Differences within the period of adolescence will be explored by testing the hypothesis that 15-16 year old adolescents will generate fewer coping responses than 17-18 year old adolescents. It is also postulated that early-middle adolescents (15-16 year olds) will cope more frequently than their older counterparts (17-18 year olds) with emotion-focused rather than problem-focused coping.

It is hypothesized that there will be gender

differences in coping since the socialization of females is thought to lead to their being more forthcoming about their feelings and to seeking help from others. In particular, it is hypothesized females will use more emotion-focused coping than males.

Socioeconomic differences are also anticipated. Previous research has not included people from low socioeconomic backgrounds except in regard to coping with extreme situations, i.e., drug abuse or teenage pregnancy. This study hypothesizes that those from low socioeconomic backgrounds will use more emotion-focused coping in their daily living experiences. This is because they have fewer material resources and less control available to them in work and at least social settings. Also participants in previous research of coping with daily events were generally of the White race. This study will expand our investigations to include African-American adolescents in addition to White adolescents.

Further, the impact of a stressful event and the domain or context of that event will be explored through particular questions in the interview. The degree of stress observed by the adolescent (i.e., its impact) is thought to influence the use of coping strategies. Thus, impact needs to be described before specific hypotheses about its influence can be generated. The

impact of the stressful event is conceptualized as major or minor; the types of coping strategies responding to major or minor events are described as emotion-focused or problem-focused. When there is a great impact on the person's life, then coping is likely to increase in terms of the number or coping strategies used and become more emotion-focused. In addition, when there is little or no control available in a situation, the person is believed to use more emotion-focused than problem-focused coping.

Finally, the influence of personal beliefs about one's self, specifically, self-esteem and level of distress and depression on coping will be evaluated with two objective measures (Bachman & O'Malley, 1977; Derogatis & Spencer, 1982). The person characteristics of self-esteem and general distress and depression are hypothesized to influence choice of coping strategies. That is, a person with low self-esteem and high distress will be more likely to use fewer coping strategies, and the strategies they do use will be emotion-focused. The converse of these hypotheses, that a person with high self-esteem and low distress will use more coping strategies, and these strategies will be problem-focused.

CHAPTER II

REVIEW OF RELATED LITERATURE

Overview

Adolescence is a period of dramatic change in all dimensions of human development: cognitive, emotional, physical, and social. Adolescents face the challenges of incorporating an increased cognitive capacity with changes in life experience, at the same time they must deal with changes in their physical selves as a result of entry into puberty. They encounter numerous new social expectations such as developing roles with opposite sex peers, reaching academic requirements, achieving independence from parents, developing their own set of values, and choosing a career. Understanding what it takes to be a competent individual who can deal with major and daily life events is the focus of stress and coping research. Adolescents who can learn effective means for dealing with stressful encounters are believed to be more well-adjusted than those who cope ineffectively. Adult research on stress, coping, and adjustment have indicated a dynamic relationship among these factors affected by person and environment

characteristics (Lazarus & Folkman, 1984). Because adolescence is a period of tremendous growth and change, and coping is affected by changes in the person and the environment, this developmental period affords important opportunities to study the stress and coping relationship.

Life stress and psychological adjustment

Stress has always been difficult to measure. According to the theory of Lazarus and Folkman (1984), the stressfulness of an environmental event is dependent upon the person's view of that event (e.g., whether they see the event as threatening or nonthreatening, desirable or undesirable, controllable or uncontrollable). As well, the impact of an event is dependent upon the resources the person has to deal with the event. Therefore, what is stressful for one person may not be stressful for another, and the impact that stress has on one person may vary from the impact experienced by others.

From this perspective, linking the environmental event to its perception is central to the experience of that event as stressful. In particular, stress results from experiencing events which the individual perceives as threatening his/her ability to cope. This process is referred to as cognitive appraisal, the impact of which is dependent in part on characteristics like age,

gender, and self-esteem.

Cognitive appraisal is evaluative; it is thought to take place continuously in waking life. In general, cognitive appraisal involves two issues: 1) whether a situation is going to cause the person trouble, or benefit; now or in the future; and in what way; and 2) what, if anything, can be done about this situation. The first issue is called primary appraisal. Primary appraisal concerns the evaluation of the situation as stressful, benign-positive, or irrelevant. The second issue is called secondary appraisal. It is a more complex evaluation, taking into account the coping options available to the person and whether or not a particular option will be effective in reducing the stressor. In addition, the person tries to determine whether he/she can carry out this coping option effectively. The person then attempts to meet the stressor by implementing the coping strategy he/she has determined will work effectively.

After the person has implemented the chosen coping strategy, he/she then evaluates the strategy's effectiveness in alleviating the distress experienced as a result of the stressful event. If he/she finds that the coping strategy was helpful in eliminating the distress, then the stress-coping-adjustment process is finished. If he/she finds that the coping strategy

merely reduced the distress or had no effect, then the person will probably reappraise the current stressful experience and attempt to cope again. Through this process the person gains experience in coping with stress and modifies the appraisals of his/her capabilities and of the stressful situations.

Stress research and its implications for coping

In the last decade, the transactional model of Lazarus and Folkman has been utilized to investigate how adolescents respond to stress. In particular, research with adolescents has shown a relationship between stress and psychological adjustment (see Compas, 1987b and Johnson, 1986 for reviews). But this same research has indicated that some subjects who experience a great deal of stress are not poorly adjusted; rather, they are well adjusted. This is perhaps because the person's coping serves to mediate the relationship between stress and adjustment (Lazarus & Folkman, 1984). If coping does influence the stress-adjustment relationship, then it is the task of researchers to identify and describe specific coping strategies and their effectiveness.

Age and gender differences in the appraisal of stressful events. Research has found that person characteristics such as age and gender can affect the adolescent's appraisal of stressful events (Compas, Davis, & Forsythe, 1985; Davis & Forsythe, 1986). Compas

and his colleagues sought to describe adolescent stress by asking adolescents to name stressors they had experienced on a day-to-day basis (called minor events) and stressors experienced as major events. Subjects listed major and minor events that were positive and negative. In this research, gender and age differences in the reporting of events were found (Compas et.al., 1985). In particular, females reported more negative events than did males, but males and females did not report different numbers of positive events. Yet when gender differences were investigated by type of event (i.e., major or minor), females reported more daily negative events and fewer positive daily events relative to males. Finally, there were no significant differences in male and female reporting rates of valence (positive or negative) of major events.

In looking at these gender differences, it is important to note that several appeared to vary as a function of age within the adolescent period. Specifically, gender differences in the valence of daily events were only significant for early adolescents (12-14 years old). In this early adolescent age group, females reported more negative events than positive events whereas the opposite was found for males. Middle adolescent females (15-17 years old) also reported more negative daily events than positive ones. Middle

adolescent males and late adolescent females and males (18-20 years old) did not report significantly different numbers of positive and negative daily events.

From this study Compas and his colleagues were able to accomplish several goals. They expanded upon the existing stressful life events measures for adolescents by making a distinction between major events and minor events. In examining minor events, they found that these daily events are perceived differently than major events both in terms of their frequency and in terms of their valence. It may also be that early and middle adolescents are particularly vulnerable to the adverse effects of minor events due to their higher reported frequency rates and ratings of negative over positive valence. In addition, female adolescents may be more vulnerable to minor events.

A second study also uncovered age differences during the period of adolescence in the complexity of the appraisal of stressful events (Davis & Compas, 1986). Davis and Compas examined change in cognitive appraisals across adolescence. It was expected that the appraisals made by older adolescents (18-20 years old) would be more complex (i.e., involve more dimensions) than those made by younger adolescents (12-14 years old). Multidimensional scaling analyses were utilized to determine the number of dimensions early, middle, and

late adolescents use when making their appraisals of stressful events. Older adolescents were the same as middle adolescents in the complexity of their appraisals of life event dimensions. However, early adolescents appraised life events on only one dimension; desirability. On the other hand, middle and older adolescents utilize dimensions of desirability, generality of cause, and the impact of events.

Additional research categorizing types of stressful events (Tolan, Miller, & Thomas, 1988) also found gender differences in middle adolescents (16-18 years old). Stressful events were categorized into one of the following groups: 1) daily events; 2) circumscribed events, or discrete traumatic events (e.g., auto accident); 3) developmental transitions (e.g., puberty); and 4) induced transitions (e.g., parental divorce). Subjects were asked to rate the stressfulness of events in each of the four categories. Females rated daily events as significantly more stressful than developmental transitions, whereas males did not make this distinction. In ratings of change required by each category of stressor, females reported that all categories except developmental transitions required more change than did males. It may be that females report stressors as requiring more change and, in the case of daily events, more stressful than males because

females are more willing to be forthcoming about internal distress. Finally, when comparing levels of experience with the different categories of stressors, there were no significant differences (note: daily events approached significance). Females tended to experience more daily events than males. Analyses showed that other ratings of events were not affected by level of experience for males or females.

These gender differences also extend to the relationship between stress and adjustment among adolescents (Siddique & D'Arcy, 1984). In this research, females were more vulnerable to symptoms of poor adjustment. Females showed greater externality than males, a factor known to have a close association with several symptoms of poor adjustment. Females had greater social and psychological dependency in family and peer life events, thereby increasing the importance of peers and family, that then may account for their vulnerability to symptoms. Siddique and D'Arcy speculate that female adolescents may be growing into their traditional sex roles which lead them to sense a lack of control over their aspirations and behavior patterns, along with a heightened sensitivity to family and peer group stress. However, in terms of school stress, the gender differences disappear.

Other research has indicated that males may cope

with stress by using avoidance strategies, thereby experiencing more distress, in contrast to females who are socialized to lean on others for support (Compas, Slavin, Wagner, & Vannatta, 1986). Specifically, females experienced significantly more negative events than males; yet, the correlation between negative events and symptoms was significantly higher for males ($r = .49$) than for females ($r = .14$; Compas, et al., 1986). This finding is in contrast to prior studies with adolescents suggesting that the frequency and severity of negative events may not be all that is involved in the relationship of stress and adjustment. That is, there may be other variables, in conjunction with gender, that mediate the effect of stressors on adjustment. One explanation, suggested by Patterson and McCubbin (1987), is that males are socialized to be less forthcoming regarding problems and emotional responses to problems and thus, exhibit an avoidance coping style. Therefore, when males do acknowledge negative events, the impact may be greater on adjustment.

The studies reporting a significant relationship between life events and psychological adjustment for adolescents have generally found only modest correlations (Bobo, Gilchrist, Elmer, Snow, & Schinke, 1986; Compas, Slavin, Wagner, & Vannatta, 1986; Newcomb, Huba, & Bentler, 1981; Siddique & D'Arcy, 1984; Tolan,

Miller, & Thomas, 1988). This modest relationship between stress and adjustment suggests the existence of moderating variables; i.e., variables that change and sometimes buffer the effect of stress on adjustment. Some of these moderator variables may relate to the adolescent's coping ability, and some variables may be intrinsic characteristics of the person (i.e., gender, age). Some variables may relate to the adolescent's coping ability (i.e., available resources) and include the coping strategies used by the adolescent. Research needs to investigate these characteristics and resources as they relate to coping ability in order to clearly delineate the stress-adjustment relationship.

The impact of a stressful event. The impact of the stressful event on the person is also important to our understanding of the relationship between the variables of stress, coping, and adjustment, because the impact of the event affects the person's appraisal and thus, the choice of coping strategy. Tolan et al. (1988) examined the distinction between minor events and major events in terms of their impact by classifying stressors according to the demand for readjustment required by the stressor (i.e., developmental changes, induced transitions, circumscribed events, and daily events). The results demonstrated differing relationships to outcome measures depending upon their demand for readjustment. They

suggest that there is a differential impact by type of stressor on the person's adjustment process. In addition, it may be that the relative importance of types of stressors varies across developmental stages (Tolan et al., 1988). The results of this study indicate that minor stressful events have the most immediate and direct influence on psychological functioning of adolescents.

Contrary to Tolan et al.'s findings, two studies -- one with early adolescents (10-14 years; Compas, Howell, Phares, Williams, & Ledoux, 1989) and one with older adolescents (17-18 years old; Wagner, Compas, & Howell, 1988)-- demonstrated an indirect relationship of daily stressful events to symptoms. Causal modeling analyses in both studies revealed a significant path from major events to daily events and from daily events to symptoms. The Wagner et al. (1988) study with older adolescents also found that a causal path between life events and symptoms did not exist independently of daily stressful events. Perhaps there are two different types of daily stressful events: stressful events that come from daily living, and stressful events that occur as a result of a major event. Future research should ask adolescents for ratings of impact in order to differentiate major and minor events. Also future research should examine the frequency of stressful

events. Knowledge of the impact and frequency of stressful events will help to delineate the nature of stressful events and their impact on coping and symptoms.

The domain of a stressful event. The domain of a stressful event has characteristics that may also influence one's coping and adjustment. One such characteristic is the control available to the person in a stressful situation. Controllability is believed to influence the person's choice of coping strategy (Lazarus & Folkman, 1984; Pearlin & Schooler, 1978). Locus of control, the degree to which individuals view environmental factors to be under their control, also acts as a moderating variable of stressors on symptoms, and acts differentially for age and gender (Siddique & D'Arcy, 1984). It was believed that because parents still exert some control over their adolescent children, the buffering role of locus of control would be limited to those stressors that stem from adolescents' relationships and activities that occur outside the family. In fact, results of a nonpredetermined stepwise regression analysis revealed that family stress explained about 10% of the variance in psychological functioning, while school and peer stress each contributed only slightly more than 1% of the variance. Also in other regression analyses, gender and locus of

control contributed for over half (12-15%) of the total variance accounted for in psychological functioning (i.e., anxiety, depression, general health), with the remaining variance (10%) explained by the three types of stressors (i.e., family, peers, school).

It seems that locus of control acts as a moderator variable in the relationship of stress with peers and in school, but not in the relationship with family and adjustment. It may be that family stress can lead to more dysfunction because adolescents are still under the rule of parents and do not control stressful family events as much as stressful peer and school events. This study also points out a possible moderator interaction between gender and locus of control orientation. Gender differences in locus of control orientation indicate that females are more vulnerable to distress than males. This may be because females, on the average, have an external orientation, which means they attribute more events in their lives to external environmental conditions (Douvan & Adelson, 1966). This approach does not leave much room for using control and coping resources to tackle a problem. Instead, a person with this orientation would relinquish control and possibly choose coping strategies centered on dealing with emotions. Siddique and D'Arcy's (1984) findings support previous research, that females with an external

orientation are more psychologically vulnerable than females with an internal orientation or males with either an internal or external orientation.

Finally, when studying stress and its relationship to adjustment, specific attention should be given to how stress is measured. The measurement of stress is retrospective; as such it is sensitive to contamination by event recall or bias. Retrospective research also prescribes that measures of adjustment be administered at one point in time, usually by means of self-report. In most research of stress and adjustment, the subject responds to stress and health measures together. Therefore, the directionality of the relationship between these two measures is unclear. It is not known whether stressful events leads to anxiety, depression, or some other index of psychological functioning; or perhaps that maladjustment leads to an increased likelihood of experience with life stress. A third variable may be affecting the relationship between stress and adjustment, possibly in the form of moderator variables (e.g., age, gender, impact and domain of the stressful event) as was discussed earlier. In addition, the coping process may be acting as a mediator between the stressful event and adjustment.

Coping and adjustment theory

In the examination of coping and its impact on

adjustment in adolescents, research again draws from the theory of Lazarus and Folkman (1984). This theory chooses a dynamic view of coping, taking into account the changing interaction of the person and the environment. Coping is defined as "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (p. 141). Coping is an "effort to manage", which means it includes anything the person thinks or does; but it is not concerned with the success of the cognition or behavior. The effort, as opposed to an automatic response, is the act of coping. In using the word "manage" Lazarus and Folkman include efforts to minimize, avoid, accept, and tolerate as coping responses, as well as efforts to master the environment.

According to this theory, after the person appraises the situation, he/she then determines how to cope. Coping mechanisms are organized into two categories: problem-focused and emotion-focused. Problem-focused coping is directed at managing or altering the problem. Emotion-focused coping, on the other hand, is directed at regulating emotional responses to the problem. When a problem is appraised as changeable, problem-focused coping should be used. When nothing can be done to modify harmful, threatening

or challenging problems, emotion-focused coping should be used.

In addition, it is thought that one needs to regulate distress and manage the problem that is causing the distress in order to cope effectively (Lazarus & Folkman, 1984). That is, both emotion-focused coping and problem-focused coping are likely to be utilized in a stressful encounter. Typically, the person needs to regulate emotional distress in order to think clearly enough to generate solutions to the problem. It is important to have the right balance of the two in each encounter because just as they can facilitate one another, they can also impede one another. That is, too much convergence on emotion-focused coping when the situation calls for quick problem-solving (e.g., when a nurse must deal with an emergency) can lead to ineffective coping.

There is an important point to be made about the conceptualization of emotion- and problem-focused coping and the task of measurement. Lazarus and Folkman (1984) caution that it is difficult to determine whether a strategy is emotion- or problem-focused. Any thought or action can have multiple coping functions, which impedes an attempt to say that one is regulating emotion or problem solving. "We sometimes regulate feeling by solving problems and solve problems by regulating

feelings" (p.319). Therefore, Lazarus and Folkman recommend that researchers use these two categories as general guides for thought and description.

The ways people cope are heavily dependent upon the resources available to them and the constraints of a specific encounter that support or inhibit use of these resources. Coping resources include the health of the person, problem-solving skills, social skills, social support, and material resources (Lazarus & Folkman, 1984). People of low socioeconomic status (SES) are apt to have fewer material resources and poorer health than those of the middle SES group (Hollingshead & Redlich, 1958). Therefore, low SES groups may perceive themselves to be unable to change a stressful event due to fewer resources and in turn, use emotion-focused coping rather than problem-focused coping.

Until now, research has not addressed racial differences in coping with daily stressors. African-Americans are likely to experience racial discrimination more often than Whites and have fewer resources available to them (e.g., material resources, access to professional help). They may have less control in situations than Whites as a result of this racial discrimination. The experience of daily stress is likely to be different for Whites and African-Americans.

Psychological resources, such as the beliefs and

commitments of the person, also influence the coping strategies employed (Lazarus & Folkman, 1984). Positive beliefs, such as the belief that outcomes are controllable or that a particular helping person will be effective (e.g., a doctor, lawyer), can be a psychological resource to aid in coping. However, some beliefs (e.g., that there is a punitive God or that fate is in control) can lead to appraisals of helplessness. Likewise, commitments can help one cope to the extent that they motivate the person to sustain coping efforts. Commitments can also leave a person more vulnerable to threat, depending upon how deeply the commitment is held.

Pearlin and Schooler (1978) examined psychological resources in adults, looking at the extent to which they can buffer the effects of stress as compared to actual coping strategies. They defined psychological resources as what people are, separate from the roles they play, (while coping strategies are what people do). They examined mastery, self-esteem, and self-denigration as resources that may reduce the distress of a difficult encounter in four areas: marriage, parenting, work, and finances. The results of their study revealed psychological resources to be more helpful in reducing distress in work and finances, while coping strategies were more helpful in marriage and parenting. They

suggest that psychological resources enable people to face strains in situations over which they have little or no control (e.g., finances and work). However, in situations over which one has some control, what the person does (problem-focused coping) is more important than focusing on their emotional response to the stressor (emotion-focused coping).

This research implies that adolescents may use more emotion-focused coping with family because they have less control (i.e., the parents are in charge); comparable in some ways to their parents who have less control at work (they must answer to their bosses). In addition, it may be that low SES persons use more emotion-focused coping because they are more likely to be in situations in which there is less control (i.e., low-paying jobs) and have fewer material resources.

Research into social support is unique in that social support is examined as both a coping mechanism (e.g., satisfaction with helpful feedback) and a resource (e.g., number of friends can mean more available material resources). Many researchers have suggested that social support moderates or "buffers" the impact of stress on adjustment. Therefore, Compas and his colleagues (Compas et al., 1986) hypothesized that higher levels of distress would be associated with lower levels of perceived social support. Their hypothesis

was supported by the data. Specifically, they found that lower levels of satisfaction with social support were related to symptoms of depression, somatization, interpersonal sensitivity, and anxiety. Females reported having more individuals available for social support, although the number of persons reported was not related to psychological functioning. This finding may support the belief that females place more importance on external relationships and that concerning themselves with the number of relationships in their lives is not a particularly helpful perspective to take.

Compas et al. (1986) also examined the contribution of social support and negative stressful events to functioning. They found that satisfaction with social support and negative stressful events did not interact with dysfunction. Each variable contributed to the variance in symptoms, but entering the interaction term of events and satisfaction as a third step did not result in a significant increase in the proportion of explained variance. Therefore, the notion that social support increases in importance as the frequency of negative events increases was not supported. Possibly these results simply indicate that people cope with stress in ways other than social support. Or perhaps the use of social support as an effective coping mechanism reaches a ceiling, a point at which more does

not reduce or buffer more stress. Social support is important to have available when experiencing stress, but beyond a certain level, more of it may not be useful.

Lazarus and Folkman (1984) have used the term "coping resources" to describe resources available to a person or competencies for finding resources that are needed but not available. Coping resources are not usually constant over time. They are likely to change as a function of experience, period of development, and expectations for adaptation associated with one's age. Adolescents, in particular, due to the developmental changes of this period, should be susceptible to changes in coping resources. For example, adolescents experience changes in their cognitive abilities, therefore, the psychological resource of problem-solving may change too.

Finally, in addition to the influence of coping resources themselves, the effectiveness of those resources should influence the functioning of the person. That is, effective coping should decrease stress, resulting in a well-adjusted person. Effective coping is determined by the outcome. The ideal outcome, in which the problem is resolved and there are no negative emotions remaining, is probably rare, making the measurement of coping effectiveness complex.

Nonetheless, Lazarus and Folkman define a positive outcome as:

"a permanent resolution without generating additional conflicts. This resolution will be marked by cessation of effort and mobilization as well as a positive affective state marked by emotions such as relief, pleasure, contentment, or joy." (p. 190)

In some cases, the problem appears to be resolved, coping was effective; but actually the same stressful problem may be reoccurring. For example, two siblings have an argument and resolve it, only to have another argument later the same day. In this case, apparent effectiveness in one encounter may not indicate good overall coping.

Research into the coping process during adolescence is new and not yet well developed. Past research has focused on related areas such as building problem-solving skills, social support, type A behavior, and coping in achievement contexts (see Compas, 1987a for a review). It does not suggest a model of coping for adolescents per se, or the process of coping, particularly as it may change with adolescent development. A few recent studies (Compas, Malcarne, & Fondacaro, 1988; Glyshaw, Cohen, & Towbes, 1989; Patterson & McCubbin, 1987) have sought to apply Lazarus and Folkman's model to their work with adolescents. These studies have attempted to answer three questions:

- 1) what types of coping strategies are used by

adolescents; 2) does the structure of coping change across the period of adolescence; and 3) does coping moderate the effect of stress on adjustment during adolescence?

Coping strategies of adolescents

Research has found that there are certain coping strategies and constellations of strategies that lead to better psychological adjustment in adolescents. In this section, measures of adolescent coping strategies and the apparent effectiveness of these strategies will be examined. Also the strengths and the shortcomings of this research will be discussed throughout this section. Most of the research of adolescent coping is based on Lazarus and Folkman's "Ways of Coping Checklist", a measure of coping strategies designed for adults (Lazarus & Folkman, 1984). This is a structured list of 62 coping mechanisms organized into eight broad categories (see Table 1).

Measures of adolescent coping. Previous research has investigated the coping strategies that adolescents use for general problems and for actually experienced events, however these measures of adolescent coping have two shortcomings. First, many do not ask the adolescents themselves to describe their coping, thereby generating an incomplete or possibly incorrect list of adolescent coping strategies. Second, most of the

Table 1

Categories or Items of Coping Strategies for Adults and Adolescents

Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986

- 1) Confrontive coping
- 2) Distancing
- 3) Self-controlling
- 4) Seeking social support
- 5) Accepting responsibility
- 6) Escape-Avoidance
- 7) Planful problem-solving
- 8) Positive reappraisal

Patterson & McCubbin, 1987

- 1) Ventilating feelings
- 2) Seeking diversions
- 3) Developing self-reliance
- 4) Developing social support
- 5) Solving family problems
- 6) Avoiding problems
- 7) Seeking spiritual support
- 8) Investing in close friends
- 9) Seeking professional support
- 10) Engaging in demanding activity
- 11) Being humorous
- 12) Relaxing

Stark, Spirito, Williams, & Guevremont, 1989

- 1) Distraction
- 2) Social withdrawal
- 3) Wishful thinking
- 4) Self-criticism
- 5) Blaming others
- 6) Problem solving
- 7) Emotional regulation
- 8) Cognitive restructuring
- 9) Social support
- 10) Resignation

Wills, 1986

- 1) Problem solving
- 2) Cognitive coping
- 3) Peer support
- 4) Adult support
- 5) Parental support
- 6) Substance use
- 7) Physical exercise
- 8) Aggression
- 9) Social entertainment
- 10) Individual relaxation
- 11) Prayer

Glyshaw, Cohen, & Towbes, 1989

- 1) Problem solving
- 2) Cognitive coping
- 3) Peer support
- 4) Social entertainment
- 5) Physical exercise

research has not been conducted with adolescents of a diverse demographic background (i.e., race, socioeconomic status, and urban/suburban).

In one study of adolescent coping, adolescents generated the coping strategies themselves, assuring a complete list of strategies actually used by adolescents (Patterson & McCubbin, 1987). However, the study sample consisted of high school students from a midwestern suburb; a group presumably not representative of our pluralistic society, with diverse racial and socioeconomic groups. Patterson and McCubbin (1987) studied the coping mechanisms that adolescents (10th, 11th, and 12th graders) used for problems in general and for problems that they had actually experienced. The subjects generated a list of 95 coping items that they used in response to general stressors. These items fit into three primary ways of coping: 1) coping by direct action to modify the situation; 2) coping by altering or controlling the meaning of experiences through perception and appraisal; and 3) coping by managing the tension or stress experience. The items were then factor analyzed using data from 467 junior and high school students (average age was 15.6 years). Twelve factors made up of 54 coping strategies were identified (see Table 1). The coping factor used most was relaxing (i.e., listen to music, ride around in car, eat food,

daydream about how you would like things to be). The coping factor endorsed the least was seeking professional support (i.e., get professional counseling, talk to a teacher or counselor at school about what bothers you).

On the other hand, a study incorporating a larger sample did not use coping strategies generated by adolescents, and may not be sensitive enough to detect age differences (Stark, Spirito, Williams, & Guevremont, 1989). This study used a checklist of cognitive and behavioral coping strategies called "Kidcope" with a diverse racial and socioeconomic sample of adolescents aged 14 to 17 years. The checklist is composed of 10 items (see Table 1). It requires subjects to state the frequency (Frequency Scale) with which they used a coping strategy item and how effective (Efficacy Scale) that strategy was for them in response to a problem they had encountered in the prior month. This checklist was originally developed for pediatric populations (Spirito, Stark, & Williams, 1988). Differences were found across gender and situation, but no differences were found for age; perhaps a result of their not using strategies generated by the adolescents.

A third coping scale also did not utilize coping strategies generated by adolescents nor did it examine a demographically diverse sample. However, Ebata and Moos

(1989) did look at four groups of adolescents representing a wide range of physical and psychological functioning. The four groups were: Rheumatic Disease, Conduct Disorder, Depressed, and Control. The researchers identified a set of coping items and then asked the adolescents to select the most important problem they faced in the previous year and to indicate how often they used each of the coping responses. Using conceptual and empirical criteria, the researchers grouped the coping responses into eight dimensions reflecting approach and avoidance coping. Results indicated that the conduct disorder and depressed groups used more avoidance coping. Also, approach responses were associated with higher levels of individual well-being. This study was unique because it examined diverse clinical groups of adolescents, but findings were based on coping strategies generated by the researchers, rather than the adolescents themselves. Therefore, there is some question as to whether the list of coping strategies represents the actual and complete pool of strategies used by these groups.

Finally, an adolescent coping scale of strategies developed by Wills (1986) and tested by Glyshaw, Cohen, and Towbes (1989) yielded two different sets of categories of coping strategies. The Wills (1986) study produced 11 factors for coping, while Glyshaw et al.

found only five factors (see Table 1). About 40% of the items from Glyshaw et al. failed to load consistently on a factor, and a number of potentially interesting coping factors reported by Wills (e.g., aggression, relaxation) were not tested in the Glyshaw et al. study. There are obvious differences in the two studies' samples: Wills' sample consisted of more non-Caucasian subjects (50% of the study sample) than Glyshaw et al. (20% representation); and the Glyshaw et al. study had a larger age range of subjects (13-18 years old) as compared to Wills (12-14 years old). In addition, the Glyshaw et al. study did not ask adolescents to generate coping strategies themselves, so perhaps the method of data collection, that is, to administer measures of predetermined coping strategies, was not sensitive to the entire list of possible strategies used by adolescents.

Coping strategies and adjustment. According to the predominant theory, the stressful event is mediated by the coping process, which in turn, affects the person's psychological adjustment (Lazarus & Folkman, 1984). In fact, in a study of appraisal and coping fit, a relationship was found between number of coping strategies named by adolescents, situation characteristics, and adjustment (Compas, Malcarne, & Fondacaro, 1988). Compas and his colleagues examined

early adolescents, ages 10-14. They looked at the number of alternative solutions generated by the adolescents, along with the number of strategies actually used. It was hypothesized that as the number of each of these variables increased, emotional and behavioral problems would decrease. Compas et al. found that the number of problem-focused coping strategies generated and used was negatively related to self-reports of emotional/behavioral problems and that emotion-focused strategies were positively related to problems.

Compas et al. (1988) also asked the early adolescents to describe stressful interpersonal and academic events, how they could have handled the event, and how they actually coped with the event. Responses were coded as problem-focused or emotion-focused coping strategies and related to emotional and/or behavioral problems. Problem-focused strategies included: studied more, talked things over with the other person, and did more homework. Emotion-focused strategies listed were; calmed myself down, ignored the situation, hit other person, yelled at other person, and threw things. The number of problem-focused alternatives generated and strategies used were negatively related to problems. Unexpectedly, Compas and his colleagues found significant correlations between coping and

emotional/behavioral problems with social but not with academic stressors. It was suggested that the subjects may have had more at stake in coping with social stress and thus, coping with social stress had a stronger relationship with emotional/behavioral problems.

Only two studies of adolescent coping measures asked the adolescents to generate their own coping responses and then examined these responses in relation to some index of adjustment (e.g., Compas et al., 1988; Patterson & McCubbin, 1987). Compas et al. (1988) looked at coping strategies and emotional/behavioral problems, as described previously, while Patterson and McCubbin (1987) looked at substance use. Take note that the samples in the Patterson and McCubbin study and the Compas et al. (1986) study were not racially or socioeconomically diverse. The results were constrained by the socioeconomic background (White and middle class) of the subjects; and in the case of Patterson and McCubbin, the sample size ($n = 30$). An additional constraint is that Compas et al. examined only early adolescents (10-14 years of age) while Patterson and McCubbin examined 16-18 year olds. These restrictions of the sample populations make it difficult to generalize the results to other groups and situations.

Despite the weakness of examining nonsubject-generated coping strategies, Ebata and Moos (1989)

discovered a relationship between coping and psychological adjustment in adolescents. They were particularly interested in the efficacy of approach and avoidance coping strategies. Avoidance strategies tend to be more passive (moving away from threat) while approach strategies are conceptualized as active (towards threat). Pearlin and Schooler (1978) found avoidant strategies to be less effective in adults. Ebata and Moos (1989) found the same to be true during adolescence. Specifically, stepwise regression analyses of coping categories revealed specific coping constellations (i.e., shared variance among coping strategies) that predict adjustment. For example, more positive reappraisal, problem solving, and less resigned acceptance predicted psychological well-being. Guidance/support and alternative rewards did not enter the stepwise regression analyses, despite having significant partial correlations with well-being. Ebata and Moos interpret these results to mean that these categories overlap in variance with other coping categories. In addition, positive reappraisal was not significantly related to distress when considered alone, but once other coping categories were included in the analyses, positive reappraisal made an additional contribution to the prediction of distress.

Patterson and McCubbin (1987) and Wills (1986)

examined approach and avoidance type coping strategies as they relate to substance abuse in adolescents. Both studies found that certain types of coping strategies were related to increased use of substances. In the study conducted by Wills (1986), factor analyses identified four factors of approach strategies (i.e., behavioral coping, cognitive coping, parental support, and peer social support). Other factors suggested indirect coping methods, such as getting mad, going to movies or shopping. In Wills' study, greater reliance on peer support and aggressive coping related to more substance use among urban junior high school students; reliance on behavioral and cognitive coping was related to less substance use. Patterson and McCubbin (1987) sought to replicate and expand on Wills' work. They found two classes of coping patterns related to substance abuse: complementary coping patterns and competing coping patterns. That is, ventilating feelings, investing in close friends, and developing social support appeared to complement substance use; while coping directed at solving family problems, seeking spiritual support, and engaging in demanding activities (e.g., get more involved in activities at school, do a strenuous physical activity) compete against substance use. The association between friends and substance use indicate that peers have a role in

influencing the adolescent to use substances.

Research thus far has tentatively identified relationships between coping strategies and adjustment in adolescents. However, these relationships are tentative, because the measurement of adolescent coping has generally been conducted with strategies generated by researchers rather than the adolescents themselves. Compas and his colleagues (1988) have stated that "presenting subjects with a predetermined list of coping strategies does not allow for accurate assessment of this skill" (p. 406). Further, research needs to carefully examine the influence of demographic characteristics (i.e., age, gender, race, and socioeconomic status) on the type and frequency of coping strategies adolescents generate and actually use. Finally, the relationship of adjustment to coping strategies generated and used by adolescents of different demographic backgrounds must be examined in order to portray a more complete picture of the effectiveness of specific coping strategies for adolescents. In the following section demographic characteristics will be discussed.

Age and gender differences in adolescent coping strategies

Adolescence is a period of many changes in cognitive, social, emotional, and physical development,

all of which would likely affect the coping strategies and processes utilized by the adolescent. The increasing complexity of adolescent cognitive development and changes in the ways adolescents perceive their social world may, in particular, affect cognitive appraisals. Developmental changes may not only occur as the adolescent grows older and more experienced, but given the many gender differences in adolescent behavior, males and females could experience different developmental paths. In this section, the influence of age and gender on adolescent coping will be discussed.

Age differences. Research into age differences in coping suggest that problem-focused coping strategies develop earlier than emotion-focused coping strategies. Eighth graders reported more emotion-focused coping strategies than did sixth graders, indicating that knowledge of and experience with emotion-focused coping was increasing; although, the generation and use of problem-focused coping solutions was relatively consistent across age (Compas et al., 1988). In Compas et al.'s study of early adolescents, emotion-focused coping related positively to number of problems reported by subjects and their mothers. Compas and his colleagues do not interpret this finding to mean that emotion-focused coping strategies are detrimental, but that the particular alternatives generated by the

adolescents reflect maladaptive efforts at coping (i.e., "hit the other person", "yelled at the other person"). In a study of a college-age sample (Forsythe & Compas 1987), emotion-focused coping that was well matched with appraisals was negatively related to symptoms. These results indicate that emotion-focused coping may be developing as the adolescent gets older and cognitive and social skills develop.

Ebata and Moos (1989) found that older adolescents used more problem-focused coping (i.e., approach coping) than younger adolescents. This effect was found even when the adolescents were from clinical populations (i.e., conduct disordered, depressed, and with rheumatic disease). These problem-focused strategies include cognitive efforts to change ways of thinking about the problem and behavioral efforts to settle problems by dealing directly with the problem itself. Emotion-focused coping (i.e., avoidant strategies) include cognitive efforts to deny or minimize the threat and behavioral efforts to avoid confrontation or to relieve tension by expressing one's emotions. Ebata and Moos' investigation of adolescents aged 12-18 revealed that older adolescents relied more on problem-focused coping responses than the younger adolescents. There were no significant group differences in problem-focused coping. This finding gives further credibility to previous

research results that have revealed that older adolescents use problem-focused strategies more than younger adolescents.

Age differences in coping may also be influenced by the domain of the stressor. In a study of adolescents 13-20 years of age, Stern and Zevon (1990) found that early adolescents used more emotion-focused coping with interpersonal and family problems than older adolescents. However, there was no differential use of coping strategy across age when the stressor was related to work or school. Therefore, the domain of the stressor, in addition to age, may influence whether the coping strategy utilized is emotion or problem-focused.

Gender differences. Gender differences in coping, while still not well researched, have been explored. A few studies have found no significant differences in coping strategies reported used by males and females (e.g., Ebata & Moos, 1989; Forsythe & Compas, 1987). However, Patterson and McCubbin (1987) found different coping patterns for females and males. Females had significantly higher mean scores for developing social support, solving family problems, investing in close friends, and developing self-reliance. Males were higher on only one pattern of coping: being humorous. Also in ranking coping patterns used most, females ranked social support as second (out of twelve), whereas

males ranked social support as seventh. Two other studies support these findings. In the first, females reported using social support more frequently than males, whereas males reported using wishful thinking more often than females (Stark et al., 1989). Males in this study also reported that they perceived resignation as more effective than did females. The second study examined only male adolescent coping strategies (Tolor & Fehon, 1987). Results indicated that the most frequently used coping strategies for males are: positive action (48% of subjects), seeking information (32%), or focusing on the positive (29%). Seeking social support was reported by only 22% of the males in this study. Taken together, these findings reflect the normative expectation for females to be more oriented toward interpersonal relationships in response to stress. Research of adult coping strategies (e.g., Carver, Scheier, & Weintraub, 1989) found similar patterns of female use of more social support and venting emotions than males in response to stress.

Other research findings indicate that the use and effectiveness of certain types of coping strategies is determined by situation in addition to gender. In particular, Compas et al. (1988) found that problem-focused strategies were related to fewer behavior problems in interpersonal events for female adolescents.

In addition, females used more emotion-focused strategies than did males in response to academic events. Both male and female adolescents who used more emotion-focused strategies had more behavior problems.

The results of these studies of gender differences in coping among adolescents point to the need for further examination, particularly around the differences found in the experience of stressors in adolescent males and females. It is likely that the studies not reporting gender differences in coping had methodological constraints, especially in the assessment of coping strategies. That is, they may have not been specific enough to capture differences and they may not have been wide enough in scope, covering situations in which males and females might differ.

In addition to the influence demographic characteristics have on coping, situation and personality factors may influence the use of coping strategies. The next sections explore the theory and research regarding situation and person characteristics and their relationship with coping.

Situation and person factors in coping

Situation factors. It appears that when appraisals are well matched with the controllability of a stressful event, the person is more likely to utilize effective coping strategies. Forsythe and Compas (1987)

examined the nature of the stressful situation and coping. In particular, they tested the "goodness of fit" between appraisals of stressful events and coping strategies. They hypothesized that if emotion-focused coping and problem-focused coping did not match with the controllability of a stressful event, then the subject would experience higher levels of psychological symptoms. In other words, selection of the appropriate type of coping strategy, according to the control available for that stressful event, should lead to adaptive psychological functioning. This study of 84 college students revealed that the use of more problem-focused coping efforts was associated with lower symptom levels when events were perceived as controllable. These same coping strategies were associated with higher symptom levels when used to deal with events over which the subjects had little control. Emotion-focused strategies had the reverse pattern. That is, subjects who used emotion-focused strategies had low levels of distress when events were perceived as low in controllability and high levels of distress when emotion-focused strategies were used for appraisals of high controllability. These findings were consistent across a range of symptoms; i.e., anxiety, depression, and somatic problems.

This research also found that subjects with higher

distress levels reported that they were doing more than usual to try to cope with their situation (Forsythe & Compas, 1987). Therefore, higher levels of coping (measured by number of strategies used) would be expected when emotional distress is high. It may be that using more coping strategies when experiencing greater distress is evidence for the effectiveness of how much one copes, that is, using more coping strategies is adaptive when experiencing high levels of distress.

Two other important findings were revealed in this study. First, as discussed earlier, it is necessary to have an "appropriate balance" of emotion and problem-focused coping. Forsythe and Compas did not find an interaction of coping with perceived control when emotion and problem-focused coping were analyzed separately. Rather, it is important to measure the relative relationship between these two types of coping, based on the proportion of each type of strategy (Lazarus & Folkman, 1984).

Second, Forsythe and Compas found this appraisal-coping match to be significant for major life event stress but not for minor stressful events. They speculate that the ramifications of mismatching one's cognitive appraisal and coping strategy on a single minor event may be much less severe than a poor match

for a major event. The most frequently reported minor event for this sample was "doing poorly on an exam", whereas the most frequently reported major events were "death of a family member" and "entering college". It seems logical that not coping well with a low grade on an exam is much different from handling the transition to college. Yet, the question remains of how appraisal and coping mismatches might accumulate to bring about high distress levels when new daily events arise from the major event of entering college. Future research should look for differences in coping for major events versus minor events, by examining the use of problem-focused and emotion-focused coping and the number of coping strategies used in each type of stressful situation. Future research also needs to examine the possible impact of accumulated appraisal-coping mismatches from daily events.

Further examination of the impact of major versus minor events on coping was conducted by Carver et al. (1989) with adults. In this study Carver et al. asked subjects to rate the importance of a stressful event they had recently experienced. They found that the more the situation mattered to the subject, the more the subject also reported focusing on and venting emotions, engaging in denial, and seeking social support. Therefore, we interpret these results to mean that an

event judged as a major event will lead a person to use more emotion-focused coping, at least initially. It may be that because major events generally cause or stimulate a variety of smaller daily hassles, that the person is actually coping with the realization that numerous smaller stressful events will come later. As the person realizes that the future holds much change and stress, he/she may initially find him/herself coping emotionally; and the problem-focused coping will come later as the smaller events begin to occur. The first step to understanding this process will be to look for differences in coping strategies for major and minor events.

Another study of situational control and coping examined the relationship between appraisals of control and the use of problem and emotion-focused coping (Compas et al., 1988). Subjects were asked to give coping responses to stressful encounters in the academic and social domains. The match of coping response with the control available in the encounter was related to adjustment. Results showed that subjects matched problem-focused coping with controllable situations in academic encounters and showed fewer adjustment problems. In other words, when problem-focused coping is used in controllable situations, the effect on one's functioning is positive. However, in the social domain,

subjects did not respond as one would expect. Rather, more problem-focused alternatives were given in response to stressors perceived as uncontrollable and fewer were given when stressors were perceived as controllable. perhaps because these subjects are young (10-14 years old), they have less well developed cognitions about social situations than older adolescents and thus, experience more socially-related distress at this time.

Stern and Zevon (1990) found similar results in their research with adolescents aged 13 to 20 years. Specifically, they found that among subjects who identified interpersonal and family problems as their primary stressor, younger adolescents used emotion-focused coping strategies more than older adolescents. The younger adolescents were more likely to employ wishful thinking, detachment or denial, tension reduction, or keep to themselves. There was no differential use of coping strategy as a function of age for those who identified a situation related to school or work as their stressor. These studies point out that it is necessary to consider the domain of the stressor, along with the control available in that domain. Research should examine coping strategies as they are used in relation to the domain and control available in various situations throughout adolescence.

Person factors. The person brings certain beliefs

about him/herself to the appraisal of a stressor, thus affecting how he/she chooses to cope. These beliefs are reflected in one's self-esteem, sense of mastery, and level of self-denigration, to name a few dimensions previously studied (Pearlin & Schooler, 1978). Studies of coping strategies among adults have found differences as a function of personality dimensions (e.g., self-esteem), suggesting that personality influences the use of types of coping strategies (Carver et al., 1989; Pearlin & Schooler, 1978). In particular, Carver et al. hypothesized that certain personality characteristics predispose people to cope in certain ways, thus creating a coping "disposition". That is, people may approach stressful encounters with a preferred set of coping strategies that remains relatively fixed across age and situations. Their findings indicated that coping strategies believed to be functional (i.e., active coping and planning) related with personality qualities that are regarded as beneficial (i.e., optimism, hardiness, and self-esteem). For example, subjects with high levels of self-esteem tended to engage in positive and active attempts to cope with stressors. Those low in self-esteem tended to become more preoccupied with distress emotions and use less problem-focused coping. Research should examine the possibility that these effects are also evident in adolescents.

Results from prospective analyses of depression, anxiety, and coping have been confusing (Glyshaw et al., 1989). Specifically, problem-solving coping was a significant predictor for early adolescents but not for middle adolescents. In addition, problem-solving coping predicted depression but not anxiety. One possible explanation is that depression and anxiety contribute to the use of certain types of coping as Carver et al. (1989) suggested. This is evidence that depression and anxiety may be person factors that influence the type of coping a person uses.

The present study

In order to study adolescent coping -- what it is, its processes, and its effects -- researchers must first adequately describe adolescent coping strategies. After that, a comprehensive measure of adolescent coping can be developed that will allow for the study of systematic comparisons of responses due to different stressors and longitudinally in response to the same stressor (Compas, 1987a). The role of various moderator variables also need to be examined as they may affect appraisal of a stressful event and thus, affect the coping process.

Research has indicated that age, gender, race, and socioeconomic status are possible moderating variables of the stress and coping relationship and therefore, should be examined in order to adequately describe

adolescent coping. The particular age of the adolescent is particularly important due to the numerous biological, psychological, and social transitions that characterize this period of development. Although the period of adolescence is likely not homogeneous, previous research has not distinguished between the subperiods of adolescence -- early, middle, and late adolescence (Green & Larson, 1991). This study will focus on the period of middle adolescence, a time that covers the high school years and encourages the development of identity, which represents the key issue of adolescence. The experience of high school and developing one's identity are likely to influence the adolescent's coping (Gouze, Keating, & Maton, 1986). Possible differences in the beginning and end of this subperiod will be examined.

Many of the studies reviewed here indicate different stress and coping orientations for females and males. Gender also needs to be more fully investigated as a factor that may affect coping patterns. The implication of past research is that females experience stress more in their interactions with the social environment than males and that their coping patterns reveal greater reliance on social support mechanisms.

Situational and person factors are important to study because these factors may also affect how the

adolescent copes with stress. According to Lazarus and Folkman (1984), the individual appraises the stressful situation and then determines how to cope. This research will look at the appraisal of the impact of the stressor (major versus minor) and how this influences the number and type of coping strategies used. Another situational variable that may affect adolescent coping is the domain or social context in which the stressor occurs. In fact, the domain of a stressor is believed to affect adolescent subgroups differently (Green & Larson, 1991), as was demonstrated in previous research with adults and late adolescents (Carver et al., 1989; Compas et al., 1988). Previous research of personality or person variables has mostly examined self-esteem (Carver et al., 1989). General distress and depression may also relate to coping because these conditions likely impact on how the person handles stressors. Research has examined the effect of coping on adjustment; adjustment defined as variables that may have become intrinsic to the person, like trait anxiety or distress. Perhaps general distress and depression should be viewed as person variables that influence coping efficacy.

Summary and Hypotheses

Coping, in the context of this study, has been defined as cognitive and behavioral efforts to manage

internal and/or external demands that are appraised as taxing or exceeding the resources of the individual (Lazarus & Folkman, 1984). It is a dynamic process requiring the person to continually reappraise the situation. As the environment reacts to one's coping strategy, he/she must reevaluate his/her coping response. Lazarus and Folkman characterize coping as an "effort to manage" because coping is not to be equated with mastery, but rather, includes tolerating, avoiding, minimizing, and accepting the stressful conditions. In some cases coping can mean efforts to master the environment. Because coping has a cognitive component, adolescents may have unique coping strategies related to their growing cognitive capacity. In combination with cognitive changes, the social tasks of adolescence require the person to deal with a long and complex period of developmental demands. Physical changes also play a central role in the developmental demands of adolescence.

The purpose of this study is to describe the ways in which a diverse group of adolescents cope with stress. Using coping strategies generated by the adolescents themselves, this study will take a first step toward a valid measurement of these behaviors. This study will also seek to identify the impact of demographics, situational, and person variables on

coping. The specific issues to be investigated are listed below:

- 1) Types of coping alternatives. This study will describe the types of coping (i.e., list individual strategies, and broadly classify the strategies as problem and emotion-focused) generated and used by adolescents. Further, similar coping strategies will be organized into coping subscales (e.g., emotional support).
- 2) Age. It is hypothesized that there will be developmental differences in coping strategies as a function of age in both frequency and type of response to stress. In particular: adolescents at the start of middle adolescence (15-16 years of age) will use more emotion-focused coping and less problem-focused coping than adolescents at the end of this subperiod (17-18 years of age). In terms of the coping strategies, 15-16 year olds will use "ignoring" and "distancing" more frequently in coping with stress than 17-18 year olds. These older adolescents will use more of "putting into perspective" and "taking action by changing one's contribution" in coping with stress than the younger group. The use of drugs and alcohol will also be explored. It is expected that the 17-18 year olds will use this type of avoidance coping

more than the 15-16 year olds because it is likely to be easier for them to obtain these substances. Finally, 15-16 year olds will generate fewer coping strategies overall than older adolescents.

(Further age-related hypotheses are proposed as they relate to particular situations and are described in No. 6 below.)

- 3) Gender. Previous research suggests that there will be gender differences in coping strategies. Because females tend to be more open about themselves, they are expected to name more strategies overall. Also, females will tend to use more of "talking feelings out" and "sharing their experience with others" than males. Males will tend to use "distancing" and "drugs and alcohol" more than females. (Other gender related hypotheses are described as they relate to particular situations and are described in No. 6 below.)
- 4) SES. Few studies have addressed coping strategies used by people of low socioeconomic status (SES). In particular, research has not addressed the question of how members of low SES groups cope with the unique daily events that they experience. Rather, studies have generally focused on coping strategies utilized by low SES groups only in

extreme situations (e.g., drug abuse). This study will examine coping with daily events for low and middle SES groups. It is hypothesized that low SES subjects will use more emotion-focused coping strategies (i.e., distancing, refocus/reappraise) than middle SES subjects due to fewer resources and options.

- 5) Race. Research has not addressed racial factors in coping with daily stressors. Since African-Americans experience racial discrimination, it is proposed that they will rely on different material resources and psychological resources for coping than Whites. Therefore, it is hypothesized that they will cope differently from comparable groups of Whites. That is, Whites will use more problem-focused coping in response to general and actual stressors (i.e., professional support, increase effort) than African-Americans due to the occurrence of racial discrimination against African-Americans.
- 6) Situational Characteristics. Previous research suggests that there will be situational influences on coping. In particular, there will be differences in coping strategies according to the importance of the stressful situation (minor versus major events). That is, the more the situation

matters to the subject or the greater the perceived impact on the subject, the more likely he/she is to use emotion-focused coping and to utilize more coping strategies overall. The domain in which the stressor occurs will also affect the number and types of coping strategies used. Problem-focused coping strategies (e.g., increase effort, generate options) will be used more in domains where the adolescent has more control (e.g., academic). Emotion-focused coping (e.g., kept it to myself, refocus/reappraise) will be used more in domains where the adolescent has less control (e.g., family relationships, peers). In addition, age and gender differences in coping with particular situations will be tested. Due to the importance of cognitive and social growth, it is believed that 15-16 year olds will use more emotion-focused coping in the domains of family and peer relationships than 17-18 year olds. The 17-18 year olds will use more problem-focused coping in the academic domain than 15-16 year olds. Finally, females in all age groups will use more problem-focused coping in the interpersonal domains (e.g., family, peers) than males. Males will use more problem-focused coping in the achievement oriented domains (e.g., academics, vocational).

- 7) Person Characteristics. It is hypothesized that person characteristics will influence the use of coping strategies. That is, people may have a coping disposition that develops from personality characteristics like self-esteem and general distress. Thus, self-esteem and general distress may predict the person's attempt to use a certain type and number of coping strategies.

Research has recently begun to delineate how adolescents cope with stress and how we should measure their coping abilities. Measurement of adolescent coping has been quite diverse (Glyshaw, Cohen, & Towbes, 1989). However, measurement of adolescent coping has generally not utilized adolescents' self-reported coping for problems in general and problems actually experienced. Research of adolescent coping also has not utilized racially and socioeconomically diverse samples.

Because adolescence is a period of immense change, including numerous developmental tasks and/or demands, it is particularly important that early, middle, and late adolescents be examined as unique groups. Tasks, such as adjustment to high school, are likely to create unique stressful experiences that require the use of coping strategies not previously known by adolescents of this subperiod (i.e., middle). Gender, race and

socioeconomic status may also affect the coping strategies employed by the person. Finally, characteristics unique to the person (self-esteem and general distress) and to the situation (impact and domain) may impact on the appraisal of a stressor and thus, the coping mechanism selected.

CHAPTER III

METHOD

The purpose of this study was to describe coping strategies of adolescents in order to determine how strategies varied as a function of age, gender, race, socioeconomic status, situation, and personality characteristics. A semi-structured interview was employed to investigate how adolescents cope with stress. Standard questionnaires (Bachman & O'Malley, 1977; Derogatis & Spencer, 1982; Nock & Rossi, 1979) were administered to measure person variables.

Subjects

The 143 participants in this project were part of a larger study conducted in Baltimore, Maryland (Gouze, Keating, & Maton, 1986) of 415 adolescents ranging in age from 15-26 years. This larger study set out to investigate the influence of cognition, identity formation, sociocultural context, and social support on level of stress experienced and on the development of coping strategies.

This subsample of 143 subjects varied in racial

background (African-American and White), socioeconomic status (low and middle), and included both students and nonstudents. Four subjects were eliminated because of erroneous recording of their subject identification numbers making demographic information unavailable, resulting in a final study sample of 139 adolescents. There were 65 males and 74 females. Thirty-nine percent of the adolescents were African-American, 61% were White. Sixty-eight percent were from a middle socioeconomic background and 32% were from a low socioeconomic background. There were forty-seven 15-16 year olds and ninety-two 17-18 year olds (see Table 2).

Procedure

All subjects were administered an interview protocol, questionnaire, and the standardized measures in a one-to-one situation in their school setting or in The University of Maryland laboratory. The data were collected by undergraduate students trained by the principal investigator (Karen Gouze) to administer these tasks in a standardized format. In a telephone conversation prior to the interview, participants were asked to complete a basic socioeconomic status questionnaire. The recruitment process differed for the younger and older subjects. In the case of the younger subjects (15-16 years of age), recruitment occurred through the schools with consent forms sent home to

Table 2

Age, gender, race, and socioeconomic status of participating adolescent sample

| | | Female | | | |
|-------------|--------|--------------|----------|--------------|-----------|
| | | <u>Age</u> | | | |
| | | <u>15-16</u> | | <u>17-18</u> | |
| <u>SES</u> | | Middle | Lower | Middle | Lower |
| <u>Race</u> | Afr-Am | 8 | 4 | 12 | 5 /29 |
| | White | 5 | 5 | 26 | 9 /45 |
| | | <u>13</u> | <u>9</u> | <u>38</u> | <u>14</u> |
| | | <u>22</u> | | <u>52</u> | |

| | | Male | | | |
|-------------|--------|--------------|-----------|--------------|-----------|
| | | <u>Age</u> | | | |
| | | <u>15-16</u> | | <u>17-18</u> | |
| <u>SES</u> | | Middle | Lower | Middle | Lower |
| <u>Race</u> | Afr-Am | 6 | 6 | 8 | 5 /25 |
| | White | 7 | 6 | 22 | 5 /40 |
| | | <u>13</u> | <u>12</u> | <u>30</u> | <u>10</u> |
| | | <u>25</u> | | <u>40</u> | |

parents. For the older subjects (17-18 years of age), the University admissions office provided names of students who would be attending school the coming fall. These students were contacted and asked to participate by telephone. The questionnaires and the interview are provided in Appendix A.

Measures

The Interview

Coping with general and actual events. A semi-structured interview designed by Gouze et al. (1986) provided information about adolescent coping. The subjects discussed coping responses toward stressors in general and toward actually experienced stressful events. In order to look at the general way adolescents cope, subjects were first asked to generate a list of stressful events typically experienced by people their age. Then the subjects were asked to think of all of the coping strategies that they and their friends use in response to the stressful events they had generated. In order to measure coping strategies used in response to actual major and minor stressful events, subjects were also asked to describe actually experienced events. These interviews then yielded coping strategies reported to be actually used by middle adolescents, spanning a range of gender (males and females), SES (low and

middle), and race (African-Americans and Whites).

Coping strategies collected from the interviews were categorized into coping subscales. The coping subscales were developed by Gouze et al. (1986) and derived from previous literature on coping. The subscales utilized the spontaneously generated responses of subjects from the original study of older adolescents (17-22). The subscales are as follows: 1) Cognitive/Problem-Solving Process; 2) Direct Actions; 3) Emotion Management; 4) Activity/Outlets; 5) Psychological Avoidance; 6) Numbing Senses/Destructive Behavior; 7) Emotional Support; 8) Companionship; 9) Direct Service; 10) Tangible Sharing; and 11) Professional Support. For definitions of each of these subscales see Appendix B.

The research of Gouze et al. (1986) yielded a total of 77 coping strategies, of which five strategies were found to be difficult to interpret, produced low interrater reliability, and were subsequently dropped from further analyses. The present interviews produced six strategies not in the Gouze et al. list. These strategies were added to the existing data list under the appropriate subscale as determined by a theoretical interpretation of each strategy type. The result is a final list of 78 strategies reported by adolescents in this age range (15-18). The Gouze et al. study examined subjects 17-22 years of age, while this study examined

subjects 15-18 years of age, which may account for the differences in coping strategies between the two lists. See Appendix B for the list of the final 78 coping strategies organized into 11 subscales.

Responses to the general and actually experienced stressors were coded independently by two raters (the author of the dissertation, and a trained female undergraduate student). Disagreements between the raters were then discussed and corrections were made. Once responses could be reliably coded at the .80 level, a group of 4 interviews were randomly selected and coded to determine inter-rater reliability. The percent of agreement for each of the coded variables were as follows: 1) number of coping strategies generated = 86%; 2) type of coping strategy = 80%; and 3) domain of the stressful events = 82%. Interrater reliability was determined again at the end of the coding period and the reliability obtained was as follows: 1) number of coping strategies = 84%; 2) type of coping strategy = 82%; and 3) domain of stressful events = 81%.

Situation characteristics: Impact and domain. In order to examine whether the impact of a situation influences the frequency and type of coping used by adolescents, subjects were asked to describe one major and one minor event that they had actually experienced within a specified time limit. First, subjects were

asked to describe a major event: "an event that had the greatest impact on them or made a difference in their lives in the past year". Next, subjects were asked to recall the events that they had described earlier in the interview as being minor hassles or annoyances. They were then asked to describe one of these minor events that had occurred in the last day or two.

The major and minor events were coded according to a taxonomy of stressors developed by Gouze et al. (1986). This taxonomy organizes the specific stressors into 15 domains of adolescent functioning. The 15 domains are: 1) academics, 2) vocational, 3) financial, 4) peer relationships, 5) family relationships, 6) independence from family, 7) family planning, 8) significant other relationships, 9) physical/emotional, 10) sexual identity, 11) existential/general life issues, 12) religion, 13) recreational, 14) environmental, and 15) political. See Appendix B for a list of the domains and stressors. Responses are examined in terms of the frequency of strategies reported and the type of coping (i.e., emotion-focused or problem-focused) used for minor versus major stressful events.

Subject Characteristics

This study examined coping strategies and their relationship to various subject demographic

characteristics, including age, gender, race, socioeconomic status. Also person characteristics, such as self-esteem and general distress, were examined. These variables were measured with the following standardized measures.

Demographics

Subjects were asked to fill out a questionnaire investigating their demographic background. This questionnaire included information about the age, gender, and race of each subject. Information pertaining to socioeconomic status was also requested.

Age. Subjects were asked to give their chronological age.

Gender. Subjects were asked to state whether they are male or female.

Race. Subjects were asked to state whether they are African-American or White.

Socioeconomic status. Socioeconomic status (SES) was measured using a weighted composite social class scale (Nock & Rossi, 1979), combining information about father's education and occupation, and mother's education and occupation. A categorical division was made by Gouze et al., 1986, to identify two social class categories: middle and working/lower class. The dividing point of this quantitative, continuous variable was made at a score that indicated that neither parent

had more than a high school education, and neither parent is/was employed above the skilled blue collar or office work level.

Person characteristics

Self-esteem. The Bachman and O'Malley self-esteem questionnaire (1977, adapted from Rosenberg, 1965) was administered to subjects. The questionnaire has 10 items to which subjects respond using a Likert scale ranging from 1 (not at all accurate) to 5 (completely accurate). Rosenberg's work found that this scale related to psychological functioning and psychophysiological indicators as would be predicted by a measure of self-esteem.

General Distress and Depression. The Global Distress and Depression Scales from the Brief Symptom Inventory (Derogatis & Spencer, 1982) were administered to subjects immediately after the interview. The Depression Scale has a test-retest reliability coefficient of .80 and an internal consistency of $r = .86$ (coefficient alpha). The Global Distress Scale represents a general distress score based upon the entire Brief Symptom Index. This measure has met acceptable standards of reliability and validity (Derogatis & Spencer, 1982). In particular, research has indicated that the constancy of its scales verify generalizability across a wide range of subjects

(Derogatis & Spencer, 1982), and earlier investigations of the construct validity have also confirmed the appropriateness of this index in measuring psychological functioning (Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974).

CHAPTER IV

RESULTS

overview

This study was designed to describe and examine coping during the period of middle adolescence (15 to 18 years of age). Four general areas were examined: 1) a description of coping strategies generated by adolescents of this age range in response to general stressful events; and the effect of demographic characteristics on the generation of these general coping strategies; 2) a description of coping strategies used with actual events (including the impact and domain of these events); and the effect of demographics on the use of these actual coping strategies; 3) a comparison of coping strategies generated by adolescents to events generally experienced versus coping strategies used by adolescents in response to events actually experienced; and 4) the relationship of person factors (i.e., self-esteem and general distress) to the use of coping strategies with stressful events of varying impact and domain across demographic groups. Overall, results

indicated that adolescents utilize more diverse coping strategies than was previously thought, and that demographic, situation, and person variables influence the number of coping strategies generated and the type of strategies used in dealing with stress.

Description of coping strategies with general events

The first concern to be addressed was the task of describing adolescent coping strategies reported in response to general stressful events. The interview question asking subjects to generate all coping strategies they, their friends, or people they know have used in response to general stressful events yielded 66 strategies (see Table 3) from the total list (78). Efforts to code these strategies into subscales based on theoretical and conceptual assumptions was not successful. The only subscale with an appropriate internal consistency (i.e, Cronbach's alpha = .65) was Numbing senses/Destructive behavior. The remaining subscales exhibited extremely low alpha levels ranging from .05 to .49. These low alpha levels were thought to result from the nature of the interview question. That is, subjects generated as many coping strategies as possible in response to a list of general stressors. As a result, it has been suggested that their responses may not relate in any cohesive manner (D. P. Keating, personal communication, March 20, 1992). Because of the

Table 3

Coping Strategies Nominated and Endorsed by AdolescentsCognitive/Problem-Solving Process

1. Suggestions or opinions sought or given
2. Clarification feedback - unspecified
3. Direction, goals - considered, discussed, prioritized, clarified
4. Information - referral
5. Think to self or with others
6. Options - generate
7. Perspective - put into; gives objectivity
8. Accepting responsibility
9. Information - source of stress - what stress is

Direct Actions

10. Action - specific which changes external situation (not listed below)
11. Action - specific which changes one's contribution (not listed below), e.g., organize time better
12. Apologize
13. Effort - increase/best effort/try harder
14. Hang in - stand ground
15. Talk to source of problem/confront
16. Time away from problem
17. Together - e.g., study together

Emotion Management

18. Emotion management through emotional release or focus
19. Anger expressed at others/blaming/arguing
20. Crying
21. Outburst - yelling, shouting, throwing things
22. Pray/meditate
23. Refocus/reappraise
24. Talk feelings out
25. Time heals/will take care of itself
26. Kept it to myself/Keep feelings inside

Activity/Outlets

27. Creative outlets - paint, draw, build something, write music
28. Exercise
29. Music - listen to
30. Physical release (unspecified)
31. Reward self/treat self in special manner - e.g., go shopping
32. Sports
33. Walking/Biking
34. Activity/Outlet (unspecified)

Table 3, continued

Psychological Avoidance

35. Denial/repression
36. Distancing - escaping/physical
37. Fantasize/day dream
38. Ignore
39. Procrastinate
40. Sleep more/sleep to escape
41. Wish it would go away
42. Did nothing

Numbing Senses/Destructive Behavior

43. Alcohol
44. Driving fast (reckless)
45. Drugs - includes giving in to peer pressure
46. Food binge/fast
47. Physical self-abuse
48. Object Destruction
49. Running away from home
50. Physical fighting with others

Emotional Support (receive or provide; unspecified)

51. Acceptance - nonjudgmental, unconditional, restrains from judging
52. Caring or love expressed, general positive feelings and regard
53. Concern - shows concern and interest, empathy/being there
54. Encourages - helps to motivate, reassures, builds confidence
55. Hugs, touches - physical contact
56. Shared experience - relates own experience with similar others/listens
57. Religion - activities, God

Companionship

58. Accompany in stressful situations
59. Do something together - e.g., go out to parties, bars
60. Do something together - other

Direct Service

61. Direct service (unspecified)
62. Housework - do for someone
63. Rides - give
64. Task - do together with person

Tangible Sharing

65. Money - give/lend

Professional Support

66. Professional support

poor alpha levels, it was not possible to explore the coping categories (e.g., with a principal components analysis).

In order to examine the most representative coping strategies used by middle adolescents, those strategies generated by 20% or more of the subjects were identified, yielding eight coping strategies from the original list of 66. These eight strategies are generally action-oriented and theoretically adaptive (e.g., suggestions or opinions sought or given; see Table 4). On the other hand, there was a surprisingly high report of at least some theoretically less adaptive strategies (e.g., alcohol, drugs, distancing). See Table 5 for the frequency of all coping strategies reported by middle adolescents in response to general stressors.

Demographic characteristics. Univariate analyses of variance were used to examine demographic differences in the number of coping strategies generated by subjects when asked to name all of the coping strategies they, their friends, or people their age use in response to a list of general stressors. Chi square analyses examined demographic differences in the type of coping strategy generated for general stressors using the eight strategies listed in Table 4.

Age does not appear to be a significant factor in

Frequency of Most Commonly Used Coping Strategies in
Response to General Stressful Events

Coping strategies used with general stressors

| Coping Strategy | Frequency | % of Subjects |
|---|-----------|---------------|
| 1. shared experience w/ similar/comparable others | 62 | 43.4 |
| 2. action - specific which changes one's contribution | 56 | 39.2 |
| 3. suggestions/opinions sought or given | 53 | 37.1 |
| 4. seek professional support | 47 | 32.9 |
| 5. effort - increase; try harder | 36 | 25.2 |
| 6. refocus/reappraise | 34 | 23.8 |
| 7. talk to source of problem/confront | 31 | 21.7 |
| 8. perspective - put into; gives objectivity | 30 | 21 |

Table 5

Frequency of Nominated Coping Strategies in Response to General Stressors

| Coping Strategy | Frequency | % of Subjects |
|-------------------------------|-----------|---------------|
| 1. shared with others | 62 | 43.4 |
| 2. action - change self | 56 | 39.2 |
| 3. suggestions - given,taken | 53 | 37.1 |
| 4. professional support | 47 | 32.9 |
| 5. increase effort | 36 | 25.2 |
| 6. refocus/reappraise | 34 | 23.8 |
| 7. talk to/confront | 31 | 21.7 |
| 8. perspective - put into | 30 | 21.0 |
| 9. ignore | 27 | 18.9 |
| 10. action - change situation | 22 | 15.4 |
| 11. direction considered | 20 | 14.0 |
| 12. alcohol | 20 | 14.0 |
| 11. talk feelings out | 19 | 13.3 |
| 14. hang in, stand ground | 19 | 13.3 |
| 15. drugs | 18 | 12.6 |
| 16. time heals | 18 | 12.6 |
| 17. distancing | 16 | 11.2 |
| 18. denial | 15 | 10.5 |
| 19. kept it to myself | 15 | 10.5 |
| 20. think to self or w/others | 15 | 10.5 |
| 21. activity/outlet | 13 | 9.1 |
| 22. together-action w/others | 13 | 9.1 |
| 23. time away | 13 | 9.1 |
| 24. options - generate | 13 | 9.1 |
| 25. did nothing | 12 | 8.4 |
| 26. do something-go out | 12 | 8.4 |
| 27. emotion management | 11 | 7.7 |
| 28. physical self-abuse | 11 | 7.7 |
| 29. acceptance from others | 10 | 7.0 |
| 30. clarification | 9 | 6.3 |
| 31. anger expressed | 9 | 6.3 |
| 32. outburst | 9 | 6.3 |
| 33. money, give or lend | 9 | 6.3 |
| 34. pray | 8 | 5.6 |
| 35. music | 7 | 4.9 |

Table 5, continued

| Coping Strategy | Frequency | % of Subjects |
|-----------------------------|-----------|---------------|
| 36. concern-being there | 7 | 4.9 |
| 37. accept responsibility | 6 | 4.2 |
| 38. information-source | 6 | 4.2 |
| 39. crying | 6 | 4.2 |
| 40. procrastinate | 6 | 4.2 |
| 41. encourages | 6 | 4.2 |
| 42. exercise | 5 | 3.5 |
| 43. information-referral | 4 | 2.8 |
| 44. sleep | 4 | 2.8 |
| 45. wish it would go away | 4 | 2.8 |
| 46. religion | 4 | 2.8 |
| 47. do somet together-other | 4 | 2.8 |
| 48. direct service | 4 | 2.8 |
| 49. reward self | 3 | 2.1 |
| 50. run away from home | 3 | 2.1 |
| 51. creative outlet | 2 | 1.4 |
| 52. physical release | 2 | 1.4 |
| 53. sports | 2 | 1.4 |
| 54. physical fighting | 2 | 1.4 |
| 55. caring expressed | 2 | 1.4 |
| 56. apologize | 1 | 0.7 |
| 57. walking | 1 | 0.7 |
| 58. fantasize | 1 | 0.7 |
| 59. driving recklessly | 1 | 0.7 |
| 60. food binge/fast | 1 | 0.7 |
| 61. object destruction | 1 | 0.7 |
| 62. hugs-physical contact | 1 | 0.7 |
| 63. accompany-stressful sit | 1 | 0.7 |
| 64. housework | 1 | 0.7 |
| 65. rides | 1 | 0.7 |
| 66. task (service) | 1 | 0.7 |

the coping strategies generated in response to general stressors. No age differences were found in the number of coping strategies generated for general stressors. Chi square analyses revealed only one difference in coping strategies generated by early middle and late middle adolescents (see Table 6). Specifically, 15-16 year olds appeared to generate the cognitive coping strategy of "putting the stressor into perspective" less than 17-18 year olds. This difference was marginal ($\chi^2 = 2.82, p < .10$).

Gender differences were stronger than age differences and generally were as predicted. Females generated more coping strategies overall than males ($F(1, 139) = 6.31, p < .01$; $M = 2.68$ for females, $M = 2.15$ for males). Also, females generated the coping strategy "sharing experience with others" more than males ($\chi^2 = 5.88, p < .05$) in response to general stressors.

Also an interaction was found for race and socioeconomic status in relation to number of coping strategies generated. Specifically, findings revealed that White 15-16 year olds from middle SES backgrounds generated more coping strategies in response to general stressors than White 15-16 year olds from low SES backgrounds ($F(3, 139) = 8.52, p < .01$). No significant differences were found in the types of strategies used

Table 6

Chi Square Results for Age, Gender, Race, and SES Differences in the Use of Coping Strategies

| Coping Strategy | <u>Age</u> | | <u>Gender</u> | | <u>Race</u> | | <u>SES</u> | |
|----------------------|--------------------------------|----|--------------------------------|----|--------------------------------|----|--------------------------------|----|
| | 15-16 vs. 17-18 | | Male vs. Female | | Black vs. White | | Low vs. Middle | |
| | frequency (X ²) | | frequency (X ²) | | frequency (X ²) | | frequency (X ²) | |
| Suggestions | 21 (1.60) | 31 | 20 (2.30) | 32 | 23 (1.01) | 29 | 17 (0.00) | 35 |
| Perspective | 6 (2.82) ⁺ | 23 | 11 (1.15) | 18 | 12 (0.10) | 17 | 10 (0.07) | 19 |
| Action-change self | 18 (0.05) | 37 | 28 (0.63) | 27 | 23 (0.34) | 32 | 17 (0.09) | 38 |
| Effort - increase | 14 (1.09) | 20 | 18 (0.69) | 16 | 9 (2.90) ⁺ | 25 | 10 (0.18) | 24 |
| Talk to/confront | 13 (1.17) | 18 | 12 (1.04) | 19 | 15 (1.53) | 16 | 11 (0.18) | 20 |
| Refocus/reappraise | 9 (0.60) | 23 | 12 (1.43) | 20 | 10 (1.01) | 22 | 9 (0.34) | 23 |
| Shared experience | 19 (0.22) | 41 | 21 (5.88) [*] | 39 | 20 (1.35) | 40 | 22 (0.89) | 38 |
| Professional support | 16 (0.09) | 29 | 18 (1.22) | 27 | 13 (2.78) ⁺ | 32 | 14 (0.05) | 31 |

* p < or = to .10

* p < .05

Note: Fisher's Exact test was used for cells with low N.

by middle and lower socioeconomic groups. Finally, a nonsignificant trend was found in response to general stressors: Whites more than African-Americans, appeared to generate the coping strategy of "professional support" ($\chi^2 = 2.78, p < .10$); and "increased effort" ($\chi^2 = 2.90, p < .09$).

Description of coping strategies with actual events

In addition to describing the coping strategies adolescents generate in response to a general question, this study identified coping strategies reported as actually used by adolescents. Subjects described specific events that they had experienced in the recent past. First, they described a major event that occurred in the last year. Then they named a minor event that occurred within the last 24 hours. Subjects explained how they had coped with each of these stressful events. Responses yielded an additional 6 coping strategies bringing the total list of coping strategies generated by adolescents to 72 (see Table 7). Due to the increased variability in responses for this condition, coping strategies said to be used by at least 10% of the subjects were described (rather than 20% as was used for analyses of coping with general stressors). See Table 8 for a list of the coping strategies most commonly used in response to major and minor events. In addition, Table 9 contains the frequencies for all coping

Table 7

Additional Coping Strategies Used by Adolescents in
Response to Major and Minor Events

Emotion Management

1. Journal keeping/write down feelings

Activity/Outlets

1. Dancing
2. Reading

Emotional Support

1. Cards, presents, letters

Direct Service

1. Child care or family member care

Tangible Sharing

1. Loan car
-

Table 8

Frequency of Most Commonly Used Coping Strategies in Response to Actually Experienced Major and Minor Stressful Events

| Major Events | | |
|---|--------------------------------|------|
| <u>Coping Strategy</u> | <u>Frequency % of Subjects</u> | |
| 1. refocus/reappraise | 30 | 21.6 |
| 2. perspective-put into gives objectivity | 21 | 15.1 |
| 3. did nothing | 19 | 13.7 |
| 4. shared experience w/ similar others | 18 | 12.9 |
| 5. shows concern & interest, empathy | 15 | 10.8 |
| 6. action - specific which changes one's contribution | 15 | 10.8 |

| Minor Events | | |
|---|--------------------------------|------|
| <u>Coping Strategy</u> | <u>Frequency % of Subjects</u> | |
| 1. talk to source of problem/confront | 25 | 18.0 |
| 2. refocus/reappraise | 22 | 15.8 |
| 3. ignore | 19 | 13.7 |
| 4. perspective-put into | 18 | 12.9 |
| 5. action - specific which changes one's contribution | 17 | 12.2 |
| 6. time away from problem | 16 | 11.5 |

Table 9

Frequency of Coping Strategies in Response to Actually Experienced Major and Minor Stressful Events

| Major Events | | |
|-------------------------------|-----------|---------------|
| Coping Strategy | Frequency | % of Subjects |
| 1. refocus/reappraise | 30 | 21.6 |
| 2. perspective-put into | 21 | 15.1 |
| 3. did nothing | 19 | 13.7 |
| 4. shared w/ others | 18 | 12.9 |
| 5. action-change self | 15 | 10.8 |
| 6. concern-being there | 15 | 10.8 |
| 7. crying | 13 | 9.4 |
| 8. emotion management | 12 | 8.6 |
| 9. talk to/confront | 12 | 8.6 |
| 10. denial | 11 | 7.9 |
| 11. think to self or w/others | 8 | 5.8 |
| 12. time heals | 8 | 5.8 |
| 13. encourages | 8 | 5.8 |
| 14. talk feelings out | 7 | 5.0 |
| 15. suggestions-given, taken | 6 | 4.3 |
| 16. kept it to myself | 6 | 4.3 |
| 17. distancing | 6 | 4.3 |
| 18. do something-go out | 6 | 4.3 |
| 19. increase effort | 5 | 3.6 |
| 20. time away | 5 | 3.6 |
| 21. pray | 5 | 3.6 |
| 22. do something-other | 5 | 3.6 |
| 23. ignore | 4 | 2.9 |
| 24. wish it would go away | 4 | 2.9 |
| 25. alcohol | 4 | 2.9 |
| 26. accompany-stressful sit | 4 | 2.9 |
| 27. professional support | 4 | 2.9 |
| 28. clarification | 3 | 2.2 |
| 29. information-referral | 3 | 2.2 |
| 30. options-generate | 3 | 2.2 |
| 31. action-change situation | 3 | 2.2 |
| 32. anger expressed | 3 | 2.2 |
| 33. outburst | 3 | 2.2 |
| 34. music | 3 | 2.2 |
| 35. activity/outlet | 3 | 2.2 |
| 36. sleep | 3 | 2.2 |

Table 9, continued

| Major | | |
|------------------------------|-----------|---------------|
| Coping Strategies | Frequency | % of Subjects |
| 37. direction considered | 2 | 1.4 |
| 38. accept responsibility | 2 | 1.4 |
| 39. information-source | 2 | 1.4 |
| 40. hang in-stand ground | 2 | 1.4 |
| 41. fantasize | 2 | 1.4 |
| 42. caring expressed | 2 | 1.4 |
| 43. religion | 2 | 1.4 |
| 44. journal | 1 | 0.7 |
| 45. creative outlet | 1 | 0.7 |
| 46. dancing | 1 | 0.7 |
| 47. exercise | 1 | 0.7 |
| 48. sports | 1 | 0.7 |
| 49. walking | 1 | 0.7 |
| 50. reading | 1 | 0.7 |
| 51. procrastinate | 1 | 0.7 |
| 52. drugs | 1 | 0.7 |
| 53. physical self-abuse | 1 | 0.7 |
| 54. object destruction | 1 | 0.7 |
| 55. cards, presents, letters | 1 | 0.7 |
| 56. direct service | 1 | 0.7 |
| 57. child care | 1 | 0.7 |
| 58. rides | 1 | 0.7 |
| 59. task | 1 | 0.7 |
| 60. apologize | 0 | |
| 61. together-action w/others | 0 | |
| 62. expressive performance | 0 | |
| 63. physical release | 0 | |
| 64. reward self | 0 | |
| 65. driving recklessly | 0 | |
| 66. food binge/fast | 0 | |
| 67. run away from home | 0 | |
| 68. physical fighting | 0 | |
| 69. acceptance from others | 0 | |
| 70. compliments | 0 | |
| 71. hugs-physical contact | 0 | |
| 72. errands | 0 | |
| 73. good work | 0 | |
| 74. housework | 0 | |
| 75. meals | 0 | |
| 76. loan car | 0 | |
| 77. housing | 0 | |
| 78. money | 0 | |

Table 9, continued

| Minor Events | | |
|------------------------------|-----------|---------------|
| Coping Strategies | Frequency | % of Subjects |
| 1. talk to/confront | 25 | 18.0 |
| 2. refocus/reappraise | 22 | 15.8 |
| 3. ignore | 19 | 13.7 |
| 4. perspective-put into | 18 | 12.9 |
| 5. action-change self | 17 | 12.2 |
| 6. time away | 16 | 11.5 |
| 7. emotion management | 13 | 9.4 |
| 8. outburst | 12 | 8.6 |
| 9. distancing | 10 | 7.2 |
| 10. action-change situation | 9 | 6.5 |
| 11. anger expressed | 9 | 6.5 |
| 12. shared w/others | 9 | 6.5 |
| 13. kept it to myself | 6 | 4.3 |
| 14. accept responsibility | 5 | 3.6 |
| 15. increase effort | 4 | 2.9 |
| 16. crying | 3 | 2.2 |
| 17. music | 3 | 2.2 |
| 18. sleep | 3 | 2.2 |
| 19. did nothing | 3 | 2.2 |
| 20. suggestions-given,taken | 2 | 1.4 |
| 21. options-generate | 2 | 1.4 |
| 22. sports | 2 | 1.4 |
| 23. activity/outlet | 2 | 1.4 |
| 24. denial | 2 | 1.4 |
| 25. procrastinate | 2 | 1.4 |
| 26. wish it would go away | 2 | 1.4 |
| 27. concern | 2 | 1.4 |
| 28. encourages | 2 | 1.4 |
| 29. money, give or lend | 2 | 1.4 |
| 30. clarification | 1 | 0.7 |
| 31. direction considered | 1 | 0.7 |
| 32. information-referral | 1 | 0.7 |
| 33. apologize | 1 | 0.7 |
| 34. hang in, stand ground | 1 | 0.7 |
| 35. together-action w/others | 1 | 0.7 |
| 36. creative outlet | 1 | 0.7 |
| 37. exercise | 1 | 0.7 |
| 38. physical release | 1 | 0.7 |
| 39. reading | 1 | 0.7 |
| 40. fantasize | 1 | 0.7 |
| 41. do something-go out | 1 | 0.7 |
| 42. do something-other | 1 | 0.7 |
| 43. loan car | 1 | 0.7 |

Table 9, continued

| Minor Events | | |
|------------------------------|-----------|---------------|
| Coping Strategies | Frequency | % of Subjects |
| 44. think to self/others | 0 | |
| 45. information-source | 0 | |
| 46. journal | 0 | |
| 47. pray | 0 | |
| 48. talk feelings out | 0 | |
| 49. time heals | 0 | |
| 50. dancing | 0 | |
| 51. expressive(performance) | 0 | |
| 52. reward self | 0 | |
| 53. walking | 0 | |
| 54. alcohol | 0 | |
| 55. driving recklessly | 0 | |
| 56. drugs | 0 | |
| 57. food binge/purge | 0 | |
| 58. physical self-abuse | 0 | |
| 59. object destruction | 0 | |
| 60. run away from home | 0 | |
| 61. physical fighting | 0 | |
| 62. acceptance from others | 0 | |
| 63. cards, presents, letters | 0 | |
| 64. caring expressed | 0 | |
| 65. compliments | 0 | |
| 66. hugs-physical contact | 0 | |
| 67. religion | 0 | |
| 68. accompany-stressful sit | 0 | |
| 69. direct service | 0 | |
| 70. child care | 0 | |
| 71. errands | 0 | |
| 72. good work | 0 | |
| 73. housework | 0 | |
| 74. meals | 0 | |
| 75. rides | 0 | |
| 76. task | 0 | |
| 77. housing | 0 | |
| 78. professional support | 0 | |

strategies nominated for major and minor events.

Demographic characteristics. Univariate analyses of variance were conducted to examine demographic differences in the number of coping strategies generated for actually experienced major and minor stressful events. Chi square analyses were used to analyze demographic differences in the type of coping strategy generated for actually experienced major and minor events.

Two age differences were found when adolescents were asked to describe how they coped with actually experienced events (see Table 10). First, 17-18 year olds reported using more "putting into perspective" when dealing with major events than the 15-16 year olds ($\chi^2 = 3.64, p < .05$). Second, 17-18 year olds use "refocus/reappraise" more than 15-16 year olds when dealing with minor events ($\chi^2 = 2.88, p < .10$), although this difference was marginal.

A few differences between males and females in the use of actual coping strategies for minor events were reported. First, in ANOVA analyses an interaction of race and gender was found. White females reported using more strategies than White males and African-American males reported using more coping strategies than African-American females ($F(1, 139) = 3.96, p < .05$). Also, females reported using more of "putting into

Table 10

Chi Square Results for Age, Gender, Race, and SES Differences in Coping Strategies
Generated in Response to Actually Experienced Major and Minor Events

Major Events

| Coping Strategy | <u>Age</u> | | <u>Gender</u> | | <u>Race</u> | | <u>SES</u> | |
|----------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|----------------|-------------------|
| | 15-16 vs. 17-18 | | Male vs. Female | | Black vs. White | | Low vs. Middle | |
| | frequency | (X ²) | frequency | (X ²) | frequency | (X ²) | frequency | (X ²) |
| Perspective-put into | 3 | 17 | 7 | 13 | 9 | 11 | 6 | 14 |
| | | (3.64)* | | (1.20) | | (0.48) | | (0.02) |
| Action-change self | 6 | 8 | 9 | 5 | 4 | 10 | 5 | 9 |
| | | (0.55) | | (2.04) | | (0.60) | | (0.14) |
| Refocus/reappraise | 10 | 20 | 16 | 24 | 11 | 19 | 7 | 23 |
| | | (0.00) | | (0.78) | | (0.03) | | (1.15) |
| Did nothing | 9 | 10 | 8 | 11 | 9 | 10 | 8 | 11 |
| | | (1.89) | | (0.15) | | (0.81) | | (1.19) |
| Concern/empathy | 3 | 12 | 6 | 9 | 3 | 12 | 7 | 8 |
| | | (1.40) | | (0.27) | | (2.34) | | (1.84) |
| Shared w/ other | 7 | 10 | 7 | 10 | 3 | 14 | 3 | 14 |
| | | (0.50) | | (0.20) | | (3.44)* | | (1.70) |

+ p < or = to .10 * p < .05 df = 1 Note: Fisher's Exact test was used for cells with N < 20.

Table 10, continued

Minor Events

| Coping Strategy | <u>Age</u> | | <u>Gender</u> | | <u>Race</u> | | <u>SES</u> | |
|----------------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|----------------|-------------------|
| | 15-16 vs. 17-18 | | Male vs. Female | | Black vs. White | | Low vs. Middle | |
| | frequency | (X ²) | frequency | (X ²) | frequency | (X ²) | frequency | (X ²) |
| Perspective-put into | 5 | 13 | 4 | 14 | 6 | 12 | 13 | 5 |
| | | (0.34) | | (4.69)* | | (0.16) | | (0.14) |
| Action-change self | 6 | 11 | 7 | 10 | 4 | 13 | 10 | 7 |
| | | (0.02) | | (0.17) | | (1.64) | | (0.83) |
| Talk to/confront | 9 | 14 | 9 | 14 | 11 | 12 | 17 | 6 |
| | | (0.35) | | (0.51) | | (1.24) | | (0.39) |
| Time away from the problem | 4 | 11 | 6 | 9 | 7 | 8 | 9 | 6 |
| | | (0.39) | | (0.23) | | (0.59) | | (0.55) |
| Refocus/reappraise | 4 | 18 | 13 | 9 | 9 | 13 | 18 | 4 |
| | | (2.88)* | | (1.86) | | (0.12) | | (2.19) |
| Ignore | 5 | 14 | 9 | 10 | 9 | 10 | 12 | 7 |
| | | (0.56) | | (0.02) | | (0.90) | | (0.28) |

* p < or = to .10 * p < .05 df = 1 Note: Fisher's Exact test was used for cells with N < 20.

perspective" for minor events than males ($\chi^2 = 4.69, p < .05$). No gender differences were found for coping with actually experienced major events.

Finally, an analysis of variance (ANOVA) produced a three-way interaction for age, race, and socioeconomic status in relation to the reported number of coping strategies. There were no main effect differences, with the exception of one finding for race. African-American 17-18 year olds from low SES backgrounds reported using more coping strategies when dealing with major events than African-American 17-18 year olds from middle SES backgrounds ($F(2,39) = 6.22, p < .02$). However, African-American 15-16 year olds from middle SES backgrounds report using more coping strategies than African-American 15-16 year olds from low SES backgrounds ($F(2,23) = 4.59, p < .05$). A marginal main effect for race revealed that Whites used more "sharing with similar others" than African-Americans when coping with major stressful events ($\chi^2 = 3.44, p = .06$).

Situation characteristics: Impact. This study examined differences in coping strategies in response to major versus minor events. Because coping with a major event is thought to be more stressful for the adolescent (i.e., impact) than coping with a minor event, it was hypothesized that major events will require the use of more coping strategies. These strategies were predicted

to be more emotion-focused as opposed to problem-focused. It was thought that major events also lead to many stressful minor events due to the changes brought about by that major event (Parfenoff & Jose, 1989). A major event may seem overwhelming when one anticipates the changes that could occur as a result. In this case, emotion-focused coping would also become more likely than problem-focused coping to be used in coping with a major event (Lazarus & Folkman, 1984).

To examine these hypotheses, the following analyses were conducted. First, a list was made of all the coping strategies adolescents reported using for major and minor stressful events (see Table 8). The content of these coping strategies was compared with the content of the strategies endorsed by subjects in response to general stressors (see Table 4) in order to establish the face validity of the "type" of stressor. These strategies were conceptualized into emotion- and problem-focused types of strategies. "Type" refers to the action required by the person versus the use of avoidance (Ebata & Moos, 1989). Interrater reliability for coding the coping strategies for general and actually experienced stressors was conducted with a trained undergraduate (L.R.) and the author (S.H.P.). Interrater reliability between these coders was 100% agreement. Action-oriented strategies are

conceptualized as "problem-focused", while avoidance-oriented strategies are "emotion-focused". Next, differences in major and minor stressful events were examined across domains of adolescents' daily functioning. Finally, the impact or degree of distress experienced by a stressful event was examined for its influence on person characteristics. These analyses are discussed in the following sections.

Situation characteristics: Domain. It was hypothesized that the domain of the stressor (e.g., academics, family relationships, etc.) would influence the use of coping strategies. In particular, it was hypothesized that the less controllable domains of family relationships, peers, and significant other relationships would require more emotion-focused coping, whereas, the more controllable domains (i.e., academics and vocation), would require problem-focused coping. Table 11 reports the number of times each domain was named as an actual major or minor stressor.

Chi square analyses of the frequency of each type of coping strategy generated for each domain when identified as an actual major or minor stressor were conducted to investigate possible effects of age, gender, race, and SES factors. Of the 56 comparisons generated, only two reached marginal statistical significance: 1) Whites used more "sharing with similar

Table 11

Frequency of Domains in which Major and Minor Events
Occurred for Middle Adolescents

| Major Events | | |
|--|------------------|----------------------|
| <u>Domain</u> | <u>Frequency</u> | <u>% of subjects</u> |
| 1. Academics | 31 | 21.7 |
| 2. Vocational | 3 | 2.1 |
| 3. Financial | 1 | 0.7 |
| 4. Peer Relationships | 14 | 9.8 |
| 5. Family Relationships | 39 | 27.3 |
| 6. Independence from Family | 1 | 0.7 |
| 7. Family Planning | 3 | 2.1 |
| 8. Significant Other Relationships | 17 | 11.9 |
| 9. Physical/Emotional | 13 | 9.1 |
| 10. Sexual Identity | 0 | 0.0 |
| 11. Existential/General Life Issues | 2 | 1.4 |
| 12. Religion | 1 | 0.7 |
| 13. Recreational | 1 | 0.7 |
| 14. Environmental | 15 | 10.5 |
| 15. Political | 0 | 0.0 |

Table 11, continued

 Minor Events

| <u>Domain</u> | <u>Frequency</u> | <u>% of subjects</u> |
|--|------------------|----------------------|
| 1. Academics | 16 | 11.3 |
| 2. Vocational | 14 | 9.9 |
| 3. Financial | 4 | 2.8 |
| 4. Peer Relationships | 17 | 12.0 |
| 5. Family Relationships | 54 | 38.0 |
| 6. Independence from Family | 12 | 8.5 |
| 7. Family Planning | 0 | 0.0 |
| 8. Significant Other Relationships | 7 | 4.9 |
| 9. Physical/Emotional | 3 | 2.1 |
| 10. Sexual Identity | 0 | 0.0 |
| 11. Existential/General Life Issues | 0 | 0.0 |
| 12. Religion | 0 | 0.0 |
| 13. Recreational | 9 | 6.3 |
| 14. Environmental | 6 | 4.2 |
| 15. Political | 0 | 0.0 |

others" than African-Americans in the domain of family relationships for major events ($\chi^2 = 4.38, p = .06$); and 2) females used more "putting into perspective" than males in the domain of independence from family for minor events ($\chi^2 = 4.95, p = .06$). These findings would be expected by chance for the number of comparisons made and therefore, are not likely to be valid. It may be that the limited number of subjects hindered the ability to uncover significant relationships.

As with earlier analyses of general coping strategies, the total number of coping strategies generated was examined for actually experienced strategies used in the various domains. Univariate analyses were conducted for each domain by demographic variables (age, gender, race, and SES). It was not possible to analyze all of the domains because of the small numbers in some cells. Table 12a identifies the domains examined and the number of coping strategies used by subjects as a function of demographic characteristics. Table 12b gives the mean and standard deviation of coping strategies used by each demographic group.

These analyses demonstrate that the domain of the stressor impacts on coping strategies although this relationship is complex. In the domain of academics the following results were found: for minor events, males

Results of Univariate Analyses for Differences in Number of Coping Strategies Used by Subjects in Response to Major and Minor Events for Domain and Demographic Characteristics

| <u>Domain</u> | | <u>Major</u> | <u>Minor</u> |
|----------------------|--------|--------------|--------------|
| | | <u>F</u> | <u>F</u> |
| Academics | age | 5.53* | - |
| | gender | n.s. | 5.25* |
| | race | n.s. | n.s. |
| | SES | 3.84+ | n.s. |
| Family Relationships | age | n.s. | n.s. |
| | gender | n.s. | n.s. |
| | race | 2.78+ | n.s. |
| | SES | 2.92* | n.s. |
| Independence | age | - | - |
| | gender | - | 3.27+ |
| | race | - | - |
| | SES | - | - |
| Peer Relationships | age | n.s. | n.s. |
| | gender | n.s. | n.s. |
| | race | - | n.s. |
| | SES | n.s. | n.s. |
| Vocation | age | - | - |
| | gender | - | n.s. |
| | race | - | - |
| | SES | - | - |
| Significant Others | age | - | - |
| | gender | n.s. | - |
| | race | n.s. | - |
| | SES | 4.53* | - |
| Environment | age | n.s. | - |
| | gender | - | - |
| | race | n.s. | - |
| | SES | n.s. | - |

+ p < .10

* p < .05

Note: - indicates analyses were not run due to low number of subjects

Mean Differences in Number of Coping Strategies Used in Various Domains across Demographic Groups

| <u>Domain/Major Events</u> | <u>Demographic group</u> | <u>Mean/signif</u> |
|----------------------------|--------------------------|--------------------|
| Academics | 15-16 year olds | 1.20 |
| | 17-18 year olds | 0.54 * |
| Academics | middle SES | 0.52 |
| | low SES | 1.00 + |
| Family Relations | Blacks | 0.67 |
| | Whites | 1.10 + |
| Family Relations | middle SES | 1.14 |
| | low SES | 0.54 * |
| Significant Other | middle SES | 0.73 |
| | low SES | 1.50 * |
| <u>Domain/Minor Events</u> | | |
| Academics | males | 1.00 |
| | females | 0.50 * |
| Independence from Family | males | 1.00 |
| | females | 1.80 + |

+ p < or = to .10

* p < or = to .05

used more strategies than females ($F(1, 14) = 5.25, p < .05$); for major events, 15-16 year olds used more strategies than 17-18 year olds ($F(1, 27) = 5.53, p < .05$); and also for major events, low SES subjects used more strategies than middle SES subjects ($F(1, 27) = 3.84, p = .06$). In the domain of family relations the following results were found: for major events, Whites showed a marginally higher number of coping strategies used than African-Americans ($F(1, 33) = 2.78, p = .10$); and for major events, middle SES subjects used more strategies than low SES subjects ($F(1, 33) = 2.92, p < .05$). Finally, there was one more significant difference in the domain of relationships with significant others; for major events, low SES subjects used more strategies than middle SES subjects ($F(1, 15) = 4.53, p = .05$).

Comparison of coping strategies to general and actual stressful events

It is interesting to note that the content of the strategies used for major and minor events was more emotion-focused than those strategies subjects generated for general stressors. For example, in coping with major events, adolescents stated using four emotion-focused strategies out of the six most frequently stated strategies. These four strategies are: 1) refocus/reappraise; 2) did nothing; 3) concern, empathy;

and 4) shared experience with similar others. Only "put into perspective" and "take action - change one's contribution" are problem-focused strategies used by adolescents in response to actual major events. In response to actual minor events, the same number of problem- and emotion-focused strategies were named (3 for each). However, when examining the list of strategies most frequently generated by adolescents in response to general stressors, the balance of problem- to emotion-focused strategies is much different. Adolescents generated six problem-focused strategies and only two emotion-focused strategies.

In addition, chi square comparisons were conducted in order to detect statistically significant differences between the number of times each strategy was generated by adolescents versus the number of times the strategy was reported to have been actually used. Results revealed that subjects tended to generate more approach coping strategies in response to questions about general stressors than in response to questions about actual major and minor events (see Table 13). For example, "take action - change one's contribution" was generated significantly more often than was used in response to actual major and minor events ($\chi^2 = 2.90, p < .10$, for major events; and $\chi^2 = 5.00, p < .05$, for minor events). Also, "perspective - put into" was generated more often

Table 13

Coping Strategies Generated by Middle Adolescents for General versus Actual Stressful Events

| Coping Strategy | General vs. Major | | Major vs. Minor | | General vs. Minor | |
|----------------------|--------------------------------|----|--------------------------------|----|--------------------------------|----|
| | frequency (X ²) | | frequency (X ²) | | frequency (X ²) | |
| Perspective-put into | 27 (6.25)* | 15 | 16 (2.36) | 5 | 27 (0.31) | 15 |
| Action-change self | 45 (2.90) ⁺ | 6 | 11 (3.04) ⁺ | 13 | 44 (5.00)* | 6 |
| Refocus/reappraise | 23 (1.15) | 20 | 23 (0.52) | 16 | 28 (0.02) | 17 |
| Did nothing | 12 (2.14) | 19 | 18 (2.17) | 1 | 12 (0.29) | 3 |
| Concern/empathy | 5 (2.31) | 13 | 14 (0.24) | 2 | 7 (0.11) | 2 |
| Shared w/other | 47 (6.65)** | 5 | 15 (3.34) ⁺ | 6 | 55 (0.57) | 4 |
| Talk to/confront | 26 (0.11) | 9 | 11 (0.71) | 22 | 22 (1.90) | 17 |
| Time away | 12 (0.50) | 5 | 3 (4.39) ⁺ | 13 | 11 (0.20) | 14 |
| Ignore | 23 (0.62) | 3 | 3 (0.50) | 19 | 19 (0.31) | 15 |

⁺ p </.10
with N < 20

* p < .05

** p < .01

Note: Fisher's Exact test was used for cells

for general stressors than was used for actual major events ($\chi^2 = 6.25, p < .05$). "Shared with similar others", a social support type of coping strategy, was also generated more in response to general stressors than was actually used with stressful major events ($\chi^2 = 6.65, p < .01$). In addition, "sharing with similar others" was reported more for actual major events than for actual minor events ($\chi^2 = 3.34, p < .10$), although this finding was marginally significant. Finally, "time away" was reported more for actual minor events than for major events ($\chi^2 = 4.39, p < .10$), and also was marginally significant.

Coping and person characteristics: The impact of stressful events

Pearson product moment correlations were used to examine the relationship between coping strategies and person characteristics. Coping strategies for general and actually experienced major and minor events were correlated with self-esteem and general distress. Findings revealed that the number of strategies mentioned by a subject (see Tables 14, 15a, and 15b) were not related to person characteristics; however, in some cases, the type of coping strategies was related to the measured person characteristics. In particular, for actual major events, self-esteem was positively correlated with two types of coping strategies:

Pearson Correlations of Coping Strategies Most Frequently Generated by Adolescents and Person Characteristics

| Coping Strategy | Self-esteem | General Distress |
|-------------------------|-------------|------------------|
| Suggestions given | 0.07 | 0 |
| Perspective - put into | 0.05 | -0.02 |
| Action-change self | 0.01 | -0.02 |
| Effort-increase | 0.12 | 0.03 |
| Talk to/confront | 0.11 | -.19* |
| Refocus/reappraise | 0.05 | 0 |
| Shared w/ other | -0.07 | 0.02 |
| Professional support | 0.12 | -0.04 |
| Total # of 8 strategies | 0.16 | -0.08 |

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

Pearson Correlations of Coping Strategies Most
Frequently Used by Adolescents in Major Stressful Events
and Person Characteristics

Major Events

| Coping Strategy | Self-esteem | General Distress |
|-------------------------|-------------|---------------------|
| Perspective-put into | 0.18* | -0.09 |
| Action-change self | 0.13 | -0.10 |
| Refocus/reappraise | 0.11 | -0.08 |
| Did nothing | 0.15 | -0.13 |
| Concern/empathy | 0.17 | -0.07 |
| Shared w/other | 0.18* | -0.09 |
| Total # of 6 strategies | 0.16 | -0.10 |

* $p < .05$

Pearson Correlations of Coping Strategies Most
Frequently Used by Adolescents in Minor Stressful Events
and Person Characteristics

Minor Events

| Coping Strategy | Self-esteem | General Distress |
|-------------------------|-------------|---------------------|
| Perspective-put into | -0.01 | 0.04 |
| Action-change self | -0.08 | -0.02 |
| Talk to/confront | -0.01 | -0.09 |
| Time away | -0.07 | 0.02 |
| Refocus/reappraise | -0.03 | 0.02 |
| Ignore | -0.04 | 0.00 |
| Total # of 6 strategies | -0.04 | -0.01 |

* $p < .05$

"putting into perspective" ($\underline{r} = .18, p < .05$); and "sharing with similar others" ($\underline{r} = .23, p < .05$). No other significant correlations between coping strategies and person characteristics were found for either actual major or minor events. In the context of general stressors however, general distress was negatively correlated with "talk to/confront" ($\underline{r} = -.19, p < .05$), but no other relationships were obtained.

Impact of stressful events across demographic groups. In order to better understand the relationship between coping and person characteristics, correlational analyses were conducted for each of the demographic groups and for general and actually experienced major and minor stressors. The relationship between coping strategies generated in response to general stress and person characteristics across demographic groups revealed a few significant findings. Negative correlations between general distress and the use of the "talk to/confront" coping strategy obtained for females ($\underline{r} = -.31, p < .01$); African-Americans ($\underline{r} = -.36, p < .01$); and low SES adolescents ($\underline{r} = -.35, p < .05$), respectively. That is, the use of "talk to/confront" correlates with low levels of general distress for these groups. Second, two other significant correlations were evident for females: 1) "professional support" and self-esteem ($\underline{r} = .29, p < .05$); and 2) the total number of

strategies from the top 20% and self-esteem ($r = .24$, $p < .05$). There were no significant correlations between person characteristics and coping strategies for males. Third, age was not an important variable for discriminating the relationship between coping with general stress and person characteristics. The younger group (15-16 year olds) did not yield any significant correlations. And for the 17--18 year olds, "suggestions sought or given" and "increase effort" both correlated positively to general distress ($r = .23$ for each, $p < .05$). This was a curious finding, indicating that the use of these problem-focused strategies relate to increased levels of distress. This finding will be discussed more in the Discussion. Fourth, there were two significant relationships for race. One of those relationships included one mentioned above, African-Americans who generated the coping strategy "talk to/confront" with general distress. In addition, African-Americans who generated "professional support" had higher levels of self esteem ($r = .29$, $p < .05$). Finally, no other significant relationships were evident for socioeconomic status except for "talk to/confront" and general distress for low SES subjects, also mentioned earlier. See Table 16 for a list of results from these correlational analyses.

The relationship between coping and person

Pearson Correlations of Coping Strategies Generated by
Adolescents and Person Characteristics across Demographic
Groups

| <u>Age</u> | <u>Coping Strategy</u> | <u>General Distress</u> | <u>Self-esteem</u> |
|---------------|------------------------|-------------------------|--------------------|
| 15-16 | - | n.s. | n.s. |
| 17-18 | suggestions given | .23* | n.s. |
| <u>Gender</u> | | | |
| males | - | n.s. | n.s. |
| females | professional support | n.s. | .29* |
| | talk to/confront | -.30** | - |
| | # of strategies | n.s. | .24* |
| <u>Race</u> | | | |
| Black | professional support | n.s. | .29* |
| | talk to/confront | -.36** | n.s. |
| White | - | n.s. | n.s. |
| <u>SES</u> | | | |
| low | talk to/confront | -.35* | n.s. |
| middle | - | n.s. | n.s. |

* p < .05

** p < .01

variables for actually experienced major and minor events across groups were examined next. In response to major events, there were significant correlations for males, African-Americans, Whites, and low SES subjects. These correlations are as follows: 1) for males - refocus/reappraise and self-esteem ($r = -.33, p < .05$); 2) for African-Americans - put into perspective and self-esteem ($r = .29, p < .05$), and refocus/reappraise and self esteem ($r = -.40, p < .01$); 3) for Whites - did nothing and general distress ($r = -.23, p < .05$); and 4) for low SES - put into perspective and self-esteem ($r = .32, p < .05$), refocus/reappraise and self-esteem ($r = -.36, p < .05$), and shared with similar others and general distress ($r = .33, p < .05$). Interestingly enough, no significant correlations were found for minor events within any of the demographic groups. See Table 17 for a list of the significant findings.

Domains of stress and person characteristics. The relationship between coping and person variables for various domains of adolescents functioning were then examined. Five out of 66 possible correlations were significant (three correlations are expected to be significant by chance). Namely, when subjects discussed actual major events, only three domains contained coping strategies that correlated with person characteristics.

Pearson Correlations of Coping Strategies Used by
Adolescents and Person Characteristics across Demographic
Groups

| | Major Events | | |
|---------------|--|---------------------|-----------------|
| | Coping Strategy | General Distress | Self- esteem |
| <u>Age</u> | | | |
| 15-16 | - | n.s. | n.s. |
| 17-18 | - | n.s. | n.s. |
| <u>Gender</u> | | | |
| males | refocus/reappraise | n.s. | -.33* |
| females | - | n.s. | n.s. |
| <u>Race</u> | | | |
| Black | perspective - put into refocus/reappraise | n.s. | .29* |
| White | did nothing | -.23* | n.s. |
| <u>SES</u> | | | |
| low | perspective - put into refocus/reappraise | n.s. | .32* |
| | shared w/ other | .33* | n.s. |
| middle | - | n.s. | n.s. |

* p < .05

** p < .01

Note: No significant correlations were found for minor events.

Those domains and the coping strategy-person characteristic relationship within them are as follows:

- 1) academics - did nothing and general distress ($\underline{r} = -.38, p < .05$);
- 2) family relationships - shared with similar others and self-esteem ($\underline{r} = .34, p < .05$); and
- 3) relationship with significant other - shows concern/empathy and general distress ($\underline{r} = .52, p < .05$).

When subjects were asked about actual minor events only one domain contained coping strategies that correlated significantly with person characteristics. In the domain of "vocation" two significant correlations were found: 1) talk to/confront and self-esteem ($\underline{r} = .57, p < .05$); and 2) refocus/reappraise and self-esteem ($\underline{r} = .75, p < .01$). Some domains were not mentioned frequently enough by subjects for correlational analyses to be conducted (see Table 11 for a list of these frequencies). The cut-off for analyses was five.

CHAPTER V

DISCUSSION

Overview

This research examined coping strategies generated by middle adolescents in semi-structured interviews. A cross section of race and socioeconomic background were represented by the subjects who participated in this study. Previous research has not examined self-generated coping strategies in as diverse a sample. The findings of this research indicated that middle adolescents generate a large variety of coping strategies, some of which have not been included in previous research of adolescent coping. In addition, the diversity of the sample provided a previously unobserved glimpse into differences in the number and type of coping strategies generated and used by adolescents across demographic groups (i.e., age, gender, race, SES). Some of these differences in coping between groups were also indicated in relation to self-esteem and general distress. Finally, these data

adolescents used more emotion-focused coping may be due, in particular, to the nature of family related stress for adolescents.

Coping and demographic characteristics. Few significant differences were found among demographic groups (age, gender, race, and SES). Of those differences found, most were expected. Females generated more coping strategies overall than males and White females, in particular, stated that they used more strategies than White males. These differences in number of strategies must be treated with caution as they may be an artifact related to the responsiveness of females in the interview as compared to males. Also, these findings do not indicate whether or not using more coping strategies is adaptive. Females also demonstrated a social response to stress by generating "sharing with similar others", as was expected.

Other expected results, related to race and SES, were found. First, Whites generated "professional support" and "increased effort" more than African-Americans in response to general stressors. This finding may be due to cultural differences between Whites and African-Americans. Perhaps Whites believe in increased effort as a method of changing one's circumstances while African-Americans may find that increased effort does not always help when one is faced

with racial discrimination. Also professional support may be an option more readily available to Whites than to African-Americans both in terms of accessibility and in terms of the existence of professionals who African-Americans feel can appreciate their needs as a minority race.

Socioeconomic groups varied in their coping as a function of race. Specifically, the White middle SES group were able to generate more coping strategies in response to general stressors than the White low SES group. Low and middle SES African-Americans also varied in their coping as was evident in the interaction between African-Americans of the two age groups and SES. This interaction indicated that middle SES African-Americans may be better at coping with actually experienced events than low SES African-Americans. Specifically, African-American 15-16 year olds from middle SES backgrounds used more coping strategies than African-American 15-16 year olds from low SES backgrounds and 17-18 year old African-Americans from low SES backgrounds used more strategies than 17-18 year old African-Americans from middle SES backgrounds. It may be that there is a developmental process at work here in which the 15-16 year olds of the middle SES group use more coping because they need to try out many strategies to find what works best for them. Therefore,

as 17-18 year olds from the middle SES group, they can utilize those strategies that work, thus, naming fewer coping strategies. Middle SES African-Americans and low SES African-Americans experience quite discrepant daily lives, perhaps more so than middle SES Whites and low SES Whites, again, due to the circumstances of racism (e.g., availability of educational opportunities).

Coping and situation characteristics. The impact of the situation seems to have some influence on an adolescent's choice of type of coping strategy. Adolescents used emotion-focused strategies more frequently for major events than for minor events (4 out of the top 6 for major, as opposed to 3 out of the top 6 for minor). In addition, "shows concern/empathy" was used for major events more than minor events. Because of the great impact that a major stressful event has on a person, the use of emotion-focused coping for major events is expected in order to deal with one's strong emotional response (Carver et al., 1989).

The domain of the stressful event appears to influence coping in terms of the number of strategies generated by various adolescent groups. However, there were no significant differences in the type of coping strategies utilized for each domain. These findings are helpful in describing adolescent coping. For example, in response to minor stressful events in the domain of

academics, males used more coping strategies than females. This is interesting because it may have implications for the academic success of males versus females in high school. Perhaps for minor academic stressors, it is good practice to use numerous methods to deal with that stressor. For example, a typical minor academic stressor was failure of an exam. It is probably more adaptive for an adolescent to try many strategies to improve his/her grade (i.e., seeking help, talking to the teacher, increasing effort, etc.) Therefore, in this domain, using more coping strategies is possibly a measure of good coping.

However, analyses also revealed that the use of number of coping strategies varies for age, SES, race, and impact of the stressful event. When subjects appraised academic stressors as being major events, 15-16 year olds used more strategies than 17-18 year olds. This indicates that younger adolescents, who are not as developed in their study skills, may need to use more coping strategies to improve a bad grade. Older adolescents, on the other hand, are more experienced and have a better understanding of what it takes to improve their school performance. They do not need to try many coping strategies, but rather can utilize those that they know to work for them. Additionally, low SES adolescents used more coping strategies than middle SES

adolescents with academic stressors appraised as major events. Perhaps the parents' familiarity with study techniques and their influence over the adolescent is affecting the coping in this domain. For example, if an academic stressor is appraised as major, it is likely that the parent(s) will get involved and perhaps suggest to their teenager ways in which to deal with the academic problem. Their suggestions may be based on their own experiences with school. Since the middle SES parent has usually spent more time in school than the low SES parent, coping strategies may be based on the experience of the parent(s) as suggested above when less experienced younger adolescents used more strategies than the more experienced older adolescents. Now that these relationships have been described, future research needs to determine their nature, and how they interact.

Coping and person characteristics. Analyses of the relationship between coping and person characteristics found that the type of coping strategies seemed to be more relevant than the number of coping strategies. Results varied by demographic groups, particularly for gender and race. Females who reported "talk to/confront", "professional support", and a high number of strategies from the top 20% seemed to have higher self esteem and lower general distress. These results stand in contrast to the fact that females did not

produce any significant relationships between coping strategies and person characteristics for stressful events they had actually experienced. It is not clear why there would be this discrepancy for females. Perhaps there is no meaningful reason for this difference, particularly since only one significant relationship was found for males in coping with actual stressful events ("refocus/reappraise" and self-esteem).

Race was also a distinguishing variable for the relationship between coping and person characteristics. In response to general stressors, African-Americans stated that "talk to/confront" and "professional support" related to adaptive person characteristics. In terms of actually experienced stressful events, African-Americans who used "put into perspective" and "refocus/reappraise" had high self-esteem and low general distress. Whites, on the other hand, did not produce any significant findings for general stressors and stated "did nothing" as a coping strategy for actual stressful events. "Did nothing" is a unique response from subjects in that it may in fact be a method of coping, especially when the stressor is out of the person's control. But, it can also be a response from subjects when they are stumped by the interview questions and/or they are simply tired. Therefore, it is important that researchers design interviews so that

all subjects will be able to answer questions to the best of their ability and that interviewers are given some flexibility to ask questions, even returning to some questions or taking time out when subjects are unable to respond.

"Put into perspective" and "refocus/reappraise" were also adaptive coping strategies for adolescents from low socioeconomic backgrounds. However, "shared with similar others" was not a helpful coping strategy for low SES adolescents. Perhaps this is because the experience of low socioeconomic status is accompanied by chronic stress (i.e., low paying work, less education, etc.) and talking about it with similar others is difficult and not particularly constructive.

Interestingly, no age differences were found in coping and person characteristics, with one exception. In response to general stressors, 17-18 year olds indicated that "suggestions sought or given" and "increase effort" were related to increased levels of general distress. This is curious because both of these coping strategies are problem-focused and are generally believed to be helpful in solving problems. Possibly, as adolescents grow increasingly more independent they find that the types of problems they face are more difficult to cope with, and that seeking help and increasing their effort is not enough. For example,

freshman college students may experience difficulty in academics for the first time and find that they are simply not able to perform in some disciplines at the same level as they did in high school. Therefore, increasing their effort may help a little but not enough to improve their academic performance, thus leading to increased distress.

Finally, no significant relationships of coping and person characteristics were found for minor events. It is not clear why there were no relationships found in coping with minor events. Perhaps this is because of the wording used when participants were asked to describe major and minor events they had actually experienced. When participants were asked to describe a major event, they were to think of some important event that "made a difference in their lives" or "changed them in some way". This wording of the interview question may have prompted participants to think more broadly of the impact of the stressful event and thus, generate more coping strategies, perhaps even including strategies used for minor events that occurred in relation to the major event. Because the minor event was defined as some recent annoying event, the importance and meaning of the minor event is less than that of the major event. Therefore, minor events did not account for any sizable effect in the relationship

between person characteristics and coping.

Implications for future research

This study set out to describe coping strategies used by middle adolescents. The findings demonstrate some differences between the coping strategies that adolescents generate for questions about general stressors and those they generate for questions about stressors they have actually experienced. Future research should explore further the coping strategies adolescents actually use in various domains of stressful events. For example, Compas and his colleagues compared social and academic stress for 10 to 14 year olds. They looked at the consistency of coping strategies used across domains and found low to moderate levels of consistency in the alternatives generated and used across these two domains. Because the Compas et al. (1988) study demonstrates that adolescent coping may not be highly consistent, researchers should make every effort to describe the domain of the stressful event for which the subject is coping. The importance and meaning of the domains of stressors will likely vary for adolescents as they pass through this stage of their lives.

This research also examined the number of strategies a subject generates and uses. Developmental trends found here replicate earlier research conducted

by Compas et al. (1988). The number of strategies used and generated may be a useful variable for understanding the coping options adolescents of different ages, genders, races, and socioeconomic backgrounds have available to them in different domains of their lives. Future research of adolescent coping should continue to describe average numbers of strategies generated and used by demographic groups. These numbers can be employed to determine what is the adaptive number of strategies for a person to use under certain demographic and situational influences.

This research examined self-esteem and general distress as person characteristics that may relate to coping. Future research needs to describe additional person characteristics as they relate to use of coping strategies. Carver et al. (1989) looked at locus of control, while Gouze et al. (1986) examined morale as well as life satisfaction. These would be interesting variables to examine in adolescents, particularly because locus of control and morale have both been previously examined for their influence on the daily functioning of adolescents (Csikszentmihaly & Larson, 1984).

Finally, it is curious that very few differences were found in coping with minor events. Is it possible that person, situation, and demographic characteristics

have no influence over one's coping with minor events? So much previous theory and research would indicate otherwise and suggest a different explanation. This research may not have tapped on the variables that would reveal differences in minor event coping. In addition, the small N (139) may not have been enough to discover differences to common daily stressors. A closer examination of adolescent coping with daily stress is needed.

Past research of adolescent coping has generally not consulted the adolescents themselves to describe their coping strategies. We cannot adequately understand adolescent coping until we carefully describe it and this must be done by listening to the adolescents' own words. Using this methodology brings up numerous questions, but we can be assured that when attempting to answer these questions we are on the right track to explaining how it is that adolescents cope with life stress.

Conclusion

Professionals who work with adolescents need a complete picture of adolescent coping as it changes across this period of development and varies for different demographic groups and situations. The accurate and comprehensive description of adolescent coping strategies will help professionals to treat, and

eventually prevent, psychological and physical problems. Many adolescents face numerous stressful events, but do not experience problems at a maladaptive level. Other adolescents, experiencing similar stressful events do experience problems; perhaps feeling depressed, doing poorly in school, or getting involved in criminal activity. Describing the coping strategies for adolescents is the first step toward determining what is adaptive coping for different demographic groups and for different situations. Person characteristics can also be an indication of adaptive coping strategies. Once professionals know which coping strategies are adaptive and when they should be used, then psychological and physical problems can be prevented.

References

- Bachman, J. G., & O'Malley, P. M.. (1977). Self-esteem in young men: A longitudinal analysis of the impact of educational and occupational attainment. Journal of Personality and Social Psychology, 35, 365-380.
- Bobo, J. K., Gilchrist, L. D., Elmer, J. F., Snow, W. H., & Schinke, S. P. (1986). Hassles, role strain, and peer relations in young adolescents. Journal of Early Adolescence, 6, 339-352.
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. Journal of Personality and Social Psychology, 56, 267-283.
- Compas, B. E. (1987a). Coping with stress during childhood and adolescence. Psychological Bulletin, 101, 393-403.
- Compas, B. E. (1987b). Stress and life events during childhood and adolescence. Clinical Psychology Review, 7, 275-302.
- Compas, B. E., Davis, G. E., & Forsythe, C. J. (1985). Characteristics of life events during adolescence. American Journal of Community Psychology, 13, 677-692.
- Compas, B. E., Howell, D. C., Phares, V., Williams, R. A., & Ledoux, N. (1989). Parent and child stress

and symptoms: An integrative analysis.

Developmental Psychology, 25, 550-559.

Compas, B. E., Malcarne, V. L., & Fondacaro, K. M.

(1988). Coping with stressful events in older

children and young adolescents. Journal of

Consulting and Clinical Psychology, 56, 405-411.

Compas, B. E., Slavin, L. A., Wagner, B. M., & Vannatta,

K. (1986). Relationship of life events and social

support with psychological dysfunction among

adolescents. Journal of Youth and Adolescence, 15,

205-221.

Csikszentmihaly, M., & Larson, R. (1984). Being

adolescent: Conflict and growth in the teenage

years. New York: Basic Books.

Davis, G. E., & Compas, B. E. (1986). Cognitive

appraisal of major and daily stressful events

during adolescence: A multidimensional scaling

analysis. Journal of Youth and Adolescence, 15,

377-388.

Derogatis, L. R., Lipman, R. S., Rickels, K., Uhlenhuth,

E. H., & Covi, L. (1974). The Hopkins Symptom

Checklist (HSCL): A measure of primary symptom

dimensions. In P. Pichot (Ed.), Psychological

measurements in psychopharmacology: Modern

problems in pharmacopsychiatry (pp. 79-110).

Basel, Switzerland: S. Krager.

- Derogatis, L. R., & Spencer, P. M. (1982). The Brief Symptom Inventory (BSI): Administration, scoring, and procedures.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. Journal of Personality Assessment, 49, 71-75.
- Douvan, E., & Adelson, J. (1966). The adolescent experience. New York: Wiley.
- Ebata, A. T., & Moos, R. H. (1989, April). Coping and adjustment in distressed and healthy adolescents. Paper presented at the biennial meeting of the Society for Research in Child Development, Kansas City, MO.
- Forsythe, C. J., & Compas, B. E. (1987). Interaction of cognitive appraisals of stressful events and coping: Testing the goodness of fit hypothesis. Cognitive Therapy and Research, 11, 473-485.
- Glyshaw, K., Cohen, L. H., & Towbes, L. C. (1989). Coping strategies and psychological distress: Prospective analyses of early and middle adolescents. American Journal of Community Psychology, 17, 607-623.
- Gouze, K. R., Keating, D. P., & Maton, K. R. (1986). Adolescent stress and coping: A developmental perspective. (National Institute of Health, Grant Application Report No. R01 - MH40963). Unpublished

manuscript.

- Greene, A. L., & Larson, R. W. (1991). Variation in stress reactivity during adolescence. In E. M. Cummings, A. L. Greene, & K. H. Karraker (Eds.), Life-span developmental psychology: Perspectives on stress and coping (pp. 195-209). Hillsdale, NJ: Lawrence Erlbaum.
- Hollingshead, A. B., & Redlich, F. C. (1958). Social class and mental illness: A community study. New York: John Wiley & Sons.
- Johnson, J. H. (1986). Life events as stressors in childhood and adolescence. Beverly Hills, CA: Sage Publications.
- Kanner, A. D., Coyne, J. C., Schaefer, C., & Lazarus, R. S. (1981). Comparisons of two modes of stress measurement: Daily hassles and uplifts versus major life events. Journal of Behavioral Medicine, 4, 1-39.
- Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal, and coping. New York: Springer.
- Newcomb, M. D., Huba, G. J., & Bentler, P. M. (1981). A multidimensional assessment of stressful life events among adolescents: Derivation and correlates. Journal of Health and Social Behavior, 22, 400-415.
- Nock, S. L., & Rossi, P. H. (1979). Household types

- and social standing. Social Forces, 57, 1325-1345.
- Parfenoff, S. H., & Jose, P. E. (1989, April). Measuring daily stress in children. Paper presented at the biennial meeting of the Society for Research in Child Development, Kansas City, MO.
- Patterson, J. M., & McCubbin, H. I. (1987). Adolescent coping style and behaviors: Conceptualization and measurement. Journal of Adolescence, 10, 163-186.
- Pearlin, L. I., & Schooler, C. (1978). The structure of coping. Journal of Health and Social Behavior, 19, 2-21.
- Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.
- Siddique, C. M., & D'Arcy, C. (1984). Adolescence, stress, and psychological well-being. Journal of Youth and Adolescence, 13, 459-473.
- Spirito, A., Stark, L. J., & Williams, C. (1988). Development of a brief checklist to assess coping in pediatric populations. Journal of Pediatric Psychology, 13, 555-574.
- Stark, L. J., Spirito, A., Williams, C. A., & Guevremont, D. C. (1989). Common problems and coping strategies I: Findings with normal adolescents. Journal of Abnormal Child Psychology, 17, 203-212.
- Stern, M., & Zevon, M. A. (1990). Stress, coping and

family environment: The adolescent's response to naturally occurring stressors. Journal of Adolescent Research, 5, 290-305.

Tolan, P., Miller, L., & Thomas, P. (1988). Perception and experience of types of social stress and self-image among adolescents. Journal of Youth and Adolescence, 17, 147-163.

Tolor, A., & Fehon, D. (1987). Coping with stress: A study of male adolescents' coping strategies as related to adjustment. Journal of Adolescent Research, 2, 33-42.

Wagner, B. M., Compas, B. E., & Howell, D. C. (1988). Daily and major life events: A test of an integrative model of psychosocial stress. American Journal of Community Psychology, 16, 189-205.

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

Appendix A

Interview Protocol

- 1) What do you think is the one most important thing you & your friends worry about? Why do you think it's important?

From time to time, major events occur which change or affect people's lives in important ways. Take a moment to think about the important things which have happened in your life during the past year and then tell me those that have had the biggest impact on you. Any other events which seemed especially important or make a difference in your life during the past year?

We all have a number of hassles or stresses in our everyday lives, things that are annoying, get on our nerves, or make us angry or upset. These things can happen once, twice, or many times a month. What are the things like this in your life?

- 2) You've just gone over a list of different problems that you and your friends face.
- a) How do **you** deal with these problems?
 - b) How do your **friends** deal with these problems?
 - c) What **other** things could people your age do about these problems? (general coping)*
- 3) We've been talking about certain things that you and your friends do to deal with the problems in your lives. Now I'd like to ask you how you deal with the **feelings** you have about these problems. Beyond what you've told me about already, are there certain things you do to deal with the **feelings** you have about these problems?
- 4) Now let's go back to the important events that happened in your life this past year which you mentioned earlier or checked off on the sheet. Which of these do you think was the most difficult for you? (major event)
- a) When did this happen? (when happened)
 - b) Could you tell me more about how you felt at the time?
 - c) Did you do anything special to deal with this? (do anything)

MORE PROBING:

Has this continued to influence you or make a difference in your life?

- d) Could you tell me more about how you've been feeling about this since the time it happened?
 - e) Did you do anything special to deal with this?
- 5) We also talked about everyday hassles. Did any of these happen to you today or yesterday? (minor event)
- a) How did you deal with it? (do anything)
 - b) How did you feel when this happened? How did you deal with these feelings?

* The words in parentheses indicate how the questions were used for coding subjects' responses.

Self-esteem Questionnaire

These questions focus on how you see yourself and your life in general.

| | 1 | 2 | 3 | 4 | 5 |
|--|------------------------|---|----------------------|---|------------------------|
| | Not at all accurate | | Somewhat accurate | | Completely accurate |
| 1. I feel that I'm a person of worth, at least on an equal with others. | 1 | 2 | 3 | 4 | 5 |
| 2. I feel that I have a number of good qualities. | 1 | 2 | 3 | 4 | 5 |
| 3. All in all, I am inclined to feel that I'm a failure. | 1 | 2 | 3 | 4 | 5 |
| 4. I am able to do things as well as most other people. | 1 | 2 | 3 | 4 | 5 |
| 5. I feel I do not have much to be proud of. | 1 | 2 | 3 | 4 | 5 |
| 6. I take a positive attitude toward myself. | 1 | 2 | 3 | 4 | 5 |
| 7. On the whole, I am satisfied with myself. | 1 | 2 | 3 | 4 | 5 |
| 8. I certainly feel useless at times. | 1 | 2 | 3 | 4 | 5 |
| 9. I wish I could have more respect for myself. | 1 | 2 | 3 | 4 | 5 |
| 10. At times, I think I am no good at all. | 1 | 2 | 3 | 4 | 5 |
| 11. I see myself as more of a "receiver" than a "giver" in relationships. | 1 | 2 | 3 | 4 | 5 |
| 12. I have the desire and the ability to reach out and provide support to others during their times of need. | 1 | 2 | 3 | 4 | 5 |
| 13. I see myself as more of a "giver" than a "receiver" in relationships. | 1 | 2 | 3 | 4 | 5 |
| 14. I am able to ask for and receive support from others during my times of need. | 1 | 2 | 3 | 4 | 5 |
| 15. I need to help others in order to feel life is meaningful and good. | 1 | 2 | 3 | 4 | 5 |
| 16. I need to receive from others in order to feel life is meaningful and good. | 1 | 2 | 3 | 4 | 5 |

| | 1 | 2 | 3 | 4 | 5 |
|---|------------------------|---|----------------------|---|------------------------|
| | Not at all accurate | | Somewhat accurate | | Completely accurate |
| 17. There is really no way I can solve some of the problems I have. | | | | 1 | 2 3 4 5 |
| 18. Sometimes I feel that I'm being pushed around in life. | | | | 1 | 2 3 4 5 |
| 19. I have little control over the things that happen to me. | | | | 1 | 2 3 4 5 |
| 20. I can do just about anything I really set my mind to do. | | | | 1 | 2 3 4 5 |
| 21. I often feel helpless in dealing with the problems of life. | | | | 1 | 2 3 4 5 |
| 22. What happens to me in the future mostly depends on me. | | | | 1 | 2 3 4 5 |
| 23. There is little I can do to change many of the important things in my life. | | | | 1 | 2 3 4 5 |
| 24. In most ways my life is close to my ideal. | | | | 1 | 2 3 4 5 |
| 25. The conditions of my life are excellent. | | | | 1 | 2 3 4 5 |
| 26. I am satisfied with my life. | | | | 1 | 2 3 4 5 |
| 27. So far I have gotten the important things I want in life. | | | | 1 | 2 3 4 5 |
| 28. If I could live my life over, I would change almost nothing. | | | | 1 | 2 3 4 5 |

Global Distress and Depression Scales from the Brief Symptom Index

Note: The Brief Symptom Index (BSI) is a copyrighted measure and therefore not printed here. However, the instructions for this measure and an example of an item are provided.

INSTRUCTIONS

Below is a list of problems and complaints that people sometimes have. Please read each one carefully. After you have done so, please fill in one of the numbered circles to the right that best describes HOW MUCH DISCOMFORT THAT PROBLEM HAS CAUSED YOU DURING THE PAST WEEK INCLUDING TODAY. Mark only one numbered circle for each problem and do not skip any problems. If you change your mind, erase your first mark carefully. Read the example below before beginning, and if you have any questions, please ask the technician.

EXAMPLE

HOW MUCH WERE YOU DISTRESSED BY:

| | Not at all | | Moderately | | Extremely |
|--------------|---------------|---|------------|---|-----------|
| | 1 | 2 | 3 | 4 | 5 |
| 1. Bodyaches | | | | | |

Appendix B

Coping Categories

1. cognitive problem solving
2. direct actions
3. emotion management
4. activity/outlets
5. psychological avoidance
6. numbing senses/destructive behavior
7. emotional support
8. companionship
9. direct service
10. tangible sharing
11. professional support

Problem-focused Coping

cognitive prob solving
 direct actions
 direct service
 tangible sharing
 professional support

Emotion-focused Coping

emotion management
 activity/outlets
 psychol avoidance
 numbing senses/
 destructive
 emotional support
 companionship

Definitions and Examples of Adolescent Coping Strategies

Cognitive/Problem-Solving Process

1. Suggestions or opinions sought or given: the adolescent seeks help from others, usually adults, in the form of suggestions or opinions regarding the stressful event; e.g., talk to your parents, get another point of view.
2. Clarification feedback - unspecified: clarifying with yourself or with the help of others the nature of the problem; e.g., try to understand the problem - the reason for the problem, and think about the other person & why they are doing what they are doing.
3. Direction, goals -- considered, discussed, prioritized, clarified: the adolescent may think to him/herself or discuss with others the direction to take regarding a stressful event or the goal he or she wishes to obtain; e.g., decide what direction I'm taking and what kind of job I want - I look into it.
4. Information - referral: the adolescent seeks specific information regarding either the problem or the solution; e.g., go out and ask questions of the financial aid people - ask them what can I do? I contacted my union and asked them what I should do.
5. Think to self or with others: the adolescent talks with self or companions to think through the problem; e.g., I thought and thought to myself about where I wanted to go for college.
6. Options - generate: the adolescent thinks about or discusses possible solutions to the problem; e.g., I think about the different things I can do.
7. Perspective - put into, gives objectivity: the adolescent judges the constraints of the environment that are creating or influencing the problem; e.g., I think about what would happen if I was in the other person's place; I realized that even though I don't like my boss, I will still get paid for my job, and that's all that matters.
8. Accepting responsibility: the adolescent decides that they are responsible for the problem; e.g., I realized it was my own fault.

9. Information - source of stress--what stress is: the adolescent thinks about the source of the problem; e.g., I think about him and what happened.

Direct Action

10. Action - specific which changes the external situation: the adolescent takes some action which changes the environment causing or influencing the problem; e.g., I just don't hang around these people much at parties because they drink a lot.
11. Action - specific which changes one's contribution: the adolescent takes some action which changes what they do in response to the problem or in anticipation of the problem; e.g., organize time better; prevent the problem by using a condom.
12. Apologize: the adolescent apologizes to those involved; e.g., I told her I was sorry.
13. Effort - increase, try harder: the adolescent increases their effort to tackle a problem; e.g., I tried harder in school.
14. Hang in - stand ground: the adolescent sticks with his/her belief or action toward a problem, despite opposition from others; e.g., when people around me are taking drugs, they know that I won't do it, and they won't pressure me about it.
15. Talk to source of problem, confront: the adolescent hashes out the problem with the person(s) who is perceived to be causing the problem; e.g., I talked to my teacher about my test grade.
16. Time away from problem: the adolescent leaves the problem for a period of time; e.g., I went up to my room for awhile.
17. Together: the adolescent takes some action with peers to address the problem; e.g., study together; includes going along with a peer group on some issue, activity.

Emotion Management

18. Emotion management through emotional release or focus: the adolescent attempts to manage emotions through a release or control of these emotions; e.g., laugh it off; keep calm.

19. Anger expressed at others, blaming arguing: the adolescent expresses a point of view with emotions of anger or frustration; e.g., I argued with my parents about going out with my friends.
20. Crying: the adolescent cries in response to the problem; e.g., I cried.
21. Journal keeping - write down feelings: the adolescent writes down feelings in a journal; e.g., I write down what happened and how I'm feeling.
22. Outburst - yelling, shouting, throwing things: the adolescent expresses frustration emotions in an outburst; e.g., I just explode; I screamed and yelled at my parents.
23. Pray, meditate: the adolescent prays about the problem and a solution; e.g., I prayed to God to help me.
24. Refocus, reappraise: the adolescent changes the meaning of the stressful event; e.g., I know that I am doing my best; think positive - I've pulled through other things, then I can pull through this - it will make me more mature.
25. Talk feelings out: the adolescent talks with others about their stressful feelings; e.g., I talked with my friend about how our fight made me feel; I talk to people and get my feelings out when I'm having problems emotionally.
26. Time heals, will take care of itself: the adolescent takes the perspective that the feelings will be managed after a period of time; e.g., wait and see what happens; if I'm mad at her, I'll get over it in awhile.
27. Kept it to myself, keep feelings inside: the adolescent doesn't let anyone know how they are feeling; e.g., I just kept it to myself, didn't tell anyone.

Activity/Outlets

28. Creative outlets - paint, draw, build something, write music: the adolescent uses painting, drawing, building as an outlet for the distress they feel or an activity of distraction; e.g., I worked on a drawing; I fixed a car up.

29. Dancing: can be a creative outlet or an activity to distract the adolescent or release emotional distress; e.g., I went dancing.
30. Exercise: the adolescent engages in exercises or in exercise as activity; e.g., I went jogging.
31. Expressive (performance) outlet - play an instrument, sing: the adolescent engages in some expressive performance activity; e.g., I play my violin.
32. Music - listen to: the adolescent listens to music; e.g., I listen to music.
33. Physical release (unspecified): when the adolescent engages in some physical activity but is not specific about what the activity is; e.g., I do something physical - get out and run around; chop wood; throw sticks and rocks.
34. Reward self, treat self in special manner: the adolescent does something special or nice for him/herself; e.g., go shopping.
35. Sports: play sports; e.g., play football, basketball.
36. Walking, biking: specific examples of exercise as an activity; e.g., I go for a bike ride.
37. Reading: reading as an activity; e.g., I read a book to get my mind off things.
38. Activity/outlet (unspecified): activities and/or outlets that are not specifically described by the adolescent; e.g., I do something to forget about the problem for awhile.

Psychological Avoidance

39. Denial, repression: the adolescent denies or represses the existence of the problem, but can acknowledge it later; e.g., try and get away from it by trying to think about something else.
40. Distancing - escaping (physical): the adolescent psychologically distances him/herself from the problem by leaving the stressful situation; e.g., stay away from the person for awhile until you cool down; go home from work and forget about it.

41. Fantasize, daydream: the adolescent fantasizes or daydreams to avoid thinking about the problem; e.g., I try to fantasize that I have a normal mother (mother is manic-depressive).
42. Ignore: the adolescent ignores the problem, doesn't attend to it or think about it for the moment; although the adolescent does acknowledge that the problem occurred; e.g., I ignored him/her/it.
43. Procrastinate: the adolescent puts off thinking about or taking action for a problem; e.g., put it off and see what happens.
44. Sleep more, sleep to escape: the adolescent sleeps to avoid thinking about the problem; e.g., I just went to bed/sleep.
45. Wish it would go away: the adolescent hopes or wishes that the problem would take care of itself; e.g., not really worrying about it - hoping it will go away.
46. Did nothing: the adolescent does nothing in response to the problem; e.g., I did nothing.

Numbing Senses/Destructive Behavior

47. Alcohol: the adolescent drinks alcoholic beverages; e.g., I drink alcohol; I go out on weekends and get trashed.
48. Driving fast (reckless): the adolescent drives a car in a reckless manner; e.g., get in the car and drive too fast, drive recklessly.
49. Drugs: the adolescent takes drugs, includes giving in to peer pressure to take drugs; e.g., I took drugs.
50. Food binge or fast: the adolescent eats too little or too much; e.g., I ate a lot; I stopped eating.
51. Physical self-abuse: the adolescent hurts his/herself by being physically abusive; e.g., attempt suicide; run until I throw up.
52. Object destruction: the adolescent damages or destroys objects; e.g., I burned holes in my bedroom carpet.

53. Running away from home: the adolescent runs away from home; e.g., I could run away.
54. Physical fighting with others: the adolescent instigates or engages in physical fighting with others; e.g., I went out looking for a fight with someone.

Emotional Support (receive or provide, unspecified)

55. Acceptance - nonjudgmental, unconditional, restrains from judging: the adolescent seeks or provides acceptance to another; e.g., we (friends) team up together - like against parents - we don't judge each other.
56. Cards, presents, letters: the adolescent gives or receives a token to/from another; e.g., I sent a get well card to my friend.
57. Caring or love expressed, general positive feelings of regard: the adolescent tells another (or is told) that he/she is cared for; e.g., having people around - I just knew that everybody loved me and cared about me.
58. Compliments, reinforces good traits, respects, is proud of, shows appreciation that makes you feel important: the adolescent expresses (or is told by someone else) appreciation of another; e.g., My parents were said they were proud of me.
59. Concern: the adolescent shows concern and interest (or someone expresses concern about the adolescent), empathy, being there; e.g., I was there for my boyfriend when he went through a tough time.
60. Encourages: the adolescent helps to motivate (or is encouraged by another), reassures, builds confidence; e.g., have someone there to tell you that its going to be okay.
61. Physical contact: the adolescent hugs or touches someone (or is hugged or touched); e.g., He gives me a hug.
62. Shared experience: the adolescent relates own experience with similar or comparable others, and/or listens to others; e.g., I talk with my friends about problems, they understand.

63. Religion - activities, God: the adolescent goes to church, looks for support in God; e.g., I just go to Him when I have a problem.

Companionship

64. Accompany in stressful situations: the adolescent accompanies or is accompanied in stressful situations; e.g., I went with my mother to the funeral.
65. Do something together - go out: the adolescent goes out to parties, bars, etc. with another person(s); e.g., I go out with my friends to a party.
66. Do something together - other: the adolescent does something with another person(s); e.g., hang out with my friends.

Direct Service (receive or provide, unspecified)

67. Direct service (unspecified): the adolescent receives or provides a service; e.g., get a tutor.
68. Child care or family member care: the adolescent receives or provides child or family member care; e.g., my mother took care of my baby; I watch my little brother for my mom.
69. Errands: the adolescent runs errands for another or someone runs errands for the adolescent; e.g., ????
70. Good work: the adolescent does special or good work for another; e.g., I help out my mom sometimes by doing extra work for her.
71. Housework: the adolescent does housework for someone; e.g., I helped out my mom around the house.
72. Meals: the adolescent prepares a meal(s) for someone or is given a meal(s); e.g., I went over to my friend's house for dinner.
73. Rides: the adolescent receives or provides a ride; e.g., I give my friends rides.
74. Task - do together with person: the adolescent performs some task with another person; e.g., My friend helped me clean the garage.

Tangible Sharing (receive or provide, unspecified)

75. Loan car: the adolescent loans or is loaned a car; e.g., I borrowed my friend's car.
76. Housing: the adolescent receives or provides housing; e.g., I stayed with my friend.
77. Money: the adolescent gives/lends or is given/lent money; e.g., I borrowed money from a friend.

Professional Support

78. Professional support: the adolescent seeks professional support for his/her problem, generally from a psychologist, school counselor, or clergyman; e.g., I went to talk with my counselor.

Coding Categories for Coping Strategies

- 100 Cognitive/Problem-Solving Process
- 110 Suggestions or opinions sought or given
- 111 Clarification feedback - unspecified
- 112 Direction, goals - considered, discussed, prioritized, clarified
- 113 Information - referral
- 114 Think to self or with others
- 115 Options - generate
- 116 Perspective - put into; gives objectivity
- 117 Accepting Responsibility
- 118 Information - source of stress - what stress is

- 120 Direct Actions
- 121 Action - specific which changes external situation (not listed below)
- 122 Action - specific which changes one's contribution
- 123 Apologize
- 124 Effort - increase/beat effort/try harder
- 125 Hang in - stand ground
- 126 Talk to source of problem/confront
- 127 Time away from problem
- 128 Together - e.g., study together

- 200 Emotion Management
- 210 Emotion management through emotional release or focus
- 211 Anger expressed at others / blaming/arguing
- 212 Crying
- 213 Journal keeping/write down feelings
- 214 Outburst -- yelling, shouting, throwing things
- 215 Pray/meditate
- 216 Refocus/reappraise
- 217 Talk feelings out
- 218 Time heals/will take care of itself
- 219 Kept it to myself/Keep feelings inside

- 220 Activity/Outlets
- 221 Creative outlets - paint, draw, build something, write music
- 222 Dancing
- 223 Exercise
- 224 Expressive (performance) outlet - play an instrument/sing
- 225 Music - listen to
- 226 Physical release (unspecified)
- 227 Reward self/treat self in special manner - e.g., go shopping
- 228 Sports
- 229 Walking/Biking
- 230 Reading
- 231 Activity/Outlet (unspecified)

- 300 Psychological Avoidance
- 310 Denial/repression
- 311 Distancing - escaping/physical
- 312 Fantasize/day dream
- 313 Ignore
- 314 Procrastinate
- 315 Sleep more/ sleep to escape
- 316 Wish it would go away
- 317 Did nothing

- 320 Numbing Senses/Destructive Behavior
- 321 Alcohol
- 322 Driving fast (reckless)
- 323 Drugs - includes giving in to peer pressure
- 324 Food binge/fast
- 325 Physical self-abuse
- 326 Object Destruction
- 327 Running away from home
- 328 Physical fighting with others

- 400 Emotional Support (receive or provide; unspecified)
- 410 Acceptance - nonjudgmental, unconditional, restrains from judging
- 412 Cards, presents, letters
- 413 Caring or love expressed, general positive feelings and regard
- 415 Compliments/reinforces good traits/ respects/ is proud of/shows appreciation makes you feel impt
- 416 Concern - shows concern and interest, empathy/being there
- 417 Encourages - helps to motivate; reassures, builds confidence
- 418 Hugs, touches - physical contact
- 420 Shared exp. - relates own exp. w/ similar or comparable others/listens
- 421 Religion - activities, God

- 500 Companionship
- 510 Accompany in stressful situations
- 511 Do something together - go out/parties, bars
- 512 Do something together - other

- 600 Direct Service
- 610 Direct service (unspecified)
- 611 Child care or family member care
- 612 Errands - run
- 613 Good work - put in
- 614 Housework - do for someone
- 615 Meals - prepare
- 616 Rides - give
- 617 Task - do together with person

- 620 Tangible Sharing (unspecified)
- 621 Loan car
- 622 Housing - provide
- 623 Money - give/lend

- 700 Professional Support

Life Events/Worry - Domain

- 01 - Academic
- 02 - Vocational
- 03 - Financial
- 04 - Peers - Relationships
- 05 - Family - Relationships
- 06 - Independence from Family
- 07 - Family Planning
- 08 - Significant Other - Relationships
- 09 - Physical/Emotional
- 10 - Sexual Identity
- 11 - Existential/General Life Issues
- 12 - Religion
- 13 - Recreational
- 14 - Environmental
- 15 - Political

Life Events/Worry - Type

- 1 - Major Negative Events - No Control
- 2 - Major Negative Events - May Have Had Control (Had Control)
- 3 - Minor Events or Hassles
- 4 - Positive events
- 5 - Change (Positive or Negative)
- 6 - Future Worries or Concerns
- 7 - Present Worries or Concerns

01 = Academic

- 01 1 1
- 01 2 1 Suspension/Expulsion
- 01 3 1 Red Tape/Rules & Regulations of the School
- 01 3 2 Dealing w/Classmates/Professors/Competition
- 01 4 1
- 01 5 1 Starting Highschool/College
- 01 6 1 Standardized Test Performance
- 01 6 2 Decision - Major, Furthering Education
- 01 6 3 Dropping Out
- 01 6 4 Graduation/Graduating
- 01 6 5 Education to Expand Job Prospects
- 01 6 6 Getting Accepted to College/Professional School
- 01 7 1 Grades/Performance in Classes
- 01 7 2 Passing/Failing/Dropping Courses
- 01 7 3 Time/Deadlines/Workload
- 01 7 4 Motivation Problems/Eagerness to Finish
- 01 7 5 Behavior & Dress Codes
- 01 7 6 Alcohol/Drug Use
- 01 7 7 Crime

02 = Vocational

02 1 1

02 2 1 Unsuccessful Attempts to Get Job/Rejection for Promotion

02 2 2 Getting Laid off/Fired/Quitting/Retired

02 3 1

02 4 1 Starting a Job

02 5 1 Change in Job conditions/Hours/Responsibilities

02 6 1 Finding a "Good" Job in Desired Field

02 6 2 Career Choice - Real vs. Ideal

02 6 3 Career Preparation (non-School)

02 7 1 Currently Unemployed/Seeking Job

02 7 2 Conflicts w/Co-workers (Boss/Harrasment/Discrimination)

02 7 3 Annoyances Inherent in Job (Physical Dangers, Hours, Dissatisfaction)

02 7 4 Workload/Responsibilities

02 7 5 Concern About Job Performance/Moving or Failing

03 = Financial

03 1 1 Unexpected Expenses/Medical Bills

03 1 2 Bankruptcy

03 2 1 Gain New Financial Responsibilities/Major Purchase

03 2 2 Repossession of Goods

03 3 1 Decrease in Income

03 3 2 Pay off Debts

03 3 3 Taxes

03 4 1 Increase in Income

03 4 2 Achieving Secure Income, to Meet Desired Standard of Living

03 5 1

03 6 1 Paying for Living Expenses/Car/Necessities

03 6 2 Being Successful/Having a Lot of Money

03 7 1 Not Having Enough Money/Budgeting Problems

03 7 2 Living from Paycheck to Paycheck

04 = Peers - Relationships

04 1 1 Peer Lying

04 1 2 Peer Moving Away/Going Away to School

04 1 3 Death of Peer/Friend

04 1 4 Losing Friends

04 1 5 Illness or injury of a Friend

04 2 1

04 3 1 Annoying Behavior

04 3 2 Inconsideration/Rudeness/Lack of Respect for Privacy

04 3 3 Communication Problems/Lack of Appreciation

04 3 4 Expecting/Asking Too Much/Requesting Help/Assistance

04 3 5 Personality Clashes-Differing Goals, Viewpoints and Morals

04 3 6 Arguments/Disagreements

04 3 7 Jealousy

04 4 1 Gaining New Friends

04 5 1

04 6 1 Honesty/Integrity/Trustworthiness (Desirable Qualities)

04 6 2 Courtesy/Consideration (Desirable Qualities)

04 7 1 Appearance (Hairstyle, Clothing)

04 7 2 Drinking, Smoking, Taking Drugs

04 7 3 Choice of Peers/Significant Other

04 7 4 Disregard/Defy Parental Authority

04 7 5 Sexual Activity

04 7 6 Social, Recreational, Leisure Activities

05 = Family Relationships

- 05 1 1 Parents Lying
- 05 1 2 Parents Divorce/Separate
- 05 1 3 Death of Family Member
- 05 1 4 Death of a Pet or Having to Give Pet Away
- 05 1 5 Sibling Lying
- 05 1 6 Illness or injury of Family Member
- 05 1 7 Parent has New Relationship
- 05 2 1 Family Member Moves In/Out
- 05 2 2 Physical Punishment (Hitting, Slapping)
- 05 2 3 Verbal Punishment (Ridicule, Scream, Yell)
- 05 2 4 Loss of Privileges/Being Grounded/Loss of Opportunity
- 05 2 5 Resentment/Anger at Punisher
- 05 3 1 Annoying Behavior (Parents & Siblings)
- 05 3 2 Inconsideration/Rudeness/Lack of Respect for Privacy (Parents & Siblings)
- 05 3 3 Communication Problems/Lack of Appreciation (Parents & Siblings)
- 05 3 4 Expecting/Asking too Much/Requesting Help/Assistance (Parents & Siblings)
- 05 3 5 Personality Clashes - Differing Goals, Viewpoints, & Morals (Parents & Siblings)
- 05 3 6 Arguments/Disagreements (Parents & Siblings & Grandparents)
- 05 3 7 Jealousy (Parents & Siblings)
- 05 4 1 New Sibling/Birth/Adoption
- 05 4 2 Getting a Pet/Taking Care of a Pet
- 05 5 1 Parents Remarry
- 05 6 1
- 05 7 1 Honesty/Integrity/Trustworthiness (Desirable Qualities)
- 05 7 2 Courtesy/Consideration (Desirable Qualities)
- 05 7 3 Lack of Trust/Inconsistent Behavior/Disciplining/Disapprove
- 05 7 4 Achievement Compare With Siblings

06 = Independence From Family

- 06 1 1
- 06 2 1
- 06 3 1 Family Hassles -Appearance, Self-Support, Moving In/Out , Maturity Not Recognized -Independence
- 06 3 2 Family Hassles - Responsibilities (Chores, Care of Family Members)
- 06 4 1 Achieving Financial Independence from Parents or Others
- 06 5 1
- 06 6 1
- 06 7 1 Choice of Peers/Significant Others
- 06 7 2 Substance Use (Cigarettes, Drink, Drugs)
- 06 7 3 Making Own Decisions (Sex, Career Choice)

07 = Family Planning

- 07 1 1 Stress of Parenting - Financial/Time
- 07 1 2 Custody/Visitation/Support Issues/Becoming Stepparent
- 07 1 3 Death of Child
- 07 2 1 Child Abuse
- 07 2 2 Family Planning/Birth Control/Abortion
- 07 2 3 Being Pregnant/Giving Birth/Adoption
- 07 3 1
- 07 4 1
- 07 5 1
- 07 6 1 Leisure Time (Activities/Vacation)
- 07 6 2 Raising the Child the "Right Way"
- 07 7 1 Child Care/Day Care Issues
- 07 7 2 Household Chores/Division of Labor

08 = Significant Other - Relationships

- 08 1 1 Significant Other Lying
- 08 1 2 Personality Clashes - Differing Goals, Viewpoints & Morals
- 08 1 3 Arrest of Significant Other
- 08 2 1 Breaking Up/With Boyfriend/Girlfriend
- 08 2 2 Losing One's Virginity
- 08 2 3 Getting Divorced
- 08 2 4 Breaking Engagement
- 08 2 5 Unfaithful/Cheating
- 08 2 6 Marital Discord
- 08 2 7 Separation
- 08 2 8 Spouse Abuse
- 08 3 1 Annoying Behavior
- 08 3 2 Inconsideration/Rudeness/Lack of Respect for Privacy
- 08 3 3 Communication Problems/Lack of Appreciation
- 08 3 4 Expecting Too Much, Taking Too Much Time, Requesting Help/Assistance
- 08 3 5 Arguments/Disagreements
- 08 3 6 Jealousy
- 08 4 1 Getting Engaged
- 08 4 2 Getting Married
- 08 4 3 Remarriage
- 08 4 4 Living Together
- 08 4 5 New Boyfriend/Girlfriend/Development of New Relationship
- 08 5 1
- 08 6 1 Honesty/Integrity/Trustworthiness (Desirable Qualities)
- 08 6 2 Courtesy/Consideration (Desirable Qualities)
- 08 6 3 Finding the "Right Partner" (Having a Boyfriend/Girlfriend)
- 08 7 1 Unrequited Love/Differing Views of the Relationship
- 08 7 2 Realization of Love/Developing Realization/Getting Closer
- 08 7 3 Serial Relationships/Dating Many at Once/Casual Dating
- 08 7 4 Socially Unacceptable Relationship
- 08 7 5 Not Having Partner
- 08 7 6 Appearance (Hair Style, Clothing)
- 08 7 7 Religious Beliefs/Activities
- 08 7 8 To Get Married
- 08 7 9 Sexual Activity
- 08 8 0 To Live Together

09 = Physical/Emotional

- 09 1 1 Physical Disability/Chronic Health Problem
- 09 1 2 Injury/Illness
- 09 1 3 Secondary Sex Characteristics
- 09 1 4 Sexual Difficulties
- 09 1 5 Diagnosed Mental Illness
- 09 1 6 Death
- 09 2 1 Over/Underweight
- 09 2 2 Drug/Alcohol Abuse
- 09 2 3 Emotional Problem
- 09 3 1
- 09 4 1
- 09 5 1
- 09 6 1
- 09 7 1 Time Management
- 09 7 2 Disapproval/Disliking of Self
- 09 7 3 Feeling Too Young
- 09 7 4 Appearance Concerns
- 09 7 5 How Others See One
- 09 7 6 Living Up to Others' Expectations
- 09 7 7 Mattering

10 = Sexual Identity

10 1 1

10 2 1

10 3 1

10 4 1

10 5 1

10 6 1

10 7 1 One's Own Sexual Identity

10 7 2 Gender Role Stereotype Conformity (From Peers)

10 7 3 Gender Role Stereotype Conformity (From Family)

11 = Existential/General Life Issues

11 1 1

11 2 1

11 3 1

11 4 1

11 5 1

11 6 1 Meaning of Life/Death

11 6 2 What Ifs

11 6 3 Who Am I/Meditation/Reflection

11 6 4 Future Plans/Issues

11 7 1 Should Haves

11 7 2 Change of Outlook

11 7 3 Inadequacies/Living up to Potential (Self Perception)

11 7 4 Dissatisfaction

11 7 5 Outstanding Achievement/Public Recognition/Life Goal/Success

11 7 6 Thinking About Suicide

12 = Religion

12 1 1

12 2 1

12 3 1

12 4 1

12 5 1

12 6 1 Leading a "good life"

12 7 1 Thinking about God

13 = Recreational

13 1 1

13 2 1

13 3 1 Non-School: Not Making Team or Group or Failing at an Activity/Competition

13 3 2 Plans Falling Through

13 4 1 Activity/Interest

13 5 1

13 6 1 Vacation (Plans)

13 7 1 Media Stress

13 7 2 Scheduling Problems/Not Enough Time for Recreation

13 7 3 Choice of Activity or Event

13 7 4 Having Enough Money For Leisure Activities

14 = Environmental

- 14 1 1 Natural Disasters
- 14 1 2 House Robbed
- 14 1 3 Fire
- 14 1 4 Getting Attacked, Mugged, Shot, Killed
- 14 2 1 Car Accident
- 14 2 2 Arrest
- 14 2 3 Incarceration/Conviction
- 14 2 4 Parole/Probation
- 14 2 5 Delinquent Activity
- 14 2 6 Drugs/Alcohol - Getting Caught, Selling, Pressuring Others
- 14 2 7 Separation/Loss of Place/Eviction
- 14 2 8 Change in Environment/Moving to New Place
- 14 3 1 Traffic
- 14 3 2 Traffic Ticket/Minor Infraction
- 14 3 3 Weather
- 14 3 4 Car Trouble
- 14 4 1
- 14 5 1
- 14 6 1 Nuclear War
- 14 6 2 Ecological Concerns
- 14 6 3 Fear of Spread of Communism
- 14 7 1 Noise Level
- 14 7 2 Crime
- 14 7 3 Parking Problems
- 14 7 4 NonDrug/Density
- 14 7 5 Noisy Neighbors/Territorial Disregard
- 14 7 6 Attachment to Place
- 14 7 7 Terrorism
- 14 7 8 World Hunger
- 14 7 9 Human/Animal Rights
- 14 8 0 To Be Responsible (Societal Pressures)

15 = Political

- 15 1 1
- 15 2 1
- 15 3 1
- 15 4 1
- 15 5 1
- 15 6 1
- 15 7 1 Economy/Inflation
- 15 7 2 Dissatisfaction with Administration
- 15 7 3 Dissatisfaction with Particular Law

The dissertation submitted by Sheila H. Parfenoff has been read and approved by the following committee:

Dr. Jill N. Reich, Director
Professor, Psychology and
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The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is, therefore, accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

April 1, 1993
Date

Jill N. Reich
Director's Signature