Predictors of Coping Strategies in Adolescence

by

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Abstract

The purpose of this study was to examine the types of variables that predict the coping strategies used by adolescents. A questionnaire was administered to a sample of 209 male and 216 female subjects ages 17 to 20. Scales in the questionnaire assessed coping strategies, perceptions of control, social support from family and friends, self-esteem, and psychological separation from parents. Stepwise multiple regressions revealed that adolescents who had high social support, high dependence on parents, and an internal locus of control were more likely to use active coping. Adolescents that had low self-esteem, greater conflictual dependence on parents, and an external locus of control were more likely to use withdrawal coping.

Predictors of Coping Strategies in Adolescence

Coping strategies are very important in times of stress or during negative life events because they may diminish the harmful effects of stress. Effective coping skills are particularly necessary in today's world, as individuals are increasingly forced to deal with complex and demanding situations. A large percentage of our society's daily conversations and media focus on negative or stressful events. "While stress is an inevitable aspect of the human condition, it is coping that makes the big difference in adaptational outcomes" (Lazarus & Folkman, 1984, p. 6). Stress-resistance research has focused on the benefits of effective coping styles which have an effect on both health and well-being. Effective coping strategies are associated with fewer psychological problems (Folkman, Lazarus, Gruen, & DeLongis, 1986), and individuals who use more adaptive coping strategies have better mental health (Aldwin & Revenson, 1987). Overall, individuals who use effective coping strategies report higher life satisfaction and happiness (McCrae & Costa, 1986).

Throughout history, stress has been conceptualized in many different ways. In psychology, most definitions of stress emphasize the relationship between the person and the environment. Stress is conceptualized as "a process that involves recognition of and response to threat or danger" (Fleming, Baum, & Singer, 1984, p. 939). "Psychological stress is a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her

resources and endangering his or her well being." (Lazarus &
Folkman, 1984, p. 19). Individuals may vary in the degree and
reaction to stress. In a transactional model, stress does not
necessarily arise out of demands people face. Rather, stress
arises when individuals perceive the situation as overtaxing
their resources. Not all stress is associated with negative
emotions. The appraisal of stress involves two stages or
processes: Primary and secondary. During the primary appraisal
process, the individual interprets whether the stress includes
harm/loss, threat or challenge to self. In the secondary
appraisal process, an individual evaluates what might and can be
done, as well as what resources and options are available. Coping
is the central part of this process which involves overt and
covert responses to threat or danger, directed toward overall
reduction of stress. 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." (Lazarus & Folkman, 1984, p. 141).

Stressors are defined as "threat or loss conditions-
circumstances or situations that produce various degree of bodily
reactions which indicate that an individual is experiencing
stress" (Hefferin, 1982, p. 76). Stressors may be acute or
chronic. Lazarus and Folkman (1984) have argued that everyday
stressors may actually have a greater effect on a person's well-
being than a major life crisis. Stressors may be external (coming
from the environment) and/or internal (originating in the
individual) (Knapp, 1980). During adolescence, self-expectations

are an important source of stress. While perceptions of stress vary for different individuals (Seiffge-Krenke, 1995), overall, adolescents who report the least stress have the most effective coping resources (Allen & Hiebert, 1991).

While effective coping strategies are essential for happiness and well-being in all stages of life, they are especially important for adolescents. Adolescence is a period of great change and adjustment both internally and externally. Adolescents experience physiological changes in their reproductive organs and the emergence of secondary sex characteristics (Adams, Gullotta, & Markstrom-Adams, 1994). Adolescence is also accompanied by cognitive changes such as the ability to reason using symbols, abstractions, and problem-solving strategies. Individuals become more vulnerable during periods of biological, social, and psychological transition (Antonovsky, 1981). While not all adolescents experience a stressful developmental phase or transition period, very few teens make it through adolescence without encountering some sort of difficult situation. Some researchers believe that compared to other age groups, adolescents experience higher levels of stress, yet they have the least effective coping resources (Allen & Hiebert). Therefore, even in the absence of a major negative life event, there are still many daily stressors which put adjustment pressures on adolescents.

In childhood and early adolescence, the most commonly reported everyday stressors involve school and relations with parents, siblings, and friends (Spirito, Stark, Grace, &

Stamoulis, 1991). For older adolescents, boyfriends and girlfriends replace siblings as stressors (Stark, Spirito, Williams, & Guevremont, 1989). For all adolescents, stressful situations usually do not include health or recreational activities (Halstead, Johnson, & Cunningham, 1993). Other common stressors include getting poor grades, arguments with parents, peer rejection, and death of a loved one (Ebata, & Moos, 1991). In adolescence, males report more school-related problems while females report more interpersonal problems involving friends, family, boyfriends, and parents (Stark, Spirito, Williams, & Guevremont, 1989). Overall, adolescents report more stressful issues concerning themselves or in relationships with their parents and fewer involving a boyfriend, girlfriend, peer, or supervisor (Halstead, Johnson, & Cunningham, 1993).

Today changing family structures and social roles have led to a whole new set of problems to deal with (Aldwin, 1994). Some adolescents must cope with parental divorce, teen pregnancy, and pressure to join gangs. In addition to normal transitional stressors, many adolescents in the nineties report the additional stressor of working at part-time jobs. Thus, adolescents must juggle multiple demands. Whether an adolescent encounters a major negative life event or is merely exposed to daily stressors, it is important to study and understand coping strategies among adolescents in order to ensure the transition into adulthood is as smooth as possible. It is at this age when maladaptive coping strategies such as the use of cigarettes, alcohol, drugs, and suicide attempts may be used as a means to reduce distress

(Aldwin). Adolescent coping behaviour has been found to be predictive of adult adaptation (Feldman, Fisher, Ransom, & Dimiceli, 1995). Therefore, improvements in coping skills during adolescence can be important for future well-being.

<u>Conceptualizations of Coping</u>

The two major functions of coping are: (1) to deal directly with the problem which is causing distress (problem-focused coping) and (2) to regulate or alleviate the emotions associated with the problem (emotion-focused coping). In the widely used process-oriented framework by Lazarus and Folkman (1984), the distinction is made between two types of coping: problem-focused strategies and emotion-focused strategies. Problem-focused coping strategies include efforts to define and redefine the problem, generate alternative solutions, weigh the costs and benefits of the alternatives, choose among them, and act. Some of these behaviours are directed at the self, such as developing new relevant behaviours, shifting levels of aspiration, or learning a new skill. Other strategies are directed at the environment, such as seeking information, trying to get help, and taking direct action. Emotion-focused coping strategies help an individual to reduce emotional stress. Some of these emotion-focused coping strategies may include cognitive processes such as avoidance, minimizing the problem, detachment, blaming others, projection, and fantasy. Other emotion-focused strategies may include behavioural strategies such as exercising to get one's mind off the problem, meditating, substance use, and venting anger.

Other researchers classify coping strategies as either

active, approach-oriented or passive or avoidance-oriented

(Billings & Moos, 1981). Active or approach-oriented strategies

utilize cognitive attempts to change ways of thinking about the

problem and behavioral attempts to resolve the problem directly.

Avoidant strategies involve the use of cognitive attempts to deny

or minimize threat and behavioural attempts to avoid

confrontation. Avoidance strategies are synonymous with denial,

distraction, repression, and suppression (Suls & Fletcher, 1985).

This type of classification is similar to that of Lazarus &

Folkman's terminology of problem-focused and emotion focused

coping strategies.

Differences in conceptualizations of coping may have

contributed to inconsistencies in the results of studies on

coping strategies. For example, some researchers see the use of

social support as an avoidance coping mechanism (Endler & Parker,

1990). However, others see the use of social support as an active

coping strategy which is beneficial (Billings & Moos, 1981;

Lazarus & Folkman, 1984). In the present study, the use of social

support is viewed as an effective or active coping strategy.

Coping is defined by Seiffge-Krenke and Shulman's (1990)

conceptualization of coping. Effective or active coping

strategies include active behaviours which help the individual to

solve the problem. These behaviours include seeking information,

thinking of alternative solutions to the problem, and the use of

social support from friends, family, and counselling centres.

Ineffective or withdrawal coping strategies are those behaviours

which avoid dealing with the problem. These behaviours include

avoidance behaviours such as denying the problem exists, as well as inappropriate actions such as aggressive behaviour or the use of alcohol and drugs.

Differences among the conceptualizations of coping may cause inconsistencies among researchers. Therefore, it is very important to clearly define the construct of coping.

<u>Coping and Well-Being</u>

Many researchers have examined the relationship between the type of coping style used and psychological well-being. "How one copes with stress, even major trauma, may be more important for at least mental health outcomes than the occurrence of the stressor itself" (Aldwin, 1994, p. 70). In virtually every stressful encounter, both problem-focused and emotion-focused coping strategies are used (Folkman & Lazarus, 1980). However, it is the *coping pattern* or "the proportion of problem-and emotion-focused coping used in a specific episode" which determines well-being (Folkman & Lazarus, 1980, p. 227).

Many studies have found problem-focused strategies to be beneficial in adapting to stressful situations, whereas, emotion-focused strategies have not been found to be very effective. A planned active solution to a problem improves emotional states, as people feel better when directly dealing with a problem (Folkman & Lazarus, 1988). Avoidant coping styles may be effective in the beginning; however, this style does not have satisfactory long-term effects (Suls & Fletcher, 1985; Folkman & Lazarus, 1988). Avoidance coping strategies such as bottling up feelings or expressing them antagonistically are associated with

physical or emotional strain (Holahan & Moos, 1985). Making the
effort to actively change, manage, or reappraise a situation is
important for long-term adjustment (Ebata, & Moos, 1991). When
coping strategies are effective, it improves the relationship
with the individual and the environment, which could lead to
positive cognitive appraisal and ultimately a positive emotional
response.

<u>Coping and Adolescence</u>

Until the mid eighties, very little was known about coping
behaviour of "normal" adolescents in everyday situations. Between
1966 to 1985, only 7 % of all publications on coping looked at
the coping behaviour of adolescents although there has been an
increase in the last few years (Seiffge-Krenke, 1995). Overall,
adolescents use multiple coping strategies in stressful
situations (Halstead, Johnson, & Cunningham, 1993), which is
consistent with prior research on adults (Folkman & Lazarus,
1980).

For adolescents, the types of coping strategies used also
affected their well-being. Adolescents who used problem-focused
coping skills were less likely to have emotional, behavioral and
adjustment problems (Compas, Malcarne, & Fondacaro, 1988). "Those
adolescents who persistently prefer an active approach, in
general, have a lower level of demand or discrepancies between
developmental state and goal" (Schonpflug & Jansen, 1995, p.
402). Adolescents who used more active and less avoidant coping
were more likely to be better adjusted (Ebata, & Moos, 1991). In
a study of college freshmen, psychosocial adjustment was related

to the use of mature salutary coping styles (Jorgensen & Dusek,
1990). Adolescents who were well-adjusted used techniques such as
reducing stress by developing a plan of action, using social
resources, discussing problems, and increasing physical,
cognitive, and scholastic activities that would enhance self-
esteem. Individuals with diabetes mellitus were healthier when
they used problem-solving coping strategies over a wish-
fulfilment coping style (Kvam & Lyons, 1991). For adolescents
experiencing loneliness, the most effective coping strategies
were social interaction, increased activity, and the use of
social support systems, while attempts to ignore or deny
loneliness were not effective (Rokach, 1996).

Emotion-focused coping strategies are associated with poor
psychological well-being in adolescents (Grossman & Rowat, 1995).
As with adults, the use of avoidance puts adolescents at greater
risk for poor adjustment when dealing with stressors and crises
(Ebata, & Moos, 1991). Less optimally adjusted individuals were
more likely to reduce tensions by daydreaming, sleeping, blaming
others, and avoiding problems through substance abuse.
Adolescents who had psychological or behavioral problems were
more likely to use avoidance methods (Ebata & Moos, 1991).
Students who smoked report higher levels of stress and fewer
coping resources (Allen & Hiebert, 1991). Depressed adolescents
failed to use active coping strategies, such as problem solving,
when confronted with an uncontrollable situation (Brightman,
1990). Children who had contemplated suicide were less likely to
use active coping strategies than non suicidal children (Asarnow,

Carlson, & Guthrie, 1987). Such a situation "can produce a
negative feedback loop of further failure and a deepening sense
of hopelessness and despair" (Brightman, p. 448). Certain groups
of vulnerable adolescents are, then, at greater risk for the
development of ineffective coping strategies and thus become
involved in an endless cycle of despair. Thus, effective coping
skills may mean the difference between a healthy, well adjusted
adolescent and an adolescent who suffers from depression, low
self-esteem, or becomes involved in deviant activities. It is
this age at which intervention may have its greatest impact. In
an intervention study targeting suicidal young adults,
improvements in problem-solving and adaptive coping skills
reduced suicidal ideation and behaviour (Rudd et al., 1996). The
study of coping skills is important, as it can help therapists
and practitioners to understand and influence the methods that
adolescents use to cope with daily problems, as well as major
life events.

Factors Involved in Coping

Over the past few decades, there have been many different
perspectives used in the study of coping styles. Some view
personality factors as the best predictors of coping styles
whereas others see the situation as crucial in predicting coping
strategies. Both perspectives have received empirical support. In
addition, gender, age, and socioeconomic status may also play an
important role in the types of coping strategies used.

Personality-based definitions of coping.

Personality-based approaches assert that personality

characteristics determine how an individual copes with stress. These theories assert that "coping is personality in action under stress." (Bolger, 1990, p. 525). There has been some research which shows that personality dimensions or traits are related to coping styles (McCrae & Costa, 1986; Bolger). Individuals who were identified as neurotic used less effective, (Parkes, 1986), immature coping strategies such as escapist fantasy, withdrawal, and wishful thinking, (McCrae & Costa, 1986) as well as self-blame (Bolger, 1990). High scores on trait anxiety were predictive of avoidance-oriented coping strategies (Nigro, 1996). Extraversion was associated with problem-focused coping such as action and positive thinking (McCrae & Costa).

In contrast, other studies have found that personality traits do not have a considerable direct effect on coping styles (Kardum, & Hudek-Knezevic, 1996). Also, it is argued whether coping as a personalty trait is consistent across situations (Folkman & Lazarus, 1988; Lazarus & Folkman, 1984). Therefore, because the proportion of variance which is accounted for by personality is not known, further research is needed to assess the role of personality factors in determining coping style.

Situation-based definitions of coping.

Situation-oriented researchers believe individuals use different coping strategies in different situations. An individual's coping styles vary according to the type of stressful event (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986). A given situation may influence the coping efforts which are used (McCrae, 1984; Parkes, 1986). These findings

related to coping have been found among adolescents and even
children as young as six years use different coping strategies
across different situations (Band, & Wiesz, 1988). Challenging
events elicit different coping responses than events which are
characterized by loss or threat to an individual (McCrae).
Individuals who perceive threats to their self-esteem, a loved
one's well-being, or respect to another may use more
confrontational coping. For example, adolescents who experienced
stress due to parental divorce or serious illness of a family
member were more likely to use problem solving (Nigro, 1996).
However, when adolescents experienced a relationship breakup,
they were more likely to use avoidance coping strategies. Both
adolescents, (Halstead, Johnson, & Cunningham, 1993) and adults,
(Folkman & Lazarus, 1980) were more likely to use emotion-focused
coping for health related stressors.

　　　Although the type of stressor or the situation may play a
role in the method of coping strategy used, other factors also
play an important role. "On the whole, coping patterns are not
greatly determined by person factors, nor are they determined
entirely by situation factors" (Folkman & Lazarus, 1980, p. 229).
Coping may depend on the interpretation of the event, who was
involved, and how the event was appraised (Folkman & Lazarus,
1980). Therefore, it is necessary to study a combination of
person and situation variables to determine which are superior in
predicting coping styles. It is also important to consider other
demographic variables such as gender, age, and socioeconomic
status.

Gender differences in coping.

Early studies found very few differences in the coping styles used by males and females, and any differences were attributed to the source of stress (Folkman & Lazarus, 1980). While some studies have found no gender differences in the coping ability, there may be gender differences in the actual use of coping styles (Allen & Hiebert, 1991). Presently, studies on gender differences in coping styles have had mixed results. Some studies reported that overall, females were more likely to use problem-solving coping strategies while males were more likely to use avoidance techniques such as blaming others (Spirito, Stark, Grace, & Stamoulis, 1991). In a study using Seiffge-Krenke's coping questionnaire, females used significantly more active coping styles than males. However, there were no significant differences in withdrawal coping for both males and females (Schludermann, Schludermann, & Huynh, 1996). In another study, females used more social support and emotional regulation while males used more wishful thinking (Stark, Spirito, Williams, & Guevremont, 1989). Males used more avoidance strategies while females used more social support and wishful thinking (Halstead, Johnson, & Cunningham, 1990). In contrast, other studies have found males were more likely to use problem-solving while females were more likely to use wish fulfilment and detachment coping strategies (Kvam & Lyons, 1991).

Several studies have asserted that it is not one's gender that determines coping differences, but rather the sex role orientation or the degree of femininity or masculinity

(Blanchard-Fields, Sulsky, & Robinson-Whelen, 1991). Individuals who were classified as highly feminine used emotion-focused coping whereas those scoring high on masculinity used problem-focused coping. Other researchers have proposed that the relationship between coping behaviour and adaptation is sex specific. For instance, in males, the use of coping behaviours consistent with the feminine gender role (turning to religion and friends) was maladaptive (Feldman, Fisher, Ransom, & Dimiceli, 1995). These males experienced more anxiety, depression, and lower self-esteem. However, for young females, these coping mechanisms decreased anxiety and depression and increased self-esteem. Further research is needed to explain the role of gender in predicting coping strategies.

Age and coping strategy.

Most researchers assume that coping changes over the life course. In a study of coping across the life span, (Diehl, Coyle, & Labouvie-Vief, 1996) older adults were more likely to use greater impulse control, cognitive reinterpretation of events, and emphasis of positive aspects. In general, adolescents and young adults were more likely to use coping strategies that were aggressive and psychologically undifferentiated such as displacement, projection, regression, or rationalization. There may not be any significant differences in coping strategies among the different ages of adolescents (Stark, Spirito, Williams, & Guevremont, 1989). Overall, emotion-focused coping decreases and problem-focused coping increases from adolescence to middle adulthood (Blanchard-Fields, Sulsky, & Robinson-Whelen, 1991).

However, differences in coping strategies as individuals age may be due to changes in the source of stress (Folkman & Lazarus, 1980).

Socioeconomic status and coping strategy.

Socioeconomic status may play a role in the types of coping strategies used. Overall, adolescents from families with lower levels of formal education were more likely to have increased substance abuse, lower levels of protective factors, and were more at risk (Wills, McNamara, & Vaccaro, 1995). Individuals who had a higher socioeconomic status were more likely to use active behavioural coping strategies and less likely to use avoidance coping strategies (Holahan & Moos, 1987a). Lower socioeconomic status and less education have been associated with avoidance coping (Billings & Moos, 1981). It is likely that there are other variables which are associated with lower socioeconomic status that also contribute to the use of ineffective coping strategies.

Predictor Variables of Coping in Adolescence

What is it that determines whether adolescents will use effective coping strategies which will decrease stress and increase their chances of well-being? Why do some adolescents repeatedly use ineffective coping strategies which push them into a further cycle of despair? As mentioned above, both person and situation variables, as well as demographic variables all play an important role in determining coping strategies. In addition, there are many other variables which contribute to the type of coping strategies used. In this study, four predictor variables of coping were selected. Three of these variables were chosen

(locus of control, social support, self-esteem) because they have received extensive empirical support as predictors of coping in stress-related research. Locus of control and self-esteem are person variables and social support is a situational variable. However, psychological separation has never been explored in the context of coping research. Psychological separation (a person variable) has been selected as it is extremely important during adolescence when the family plays a very important role. Therefore, psychological separation from parents is explored as a predictor of coping in conjunction with the other three variables to determine each variables' role in determining coping strategies.

Locus of Control

Attribution theories have been prominent over the past few decades and have been studied in terms of internal versus external attributions. Locus of control is the general feeling of control or lack of control over one's life (Rotter, 1966; 1971). Individuals who believe that their actions determine their outcomes have an internal locus of control. Those who believe their actions and behaviours have no effect on the outcome of events have an external locus of control. Locus of control has been one of the most widely used constructs (Lefcourt, 1992), and continues to be widely studied in a variety of contexts.

Locus of control and well-being.

Locus of control is a predictor of both life happiness and well-being. Perceptions of control over experiences are associated with positive affect (Langston, 1994). An internal

locus of control is associated with low levels of depression and high life satisfaction whereas an external locus of control is associated with high levels of depression and low life satisfaction (Landau, 1995). Psychologists have found locus of control to be a good predictor of many behaviours. For example, locus of control has been found to be a predictor of smoking behaviour (James, Woodruff, & Werner, 1965) and perceptions of control over chronic pain have been positively related to psychological functioning (Jensen & Karoly, 1991).

Locus of control and coping.

Locus of control has been studied in stress research and has been found to be a strong predictor of coping behaviours (Fleming, Baum, & Singer, 1984). Folkman (1984) proposed that event controllability may shape or determine the role of coping. Individuals who perceive events as changeable are more likely to use problem-focused coping styles whereas emotion-focused coping is used if there are no perceived options (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986). If an event is perceived as unchangeable, individuals are more likely to use distancing and escape-avoidance. This is based on the assumption that individuals who are repeatedly in uncontrollable situations experience helplessness and therefore, become increasingly passive in their coping efforts (Folkman, Lazarus, Gruen, & DeLongis, 1986). "Beliefs about the controllability of stressful events could influence the degree to which an individual attempts to master or change the stressful circumstances, as opposed to trying to tolerate or adjust to adverse circumstances." (Compas,

Banez, Malcarne, & Worsham, 1991, p. 24). Thus, an internal locus of control is associated with more adaptive direct coping strategies than an external locus of control (Parkes, 1984).

Many stress related studies provide support for the relationship between perceived control and coping strategies. Appraisals of control or efficacy expectancies determined both coping efforts and persistence (Bandura, 1982). Overall, individuals with an internal locus of control were more likely to use direct coping strategies and perceived the situation as more controllable (Petrosky & Birkimer, 1991). Attributions and perceptions of control have been studied in relation to performance in sport competitions, (Haney & Long, 1995) in which increased perceptions of control were associated with better performance and coping in subsequent performance. In a study of job stress, subjects who reported having a high degree of perceived control used effective coping strategies, such as seeking social support and utilizing task strategies more often and expressed greater levels of mental and physical health and overall job satisfaction (Rees & Cooper, 1992). In a study using Levenson's IPC scale (Brosschot, Gebhardt, & Godaert, 1994), individuals with an internal locus of control used more active coping strategies such as problem solving and expression of anger. Of those individuals with an external locus of control, the belief in powerful others was associated with the use of passive coping strategies such as avoidance, depression, and palliative responses while belief in chance was associated with pathological problems and increased social anxiety. Belief in

fate or powerful others may dampen or inhibit coping efforts, as it leads to an appraisal of helplessness (Lazarus & Folkman, 1984).

The relationship between locus of control and types of coping strategies used has also been found among children and adolescents. In a study of coping with homesickness, children who perceived the lowest control used the least effective coping strategies and consequently were the most poorly adjusted and felt the most homesick (Thurber & Weisz, 1997). Children who believed they had some control over parental conflict were more likely to moderate stress and decrease problem behaviours (Rossman, & Rosenberg, 1992). Adolescents who perceived control over situations were more likely to use problem-focused coping (Compas, Malcarne, & Fondacaro, 1988). Adolescents who had strong self-as-agent beliefs (high self-efficacy and internal locus of control) were more likely to use active approaches and self-reliant strategies (Schonpflug & Jansen, 1995). In a study of disordered adolescents, those who revealed more self direction showed greater coping than those who revealed a sense of powerlessness in a given situation (Tiffany & Tiffany, 1996). Overall, the use of direct coping increases with age, perceptions of controllability of the situation, and an internal locus of control (Petrosky & Birkimer, 1991).

Based on the above findings, it was expected that adolescents with an internal locus of control would be more likely to engage in active coping strategies such as problem solving. Those who had an external locus of control would be less

likely to believe their efforts could change anything. Therefore, they would be more likely to engage in avoidance coping strategies.

Social Support

During the past few decades, there have been many studies on the effects of social-support systems, with increasing interest in informal social-support systems. Social support is "the mechanisms by which interpersonal relationships presumably protect people from the deleterious effects of stress" (Kessler, Price, & Wortman, 1985, p. 541). The mechanism behind the effects of social support on well-being is not clear. The buffering model proposes that social support acts as a "buffer", protecting individuals from stressful events (Cohen & Wills, 1985). The main-effect model proposes that social support provides benefits regardless of stress. A review by Cohen and Wills concluded that there has been empirical support for both models. Also, in stress buffering, the perceived availability of social support may be more important than actual social support (Cohen & Hoberman, 1983). Other researchers believe that social support may only play a role when good coping skills are used and in the presence of a negative life event (Smith, Smoll, & Ptacek, 1990).

Social support and well-being.

Many studies on stress resistance have shown the relationship between social support and well-being. The availability of social support or social resources has been associated with good mental and physical health (Holahan & Moos, 1986). Lack of social support was associated with the development

of psychopathology (Kessler, Price, & Wortman, 1985). The source of social support is an important predictor of whether or not it affects well-being. Cohen and Wills (1985) differentiated between different types of support and suggested certain events require certain resources. There should be a specific match between a stressful event and the coping resource to maximize effectiveness. For example, for adult males, support from work was a better predictor of functioning whereas females reported family support as more important (Billings & Moos, 1982). Overall, females were more likely to deal with stress by turning to others (Holahan & Moos, 1985), which may be a pattern dictated by society's gender roles.

Some studies have found support from friends to be more important than support from families (Kvam & Lyons, 1991). Relationships with and support from friends and peers are also very important during adolescence (Seiffge-Krenke, 1995). Overall, adolescent females prefer more close intimate relationships with one or two friends, whereas males like having more friends and like being active in many different leisure contexts. For both genders, peer relations are important in guiding and shaping coping behaviour. However, this is especially the case for females.

While social support from friends is very important for overall adjustment (Kurdeck & Sinclair, 1988), other studies have found the family to offer more important support. Family support acts as a stress modifier and a stress-resistance factor, as it protects individuals from the negative psychological consequences

of life stress (Holahan & Moos, 1986). Social support from family members is an important resource for children and adolescents in coping with stress (Compas, Worsham, & Sydney, 1992). The role of family support may be crucial for children and adolescents, as they are very much immersed in family life. Therefore, for adolescents who spend a great deal of time with their families, the support may be most effective, if it has been provided by family members.

Family support has been found effective for both high and low stressors (Holahan & Moos, 1990) and it may also offer long-term positive effects. In a four-year study, individuals who had high family support had lower depression and better psychosocial health (Holahan & Moos, 1990). Family support was more of a stress modifier for females than for males (Holahan & Moos, 1986). Family support has been found to predict future psychological and physical distress among children (Holahan & Moos, 1987b). Children who attempted suicide saw their families as unsupportive, less cohesive, higher in conflict, and less controlled (Asarnow, Carlson, & Guthrie, 1987). Therefore, the use of family support bolsters an individual's stress-resistance resources and helps the individual remain healthy during stressful conditions (Holahan & Moos, 1986).

Social support and coping.

Social support may also determine the types of coping style used by an individual. "Social support may be a critical resource for generating effective coping responses" (Billings & Moos, 1982, p. 306). Lazarus and Folkman (1984) found social support to

be a resource which individuals draw upon in times of stress in order to cope. The use of active-versus-avoidance-coping responses may be linked to contextual factors such as the availability of social support (Holahan & Moos, 1987a; Chan, 1993). Personal and social resources elicited approach coping which is especially beneficial to psychological functioning under high stress situations (Holahan & Moos, 1990). Individuals who had more personal and social resources were more likely to use active-coping strategies and less likely to use avoidance-coping strategies (Holahan & Moos, 1987a).

Family support was associated with active-coping strategies; the more social resources available, the less a person needed to resort to avoidance-coping styles (Holahan & Moos, 1987b). Individuals who perceived low familial support were more likely to use a detached-coping style. Recognizing the important relationship between family support and coping responses may be an important component of intervention programs. It has been suggested that interventions with suicidal children should focus on increasing the degree of family support that the child perceives (Asarnow, Carlson, & Guthrie, 1987).

Social support has also been useful in predicting coping styles used by adolescents (Grossman & Rowat, 1995). Perceptions of parental support were associated with more problem-focused coping strategies whereas perceptions of a poor parental relationship were associated with more emotion-focused coping. Adolescents from disengaged and conflictual families were more likely to use a low level of active coping and a high level of

withdrawal (Seiffge-Krenke, 1995). Low family support was the best predictor of an adolescent's suicide attempt (Morano, Cisler, & Lemerond, 1993). However, other researchers have found there is no relationship between a problem-solving coping style and social support perception (Kvam & Lyons, 1991). The role of social support is further complicated by other mediating variables such as perceptions of control. Other theorists have devised a model which sees perceptions of controllability as a mediator of the effects of social support on coping strategies (Valentiner, Holahan, & Moos, 1994). If the event is controllable, family social context predicts adaptive coping; However, if events are uncontrollable, family context is not directly related to coping, but predicts adjustment. The exact relationship between social support and perceptions of control requires further examination.

Based on the above findings on social support and coping, it was hypothesized that high levels of social support from family and friends would be associated with more-effective coping strategies such as problem solving. Low levels of social support from family and friends would be associated with ineffective coping strategies such as avoidance and withdrawal. It was expected that there may be gender difference on this variable, as females are traditionally more likely to rely on social support. Therefore, it was hypothesized that social support would predict coping strategies for females more than for males.

Self-Esteem

Although there is no universal definition of self-esteem,

most experts agree that self-esteem refers to an individual's perception of his or her own worth (Battle, 1987). "Self-esteem" refers to a sense of self-acceptance, a personal liking for one's self, and a form of proper respect for oneself (Adams, Gullotta, & Markstrom-Adams, 1994). High self-esteem is characterized by self-respect, superiority, pride, self-acceptance, and self-love (Coopersmith, 1967). Individuals with high self-esteem are more autonomous, more assertive, more effective at meeting demands, and more popular with their peers. In contrast, low self-esteem is characterized by inferiority, timidity, self-hatred, lack of personal acceptance, and submissiveness. Individuals with low self-esteem are more passive and may withdraw from others, fail to resist social pressures, and have more difficulty forming friendships.

Self-esteem is affected by significant others, social-role expectations, psychosocial-development crises, and coping style (Stanwyck, 1983). Racial, ethnic, and economic factors also affect self-esteem (Mruk, 1995). Some researchers argue that parents exert the greatest impact on the development of a child's self-esteem (Battle, 1987). During adolescence, the development of self-esteem may also be affected by the achievement of identity and by autonomy struggles within the family (Stanwyck). Most experts agree that self-esteem is a subjective phenomenon, that is multifaceted, stable, and gradual in development (Battle, 1987).

Self-esteem and well-being.

Self-esteem has been one of the most widely studied

variables and a great deal of research focuses on the role of
self-esteem in psychological well-being. There is a positive
correlation between self-esteem and overall well-being
(Rosenberg, 1979). Self-esteem affects one's mental health, level
of achievements, adjustment to environmental demands,
relationships with others, and general state of well-being
(Battle, 1987). As self-esteem increases, depression decreases
(Battle, 1980). Children with disordered self-esteem are more
prone to anxiety disorders, childhood depression, and suicide
(Battle, 1987). There is also research which links self-esteem to
physical health. Low self-esteem is significantly associated with
the reporting of more health problems (Antonucci & Jackson,
1983).

Self-esteem and coping.

Self-esteem may also predict the type of coping strategies
used by an adolescent. Individuals develop behaviours based on
their self worth (Satir, 1972). Viewing oneself positively is a
very important psychological resource for coping (Lazarus &
Folkman, 1984). Characteristics associated with high self-esteem
such as autonomy, openness to alternatives, and high confidence
in one's abilities predispose an individual to dealing with
problems and challenges (Mruk, 1995). In a study of adolescents,
high self-esteem was predictive of active coping strategies,
whereas low self esteem was associated with passive coping
strategies (Chan, 1993; Schonpflug & Jansen, 1995). Self-
confidence along with mastery has been linked to coping process
(Holahan & Moos, 1987b). In a study of elementary school children

problem-focused coping was related to high levels of both peer and general self-esteem (Nelson, 1993). Individuals who scored high on a measure of self-defeating personality characteristics, high self-criticism, and low ego strength, were more likely to use less-adaptive, emotionally based coping strategies such as denial, mental disengagement, and alcohol and drug use (Schill, & Beyler, 1992). Low self-esteem has also been associated with juvenile delinquent behaviours (Kaplan, Martin, & Johnson, 1986). Adolescents who had lower self-esteem and fewer coping resources were more likely use smoking for stress management than did those adolescents who have higher self-esteem (Penny & Robinson, 1986).

Based on previous findings that self-esteem is a predictor of coping behaviour, it was hypothesized that individuals with high self-esteem would be more likely to use active or effective coping strategies. Individuals with low self-esteem would be more likely to use withdrawal or ineffective coping strategies.

Psychological Separation

From a psychodynamic perspective, separation-individuation or psychological separation is viewed as one of the most important developmental tasks. The psychological separation of adolescent from parents is crucial for proper psychological adjustment (Blos, 1962). Individuation is defined as the process of development in which a dependent child becomes an independent adult, viewing himself or herself as separate from the family of origin. The individuation process occurs when an individual "comes to see himself/herself as separate and distinct within the relational context in which she or he has been embedded" (Karpel,

1976, p. 67). In the context of the family, individuation is the

process by which children increase the psychological distance

between themselves and their parents (Sabatelli & Mazor, 1985).

"It is the degree to which a person no longer experiences himself

as fusing with others." (Anderson & Sabatelli, 1990, p. 33). This

individuation process is very important during adolescence when

the need to be separate from one's parents intensifies and the

adolescent searches for greater autonomy.

The idea of psychological separation first emerged as a

description of the psychological birth of the infant (Mahler,

1968; 1975). Individuation is the process that occurs when an

infant undergoes separation-individuation from the primary and

symbiotic relationship of total dependency on mother to

differentiation of self from others and a sense of separateness.

Blos (1962) proposed that a similar, yet more complex process of

separation-individuation begins during adolescence which allows

the adolescent to disengage from the parents and form a construct

of self or a sense of individuality. Blos (1979) broke down the

separation-individuation process into four types of independence:

Functional, Attitudinal, Emotional, and Conflictual Independence.

"Functional Independence" refers to the adolescent's ability to

manage and direct personal affairs without parental help.

"Emotional Independence" is the degree of freedom from the need

of parental support, approval, and closeness. "Attitudinal

Independence" is the extent to which the adolescent has different

attitudes, values, and beliefs from his or her parents. The

degree of freedom from excessive guilt, resentment, and anger in

the relationship with parents refers to "Conflictual Independence". All of these types of independence are seen as crucial for an adolescent's healthy separation from his or her parents.

Psychological separation is seen as a lifelong process in which individuals are constantly balancing autonomy and connectedness to others throughout infancy, adolescence, and adulthood (Anderson & Sabatelli, 1990). There are age-specific stages and for each age, there is an expected behaviour. In adolescence, the need to separate may come about as adolescents experience a transformation in the perception of their parents (Smollar & Youniss, 1989). In childhood, parents are perceived as "all knowing". However, in adolescence, parents are de-idealized. Quadrio (1986) asserts there is a growing belief among family therapists that individuation extends well into adulthood. "It progresses developmentally from asymmetrical, dependent relationships with significant others during childhood, toward symmetry, interdependence, and mutuality during adulthood" (Anderson & Sabatelli, p. 36).

In many studies, the concepts of individuation and differentiation are used interchangeably. However, some theorists see these variables as related, yet separate concepts (Sabatelli & Mazor, 1985; Anderson & Sabatelli). Differentiation is a family-system level variable, whereas individuation is defined as an individual-level variable. Differentiation is the degree of 'stuck togetherness' or fusion which is present in the nuclear family (Bowen, 1978). A family's level of differentiation can be

viewed on a continuum ranging from poorly differentiated to well differentiated. Levels of differentiation vary for each individual and for different ages. Many researchers see adolescent development as dependent on the interconnectedness of the individual and the family, and therefore, find both individuation and differentiation to be important aspects of adolescent development (Allison & Sabatelli, 1988). However, in this study, only the process of individuation was be examined, as it was not feasible to study the entire family.

<u>Gender differences in psychological separation.</u>

Some researchers have described differences between males and females in the process of psychological separation. In a study of infants, females were more aware of and distressed by psychological separation from their mothers (Olesker, 1990). Females interacted with their mothers more, whereas males actively explored their environment and had less involvement with their mothers. Even in adolescence, males may have higher scores of separation than females (Lopez, Campbell, & Watkins, 1986). In late adolescence, males and females experience the separation process differently, with males seeking out greater autonomy from parents (Moore, 1987). For females, as separation increased, depression decreased. In a study of college students, female adjustment was related to functional, emotional, and attitudinal independence whereas for males only conflictual independence affected college adjustment (Lopez, Campbell, & Watkins, 1986). Females' tendency for greater dependence on parents may be a function of the psychological tasks which they encounter. The

developmental tasks of females differ from males and may account

for these differences. Also, social-role expectations may play a

role in females' greater dependency on parents.

Psychological separation and well-being.

Psychological separation is seen as crucial to personality

development and healthy psychological development. The

achievement of emotional independence is seen as one of the most

important goals during adolescence (Havighurst, 1972). Many

researchers have found healthy psychological separation to be

associated with psychological well-being and adjustment.

Individuation is seen as an important aspect of the achievement

of ego identity (Sabatelli & Mazor, 1985; Anderson & Fleming,

1986), and greater achievement of ego identity status in

adolescence has been associated with healthier separation

(Kroger, 1985). Both differentiation and individuation play a

role in the development of identity and intimacy in adolescence.

Some studies see these processes as crucial to the development of

personal identity and the capacity for intimate relationships

(Allison & Sabatelli, 1988). In college students, greater

conflictual independence was associated with better personal

adjustment for females and less problematic love relationships

for both males and females (Hoffman, 1984). Ongoing conflictual

feelings may lead to mistrust, personal inadequacy, and

insecurity in love relationships. In a study of young

adolescents, low family conflict and high levels of family

cohesion, expressiveness, and personal growth were related to

better psychological adjustment (Kurdeck & Sinclair, 1988).

Hoffman and Weiss (1987) also found an adverse family environment to cause distress among family members. For both males and females greater conflictual dependence on either parent was associated with an increase in student distress.

Certain problems during adolescence may cause a failure to achieve healthy separation. Bowen's (1978) theory of individuation attributes adult problems to poor separation from one's family. Any disruption in the separation process may result in poor psychological well-being. For example, parental separation and divorce may affect the separation-individuation process (Kalter, 1987). At a time when adolescents would normally be pulling away from parents in preference of peers, the adolescent becomes more emotionally involved with his or her family and, therefore, achievement of emotional separation from the family may be hindered. Parental conflict and separation interferes with the individuation process, as the child takes on adult roles and responsibilities. Marital conflict has also been associated with poor psychological separation and college adjustment, as the adolescent may be emotionally over-involved in the family which doesn't allow for separation and independence (Lopez, Campbell, & Watkins, 1989). The achievement of psychological separation may be complicated by different nontraditional family structures such as single-parent families, absence of one parent, or remarriage (Daniels, 1990).

The concept of psychological separation has also been used to explain rebellious behaviour of adolescents (Crespi & Sabatelli, 1993). Adolescent runaways who have not been

successful at psychological separation may try to gain autonomy and independence by rebelling against the family and engaging in other self-destructive behaviours. In a study of females, failure to achieve psychological separation resulted in serious emotional consequences (Friedlander & Siegel, 1990). Poor separation was predictive of bulimia, the pursuit of thinness, inability to discriminate feelings and sensations, distrust of others, immaturity, and beliefs about personal inadequacy.

Studies on family differentiation have examined some of the problems associated with poor differentiation. In a well-differentiated family, the parents accept the adolescents' increasing need for individuality and autonomy while maintaining some authority (Allison, & Sabatelli, 1988). Poor differentiation refers to an individual's inability to think for themselves and this is associated with emotional difficulties. "Poorly differentiated families display a low tolerance for individuality and/or intimacy among members." (Anderson & Sabatelli, 1990, p. 34). Other poorly differentiated families may allow their children too much freedom, thus the children may be neglected or alienated. These children are "cut-off" at a young age, forcing them to become independent when they are not yet mature. Parents who are too restrictive or severe do not allow for individuality and reduce autonomy. Parents who allow too much autonomy may offer very little intimacy and support.

The concept of psychological separation has been used in the treatment of adolescents in psychotherapy. It is believed that many of the problems in the adjustment of adolescents are caused

by the reaction of the family to the developmental tasks of
separation and individuation (Teichman, 1981). Therefore, family
therapy has focused on dealing with the issues of separation of
adolescents. Family therapists have tried to help adolescents
achieve emotional separateness and differentiation while
remaining part of the family unit (Box, 1986). Programs have been
successful in first-year college students when dealing with
adjustment problems in separating from one's parents (Valdes &
McPherson, 1987). The study of differentiation is also gaining
popularity in family-integrated treatment, as the treatment of
adolescents must examine many factors such as the adolescent, the
parents, the school, the societal condition, and their
interaction (Pitta, 1995). The therapist suggests age-appropriate
activities for family members and the ultimate goal of this type
of therapy is integration of individuals into the family system.

Psychological separation and coping strategies.

Psychological separation may be related to the types of
coping strategies used by an adolescent. Currently, no studies
have addressed the relationship between coping styles and levels
of psychological separation. Because the family plays such an
important role during adolescence, it is natural to assume that
adolescents' level of psychological independence would affect a
variety of their behaviours. Given the importance of the
separation-individuation construct in family-systems approaches,
it is useful to examine the effect which psychological separation
has on an adolescent's coping styles. This variable, which was
the primary focus of this research, was examined in conjunction

with locus of control, social support, and self-esteem in order
to see which variables were the best predictors of coping style.

Based on the assumption that: 1) psychological separation
has predicted many behaviours; and 2) the achievement of
psychological separation is synonymous with psychological well
being and personal adjustment, it was hypothesized that
psychological separation would also play an important role in the
formation of an adolescent's coping skills. It was predicted that
high levels of psychological separation from parents would be
associated with the use of active or effective coping strategies.
An adolescent who has a healthy attachment to family, but is no
longer psychologically dependent upon their parents would use
active coping strategies. This individual has psychologically
separated from his or her parents and gained a sense of autonomy
and identity. In contrast, it was hypothesized that low levels of
psychological separation would be associated with the use of
withdrawal or ineffective coping strategies. An individual with
little autonomy who is very attached and dependent upon his or
her parents may have poor coping strategies. Consistent with
previous research, it was also hypothesized that females would
have lower levels of psycholgical separation than males.
Therefore, they would also use less effective coping strategies.

In addition, it was hypothesized that the different
components of the psychological separation scale would play a
different role in predicting coping behaviours. Of the four types
psychological separation, greater conflictual independence has
been related to better personal adjustment and greater emotional

independence has been related to better academic adjustment (Hoffman, 1984). Therefore, it was hypothesized that these two components of independence would play a greater role in predicting the types of coping strategies used. Greater conflictual and emotional independence would be associated with more active or effective coping strategies.

<u>Hypotheses</u>

In this study, four potential mediators of coping are examined: locus of control, social support, self-esteem, and psychological separation. The hypotheses of this study focus on the types of coping strategies used by adolescents. The methods of coping that an individual uses may be dependent on a combination of variables.

It was hypothesized that: a) individuals with an internal locus of control, high levels of social support, high self-esteem, and high levels of psychological separation from parents would be more likely to use effective, active coping strategies such as problem solving; b) individuals with an external locus of control, low levels of social support, low self-esteem, and low levels of psychological separation from parents would be more likely to use ineffective coping strategies such as avoidance.

Some significant correlations were also expected among the independent variables (locus of control, social support, self esteem, and psychological separation). It was hypothesized that locus of control and self-esteem would be correlated, as perceptions of control have been associated with positive affect (Langston, 1994) and high life satisfaction (Landau, 1995). The

relationship between locus of control and social support was not clear. While an internal locus of control has been associated with seeking social support (Rees & Cooper, 1992), individuals with an internal locus of control who feel in control may not see the need to seek social support. It was hypothesized that an internal locus of control would be associated with high levels of psychological separation. Adolescents who feel in control of their lives would likely also be independent from their parents.

It was hypothesized that social support and self-esteem would be highly correlated. Individuals who have plenty of support from family and friends would be more likely to report having higher self-esteem, as social support has been associated with good mental and physical health (Holahan & Moos, 1986). The exact relationship between social support and psychological separation was not known. It was not clear whether an individual who is independent of his or her parents would use social support or whether that individual is too independent to need social support.

As mentioned above, it was expected that high self-esteem would be associated with an internal locus of control and increased social support. It was also expected that self-esteem would be positively correlated with psychological separation. Individuals who are psychologically independent likely have high self-esteem, as the achievement of healthy psycholgical separation is associated with psycholgical well being.

The relationship between the four components of psycholgical separation was not known. Based on Hoffman's data on the

construction of the Psycholgical Separation Inventory (Hoffman, 1984), it was hypothesized that conflictual independence would be a discrete or separate construct from the other types of independence. It was also hypothesized that the emotional, functional, and attitudinal independence scales would be correlated.

<div align="center">Method</div>

Participants

The participants in this study were 209 male and 216 female introductory psychology students from the University of Manitoba, between the ages of 17 and 20. There were several restrictions for this sample which were approved by the ethics committee. Due to the criteria imposed by Hoffman's Psychological Separation Inventory (1984), all subjects came from intact families, in which their natural parents were married and living together. Unlike Hoffman's sample of American college students living away from home (Hoffman, 1984; 1987), the Canadian students in this sample still lived at home with their parents while attending university. Therefore, when recruiting subjects, the recruiter made it clear that in order to participate, subjects must: a) be between the ages of 17 and 20; b) come from an intact nuclear family; c) live at home with both parents. All students received extra credit towards their final grade for their participation.

Materials

A questionnaire was administered which included a variety of scales designed to measure coping strategies, locus of control, social support, self-esteem, and the four components of

psychological separation.

Seiffge-Krenke Adolescent Coping Styles Scale (Revised).

(see Appendix A; Seiffge-Krenke & Shulman, 1990). The original

scale was developed by Seiffge-Krenke and Shulman (1990) in

Germany and Israel. This instrument consisted of 100 items in

which 20 coping strategies were applied to eight problem areas

(studies, teachers, parents, peers, opposite sex, self, future,

and leisure time). A German-Hebrew version of the scale was

administered to German and Israeli students. Participants of this

study were asked to answer yes or no, as to whether they used a

given coping behaviour when confronted with a problem. Factor

analyses revealed three coping dimensions (Withdrawal, Active,

and Internal Coping) which were moderately replicable across the

German and the Israeli samples.

Schludermann, Schludermann, and Huynh (1996) created a 100

item Canadian application of the instrument in which 20 coping

behaviours were applied to 5 problem areas. In contrast to

Seiffge-Krenke and Shulman's original instrument, the Canadian

instrument replaced Seiffge-Krenke's two response categories (yes

or no) with five response categories ranging from (almost never

to very often). Active and Withdrawal Coping have a minimum score

of 5, a middle score of 15, and a maximum score of 25. High

scores for each scale indicate more Active/Withdrawal coping.

A study of 611 17-to-18-year-old Canadian university students

indicated that the students tended to use a given coping

behaviour to a similar extent across problem areas. For the 20

coping behaviours, the average correlation across problem areas

was r = .50. Factor analyses of the 20 coping behaviours revealed the same two factors (Active and Withdrawal Coping) regardless of which problem area was studied. (Schludermann, Schludermann, & Huynh, 1996).

Because of the high replicability of factors across problem areas, Schludermann et al. (1996) felt justified in developing a shortened instrument. Therefore the number of items was reduced from 100 to 20. The shortened version is a self-report scale which consists of 20 items related to different coping behaviours. Five problem areas are examined: academic work, parents and family members, same-sex friends, opposite-sex friends, and self. The problem areas represent stressful situations or difficulties which adolescents face during this stage of their lives. Students are asked to indicate their overall coping strategies (i.e., indicate how frequently you use a given method when confronted with problems). Factor analyses of the shortened version revealed that there were two major types of coping in response to these types of problems: Active and Withdrawal Coping. Internal coping, which was used by Seiffge-Krenke, was not replicable in Canadian adolescents. Therefore, this coping strategy was dropped from the shortened version.

The shortened, Canadian version is useful as it gives similar information to the longer instrument and has acceptable methodological properties. The longer (100-items) and the shorter (20-items) versions of the scale were administered to 507 university students. For Active Coping, the correlation between the longer scale and the shorter scale was r = .88. For

Withdrawal Coping, the correlation between the longer scale and the shorter scale was r = .79. Therefore, the use of the shortened scale was justified and took less time to administer. Using the 20-item scale for 507 university students, an alpha coefficient of .66 was obtained for Active Coping and an alpha coefficient of .62 was obtained for Withdrawal Coping (Schludermann, Schludermann, & Huynh, 1996).

In the present study, the shortened version of the Adolescent Coping Styles Scale was used to measure the coping styles of adolescents. Factor analyses were conducted on all items using the total sample ($\underline{N}$ = 425). A correlation matrix was factor analyzed using the principal-axes method in order to assess the reliability of the items. Items with eigenvalues or factor loadings less than three were examined. Any items which were not significant were eliminated and the process was repeated to ensure no poor items still existed. Consistent with previous research by Schludermann et al. (1996), there were two main types of coping - Active Coping and Withdrawal Coping. Therefore, Internal Coping was eliminated and all items on the Active and Withdrawal Coping scales were factorally pure. Cronbach's alpha for the Seiffge-Krenke Adolescent Coping Styles Scale was .77 for Active coping and .73 for Withdrawal coping.

Locus of Control Scale. (see Appendix B; Levenson, 1974).

Levenson's Internal, Powerful Others, and Chance scales was designed to assess a subject's level of perceived control. It is a 24-item scale in which eight items assess belief in Self as control (Internal), eight items reflect belief in Powerful Others

(External), and eight items reflect belief in Chance or Fate (External). Subjects rate each statement on a 4-point Lickert scale, ranging from strongly disagree to strongly agree. In this study, a 5-point Lickert scale was used in order to be consistent with the other scales used. Internal and Chance have a minimum score of 8, a middle score of 24, and a maximum score of 40. High score indicate high Internal/Chance/Powerful others scores. Powerful Others has a minimum score of 7, a middle score of 21, and a maximum score of 35. Kuder-Richardson reliabilities (coefficient alphas) yielded r = .64 for the I scale, .77 for the P scale and .78 for the C scale (Levenson, 1974).

In the present study, factor analyses revealed one poor item (item # 20) in Powerful Others scale. The Locus of Control scale was originally made up of three subscales - Internal Locus of Control, Powerful Others, and Chance. Because, the Chance and Powerful others scales were highly correlated (r =.62), they were consolidated into one variable - External Locus of Control. For the Internal Locus of Control scale, Cronbach's alpha was .70 and .76 for the External Locus of Control scale.

Provision of Social Relations Scale. (see Appendix C; Turner, Frankel, & Levin, 1983). The Provision of Social Relations Scale (PSR) was designed to assess perceived Social Support from both friends and family. This scale consists of 15 self-report items which are rated on a 5-point Lickert scale ranging from not at all like me to very much like me. The Social Support scale has a minimum score of 15, a middle score of 45, and a maximum score of 75. High scores indicate high social

support and low scores indicate low social support. In a sample

of 611 University of Manitoba students, Cronbach's alpha was .63

(E. H. Schludermann, personal communication, January 14, 1998).

In the present study, item analyses of the Provision of Social

Relations Scale indicated a Cronbach's alpha of .67. There were

no poor items in this scale.

Rosenberg's Self-Esteem Scale. (see Appendix D; Rosenberg,

1979). Rosenberg's self-esteem scale (RSE) is a 10-item scale in

which individuals express feelings about their self. Respondents

are asked to rate responses on a 5-point Lickert scale ranging

from strongly disagree to strongly agree. The Self-Esteem Scale

has a minimum score of 10, a middle score of 30, and a maximum

score of 50. High scores indicate high self-esteem and low scores

indicate low self-esteem. In different studies, Rosenberg (1979)

reported test-retest reliabilities ranging from .85 to .88

(Rosenberg, p. 292). In a sample of 507 University of Manitoba

students, a Cronbach's alpha of .70 was obtained (E. H.

Schludermann, personal communication, January 14, 1998). In the

present study, Cronbach's alpha for Rosenberg's Self-Esteem Scale

was .65.

Psychological Separation Inventory. (see Appendix E;

Hoffman, 1984). The Psychological Separation Inventory (PSI)

consists of 138 self-report items which measure the dependence on

or independence of the adolescents from the parents. The PSI

consists of four scales which assess the factors that

theoretically underlie the construct of psychological separation:

(a) Functional Independence assesses the adolescent's ability to

manage and direct personal affairs without parental help; (b)

Emotional Independence measures the degree of freedom from the

need of parental support, approval, and closeness; (c)

Attitudinal Independence measures the extent to which adolescents

have different attitudes, values, and beliefs from their parents;

and (d) Conflictual Independence assesses the degree of freedom

from excessive guilt, resentment, and anger in the relationship

with parents.

Half of the items rate the independence from the mother and

half rate the independence from the father. All items are rated

on a 5-point Lickert-type scale in which subjects are asked to

rate the extent to which they believed the statements were true

of them, ranging from <u>not at all true of me</u> to <u>very true of me</u>.

All scales have a minimum score of 1, a middle score of 3, and a

maximum score of 5. The scoring system of this study was such

that the adolescent had to disagree with the items in order to

obtain high "independence" scores. Thus, high scores equal

greater levels of independence. The independent adolescent:

doesn't use parental help when dealing with problems, is

emotionally distant from his/her parents, and disagrees with

his/her parents on various issues. High scores on conflictual

independence, by disagreeing with the statements, is indicative

of non-conflictual, i.e. harmonious relations with parents (i.e.

high conflict scores = harmony). Some sample items for each of

the four components of psychological separation are as follows:

<u>Functional Independence</u>:

1. My mother/father helps me to make my budget.

2. I ask for my mother's/father's advice when I am planning my vacation time.

Emotional Independence:

1. I care too much about my mother's/father's reactions.

2. Sometimes I think I am too dependent on my mother/father.

Conflictual Independence:

1. I feel I am constantly at war with my mother/father.

2. I wish my mother/father wouldn't try to manipulate me.

Attitudinal Independence:

1. My values regarding honesty are similar to my mother's/father's.

2. My religious beliefs are similar to my mother's/father's.

Hoffman (1984) reported that Cronbach alpha coefficients for each scale ranged between .84 to .92. All items on the 138-item PSI were examined for internal inconsistency on 150 undergraduate students. Interscale correlations showed that the mother and father scales were highly correlated for each of the four types of psychological separation (range = .71 to .91). Functional and Emotional Independence scales were highly correlated (r =.55 for mother and r =.66 for father). Conflictual Independence was a separate construct that was not correlated with Functional and Emotional Independence and had a moderately negative correlation with Attitudinal Independence. Attitudinal, Functional, and Emotional Independence were all correlated with each other (r = .3 to .4). Test-retest reliability correlations revealed a median

of r = .83 for both males and females. These test-retest results
indicate that the PSI measure remains consistent over time, with
the exception of Mother Functional Independence for males (r =
.49).

In the present study, 14 items were eliminated which
pertained to college students living away from home (i.e., I
sometimes call home just to hear my mother's/father's voice).
This adjustment was necessary, as the scale was designed for
American college students who have moved away from home to attend
college. In contrast, our sample, like the majority of Canadian
university students, remain in their parents' homes to attend
university. Therefore, these questions were inappropriate for
this Canadian sample. After the elimination of items, there were
124 remaining items. In order to obtain these measures of
"independence", the scoring had to be reversed, as high scores on
the original items referred to psychological "dependence" rather
than independence.

After the data from this study were collected, the scale
items of the four types of Independence were subjected to item
and factor analyses. Items which had near-zero-correlations with
other scale items or which had insignificant factor loadings on
the first principal axes factor of a scale were removed from the
scale. These procedures resulted in the removal of ten additional
items (five for mother and five for father) from the
Psychological Separation Inventory (i.e., eight items for
Conflictual Independence and two items from Functional
Independence).

The unreliable items in this study may have been due to differences in the samples used. Although our sample met two of the criteria imposed by Hoffman (that individuals be unmarried and come from intact families), our sample did not meet the third criteria (that individuals should live away from their parents while attending university). Due to the large number of Canadian students who reside with their parents, this was not possible. Therefore, failure to meet all criteria for the sample may be the reason for the poor items in the Psychological Separation Inventory.

In total, ten additional items were removed from the Psychological Separation Inventory. Eight items were eliminated from the Conflictual Independence scale (four items for the mother and the corresponding items for the father). For the Functional Independence scale, two items were eliminated. Factor analyses of Attitudinal and Emotional Independence revealed no unreliable items. After all items were eliminated the number of items for each of the components of psychological separation were as follows: Functional Independence (24 items), Emotional Independence (22 items), Conflictual Independence (41 items), and Attitudinal Independence (28 items). For all four components of Hoffman's Psychological Separation Inventory, Cronbach's alpha was .75.

Procedure

A questionnaire was administered during special research sessions outside of the normal class period (1 hour). Instructions were given by the researchers and subjects were

informed about the confidentiality and anonymity of their
responses (see Appendix F). Upon completion of the study, the
subjects received a handout that explained the study, and gave
instructions about how to receive written feedback (see Appendix
G).

Results

Means and Standard Deviations

Means and standard deviations were obtained for the total
sample and for Males and Females separately (see Table 1). Only a
few significant gender differences were found. Overall, females
were more likely to use Active Coping strategies than were males.
However, no significant gender differences were found for
Withdrawal Coping. There was also a significant gender difference
in the use of Social Support. As predicted, females were more
likely to report greater use of Social Support than males.

Gender differences were also found for some of the
components of Psychological Separation. Males were more
functionally independent from their mothers than females. Also,
males were more likely to be emotionally independent from both
their mothers and fathers than females. No other significant
gender differences were found for the relationship between
mother/father and son/daughter.

Correlations among Independent Variables

Using SAS, a correlation matrix was obtained to test the
relationships among the variables. Product moment correlations
were obtained for the independent variables: Locus of Control
(Internal and External), Social Support, Self-Esteem, and

Table 1

Means and Standard Deviations

Variable	Total		Males		Females		Anova	
	M	SD	M	SD	M	SD	F	p
IN	29.54	3.92	30.09	4.10	29.00	3.66	8.23	0.0043
EX	18.73	4.95	18.60	4.97	18.85	4.94	0.33	0.5645
SS	61.83	8.77	60.11	9.30	63.48	7.90	16.22	0.0001*
SE	38.19	7.65	39.01	7.34	37.89	7.29	5.22	0.0229
FI- Pa	3.56	0.70	3.64	0.73	3.48	0.67	5.59	0.0185
FI- Mo	3.41	0.78	3.57	0.76	3.25	0.77	19.07	0.0001*
FI- Fa	3.71	0.84	3.71	0.87	3.71	0.80	0.00	0.9715
AI- Pa	3.08	0.78	3.10	0.77	3.06	0.79	0.25	0.6185
AI- Mo	3.02	0.77	3.08	0.74	2.97	0.79	2.14	0.1443
AI- Fa	3.14	0.90	3.13	0.90	3.16	0.90	0.15	0.7007
EI- Pa	3.50	0.69	3.66	0.65	3.35	0.68	23.37	0.0001*
EI- Mo	3.39	0.75	3.55	0.71	3.24	0.76	19.26	0.0001*
EI- Fa	3.61	0.78	3.77	0.73	3.45	0.80	17.71	0.0001*
CI- Pa	3.99	0.63	3.97	0.63	4.01	0.64	0.45	0.5035
CI- Mo	3.90	0.74	3.90	0.71	3.90	0.76	0.00	0.9829
CI- Fa	4.09	0.74	4.04	0.74	4.13	0.74	1.29	0.2576
AC	16.16	2.85	15.66	2.75	16.65	2.87	13.23	0.0003
WC	12.29	3.23	11.96	3.42	12.62	3.01	4.45	0.0356

Note. IN = Internal Locus of Control; EX = External Locus of Control; SS = Social Support; SE = Self-Esteem; CI = Conflictual Independence; EI = Emotional Independence; AI = Attitudinal Independence; FI = Functional Independence; AC = Active Coping; WD = Withdrawal Coping; Pa = Parents; Mo = Mother; Fa = Father.
$p \leq .0001$.

Table 2

Correlation Matrix for Total Sample

	Locus of Control				Psych. Separation				Coping	
	IN	EX	SS	SE	CI	EI	AI	FI	AC	WD
IN	.	-.17	.24*	.32*	.11	.06	-.08	-.05	.23*	-.18
EX	-.17	.	-.29*	-.45*	-.44*	-.18	.01	-.10	-.12	.52*
SS	.24*	-.29*	.	.43*	.42*	-.20*	-.27*	-.22*	.45*	-.28*
SE	.32*	-.45*	.43*	.	.39*	.13	-.07	.02	.20*	-.52*
CI	.11	-.44*	.42*	.39*	.	.13	-.18	.00	.13	-.51*
EI	.06	-.18	-.20*	.13	.13	.	.45*	.74*	-.29*	-.15
AI	-.08	.01	-.27*	-.07	-.18	.45*	.	.62*	-.20*	.08
FI	-.05	-.10	-.22*	.02	.00	.74*	.62*	.	-.33*	-.03
AC	.23*	-.12	.45*	.20*	.13	-.29*	-.20*	-.33*	.	-.16
WD	-.18	.52*	-.28*	-.52*	-.51*	-.15	.08	-.03	-.16	.

Note. IN = Internal Locus of Control; EX = External Locus of
Control; SS = Social Support; SE = Self-Esteem; CI = Conflictual
Independence; EI = Emotional Independence; AI = Attitudinal
Independence; FI = Functional Independence; AC = Active Coping;
WD = Withdrawal Coping.

*p ≤ .0001.

Psychological Separation (Conflictual, Emotional, Attitudinal, and Functional). Correlations for the Total sample are presented in Table 2. Correlations between .19 to .29 were interpreted as low, .30 to .39 were as moderate, and .40 plus were as high. The level of significance was set at a stringent level (p = .0001) due to the large sample size (N = 425).

Locus of control.

There was a highly negative significant relationship between External Locus of Control and Self-Esteem (r = -.45) and a negative correlation which was highly significant between External Locus of Control and Conflictual Independence (r = -.44). Thus, individuals with an External Locus of Control reported having lower Self-Esteem and lower Conflictual Independence from their parents. There was a low significant correlation between External Locus of Control and Social Support (r = -.29). Individuals with an External Locus of Control reported using less Social Support from family and friends.

An Internal Locus of Control was positively related to both Self-Esteem (r = .32) and Social Support (r = .24). Therefore, individuals with an Internal Locus of Control had higher Self-Esteem and higher Social Support. An Internal Locus of Control was not significantly related to any of the constructs of Psychological Separation.

Social Support.

The second independent variable, Social Support, was also related to some of the other independent variables. There was a strong positive association between Social Support and Self-

Esteem (r = .43). Individuals with more Social Support from friends and family had higher Self-Esteem. There was a strong positive correlation between Social Support and Conflictual Independence (r = .42). Thus, individuals who had greater Social Support had a conflict free or a more harmonious relationship with their parents. There was a low positive correlation between Social Support and Internal Locus of Control (r = .24), and a low negative correlation between Social Support and External Locus of Control (r = -.29). Individuals with an Internal Locus of Control had more Social Support and those with an External Locus of Control had less Social Support. Social Support had low significant correlations with three types of independence: Emotional Independence (r = -.20), Attitudinal Independence, (r = -.27), and Functional Independence (r = -.22). Thus, individuals who had high Social Support: (1) had similar attitudes, beliefs, and values to their parents; (2) relied on their parents for help with managing personal affairs; and (3) were more emotionally attached to their parents.

Self-Esteem.

The third independent variable, Self-Esteem, was also correlated with some of the independent variables. There was a strong negative correlation between Self-Esteem and External Locus of Control (r = -.45) and Self-Esteem was positively correlated with Internal Locus of Control (r = .32). Thus, individuals with an External Locus of Control had lower Self-Esteem and those with an Internal Locus of Control had higher Self-Esteem. There was a strong positive correlation between

Self-Esteem and Social Support ($\underline{r}$ = .43). Individuals with high

Self-Esteem experienced greater Social Support from friends and

family. There was a moderate positive relationship between

Conflictual Independence and Self-Esteem ($\underline{r}$ = .39). Individuals

who scored high on Conflictual Independence, that is, whose

relationship with their parents was free from excessive guilt,

resentment, and conflict had higher Self-Esteem. There was no

significant relationship between Self-Esteem and the other types

of Psychological Separation.

Psychological Separation.

Some of the components of the fourth variable,

Psychological Separation, were related to the other independent

variables. Hoffman's Psychological Separation scale had four

components (i.e., Conflictual, Emotional, Attitudinal, and

Functional Independence). Conflictual Independence was not

significantly correlated to the other types of Independence

(Emotional, Attitudinal, and Functional). However, Emotional,

Attitudinal, and Functional independence were highly correlated

with each other. Emotional Independence was correlated with

Attitudinal Independence ($\underline{r}$ = .45) and Functional Independence ($\underline{r}$

= .74). Attitudinal and Functional Independence were also highly

correlated ($\underline{r}$ = .62). Thus, individuals who scored highly on one

of these types of independence, also scored high on the other

two. These individuals managed their own personal affairs, had

attitudes which differed from their parents, and were emotionally

distant from their parents.

There was a strong negative correlation between Conflictual

Independence and an External Locus of Control (r = -.44).
Individuals who had greater conflict in their relationships with
their parents felt that they had no control over their lives.
Conflictual Independence was positively correlated with both
Social Support (r = .42) and Self-Esteem (r = .39). Thus,
individuals who had harmonious relationships with their parents
reported having greater Social Support and higher Self-Esteem.
Although, Emotional, Attitudinal, and Functional Independence
were highly correlated with each other, they were not
significantly correlated with any of the other independent
variables with the exception of a low negative correlation with
Social Support (r = -.20 to -.27). Thus, individuals who had high
Emotional, Attitudinal, and Functional Independence reported
having lower Social Support. These individuals who were
emotionally distant, who had different attitudes from parents,
and who did not use parental help in managing their personal
affairs, experienced less Social Support.

Correlations Between Independent and Dependent Variables

Correlational analyses were also conducted to examine the
relationship of the predictor variables (Internal Locus of
Control, Social Support, Self-Esteem, and Psychological
Separation) with the two dependent variables (Active Coping and
Withdrawal Coping) (see Table 2). All data analyses were
conducted using SAS and the level of established significance was
set at p ≤ .0001. For this sample size (N = 425), correlations
greater than .19 were significant at this level.

Active Coping.

Social Support and Active Coping were very highly correlated ($\underline{r}$ = .45). Individuals with greater social support from family and friends were more likely to use active or effective coping strategies. Functional, Attitudinal, and Emotional Independence were all negatively correlated with Active Coping ($\underline{r}$ = -.33, -.20, -.29). Therefore, contrary to prediction, greater Functional, Attitudinal, and Emotional Independence was associated with less Active Coping. There was no significant relationship between Conflictual Independence and Active Coping. Internal Locus of Control was positively correlated with an Active Coping style ($\underline{r}$ = .23). Thus, individuals with an internal locus of control were more likely to use active coping strategies. There was a low positive correlation between Self-Esteem and Active Coping ($\underline{r}$ = .20). Thus, individuals with high self-esteem were more likely to use active coping strategies.

Withdrawal Coping.

There was a strong negative correlation between Self-Esteem and Withdrawal Coping ($\underline{r}$ = -.52). Individuals with lower self-esteem used more withdrawal coping strategies. An External Locus of Control was significantly correlated with Withdrawal Coping style ($\underline{r}$ = .52). Individuals with an external locus of control were more likely to engage in withdrawal coping. There was a high negative correlation between Withdrawal Coping and Conflictual Independence ($\underline{r}$ = -.51). Individuals with a high degree of conflict in their relationship with their parents were more likely to engage in withdrawal coping. There was no significant relationship between Functional, Attitudinal, and Emotional

Independence and Withdrawal coping. There was a low negative
correlation between Social Support and Withdrawal Coping (r = -
.28). Individuals who had less social support used more
withdrawal coping strategies.

Gender Differences among Correlations

Correlations were obtained separately for Males and Females
(see Table 3) to determine whether there were any gender
differences in the magnitude of correlations. Correlations which
differed more than .15 were interpreted as being significantly
different.

There were some gender differences in the relationship of
Locus of Control. For males, Conflictual Independence was
correlated with an Internal Locus of control (r = .20) but for
females, the correlation was very low (r = .02). For females,
Functional Independence was negatively correlated with an
Internal Locus of Control (r = -.21), but for males the
correlation was considerably lower (r = .04). There were some
gender differences in the correlations for Social Support. For
females, Social Support was significantly and negatively
correlated with Emotional (r = -.27), Attitudinal (r = -.37), and
Functional independence (r = -.33) whereas for males the
correlations were low and non significant (r = -.07, -.19, and -
.10).

There was only one significant gender difference for Self-
Esteem. For females, Self-Esteem was negatively correlated with
Attitudinal Independence (r = -.16) but positively correlated
with Attitudinal Independence for males (r = .02).

Table 3

Correlation Matrix for Females and Males

	Locus				Psych. separation				Coping	
	IN	EX	SS	SE	CI	EI	AI	FI	AC	WD
IN	.	-.15	.27*	.29*	.02	-.08	-.13	-.21	.28*	-.17
EX	-.19	.	-.31*	-.45*	-.46*	-.15	.03	-.05	-.18	.46*
SS	.28*	-.30*	.	.46*	.38*	-.27*	-.37*	-.33*	.41*	-.25*
SE	.32*	-.46*	.47*	.	.41*	.05	-.16	-.12	.25*	-.48*
CI	.20	-.44*	.47*	.37*	.	.13	-.26	-.07	.06	-.52*
EI	.12	-.21	-.07	.18	.15	.	.44*	.73*	-.27*	-.10
AI	-.05	.00	-.19	.02	-.09	.46*	.	.59*	-.19	.15
FI	.04	-.15	-.10	.12	-.09	.75*	.65*	.	-.38*	.02
AC	.24	-.07	.45*	.19	.21	-.25	-.21	-.26*	.	-.15
WD	-.17	.58*	-.34*	-.55*	-.51*	-.14	.02	.06	-.21	.

Note. Females: (above diagonal); Males: (below diagonal).

IN = Internal Locus of Control; EX = External Locus of Control;

SS = Social Support; SE = Self-Esteem; CI = Conflictual

Independence; EI = Emotional Independence; AI = Attitudinal

Independence; FI = Functional Independence; AC = Active Coping;

WD = Withdrawal Coping.   *p ≤ .0001.

For Conflictual Independence, there were a few gender differences. For females, Conflictual and Attitudinal Independence were more highly correlated (r = -.26) than for

males (r = -.09). However, Conflictual Independence and Active Coping were more highly correlated for males (r = .21) than for females (r = .06)

Regression Analyses

The hypotheses that four independent variables (Locus of Control, Social Support, Self-Esteem, and Psychological Separation) would influence coping strategies (Active and Withdrawal) were tested using a series of stepwise multiple regression. Tables 4 and 5 show the results of the regression analyses. A summary of the correlating variables and predictor variables of Active and Withdrawal Coping can be seen in Table 6.

Active coping.

All variables were entered into a stepwise multiple regression for the dependent variable Active Coping (see Table 4). A set of four variables were significant predictors of Active Coping, (R^2 = .28). Of all the variables, Social Support was the best positive predictor of Active Coping. Functional Independence was also a very strong negative predictor of Active Coping. Thus, adolescents who experienced social support and help from their parents tended to engage in active coping strategies. An Internal Locus of Control and Attitudinal Independence were somewhat weaker predictors of Active Coping. Individuals who had an internal locus of control and who had different attitudes from their parents were more likely to use active coping strategies.

Table 4

Stepwise Multiple Regression for Active Coping

Variable	β	F	p
Social support	+.377	72.39	.0001
Functional ind.	-.305	33.45	.0001
Internal locus	+.127	8.89	.0030
Attitudinal ind.	+.101	3.56	.0598

Note. All variables left in the model are significant at the .1500 level.

R^2 = .28

Table 5

Stepwise Multiple Regression for Withdrawal Coping

Variable	$\underline{ß}$	$\underline{F}$	$\underline{p}$
Self-esteem	-.294	47.94	.0001
Conflictual ind.	-.279	43.70	.0001
External locus	+.262	35.98	.0001

Note. All variables left in the model are significant at the

.1500 level.

$\underline{R}^2$ = .43

Table 6

Summary Table of Correlations and Regressions

Variable	Correlated		Predictor	
	A.C.	W.D.	A.C.	W.D.
Internal L.O.C.	+ √		√	
External L.O.C.		+ √		√
Social Support	+ √	- √	√	
Self-Esteem	+ √	- √		√
Psychological Separation				
C.I.		- √		√
A.I.	- √		√	
E.I.	- √			
F.I.	- √		√	

Note. A.C. = Active Coping; W.C. = Withdrawal Coping; C.I. =
Conflictual Independence; A.I. = Attitudinal Independence; E.I. =
Emotional Independence; F.I. = Functional Independence.
+ = positive correlation; - = negative correlation.

No other variables met the .1500 significance level for entry into the model. Therefore, External Locus of Control, Self-Esteem, Emotional Independence, and Conflictual Independence were not significant predictors of Active Coping.

Withdrawal Coping.

All variables were entered into a stepwise multiple regression for the dependent variable Withdrawal Coping (see Table 5). Three variables were significant predictors of Withdrawal Coping, (R^2 = .43). The strongest negative predictor of Withdrawal Coping was Self-Esteem. Conflictual Independence was the next best negative predictor of Active Coping. External Locus of Control was the last best predictor of Withdrawal Coping. Thus, adolescents who had poor self-esteem, who had conflicts with their parents, and who felt that they were not in control of their lives tended to use withdrawal coping strategies. No other variables met the .1500 significance level for entry into the model. Therefore, Internal Locus of Control, Social Support, Emotional Independence, Attitudinal Independence, and Functional Independence were not significant predictors of Withdrawal Coping.

Discussion

The primary purpose of the present research was to examine the role of various predictor variables on adolescent coping strategies. The results partially supported the hypotheses. While many significant correlations were found between the independent variables and active coping and withdrawal coping, only some of the variables were significant

predictors of coping strategies.

Predictor Variables of Coping Strategies

Of the four variables examined in this study (Locus of Control, Social Support, Self-Esteem, and Psychological Separation) only some of the variables were significant predictors of Active and Withdrawal coping. While there were no significant gender differences for withdrawal coping, overall, females were more likely to use active coping. This is consistent with previous research (Schludermann, Schludermann, & Huynh, 1996) which has found females to use significantly more active coping styles than males.

Locus of control.

The first hypothesis, that locus of control would be related to adolescent coping strategies, received partial support. Internal Locus of Control was found to be a marginally significant positive predictor Active Coping. These results support the previous literature which has found locus of control to be a significant predictor of coping behaviour (Fleming, Baum, & Singer, 1984). An internal locus of control has also been associated with more direct coping strategies (Petrosky & Birkimer, 1991; Brosschot, Gebhardt, & Godaert, 1994). These results support previous findings that adolescents who perceive control over situations are more likely to use problem-focused coping (Compas, Malcarne, & Fondacaro, 1988). Adolescents who feel they have some control over a situation may try to actively change the stressful situation in order to reduce the negative feelings associated with it. Whether perceptions of control are

accurate or inaccurate, if adolescents believe they can make a difference, they are likely to try. Therefore, individuals who have an internal locus of control and who feel they can alter the outcome of the situation are more likely to try to actively change the situation or use active coping strategies.

The hypothesis was confirmed that an External Locus of Control was a highly significant predictor of Withdrawal Coping. This is consistent with research that has found an external locus of control to predict avoidant coping styles (Brosschot, Gebhardt, & Godaert, 1994). If an event is seen as unchangeable or uncontrollable, an individual is more likely to withdraw. Being in an uncontrollable situation repeatedly causes feelings of helplessness, and ultimately passive coping responses (Lazarus & Folkman, 1984; Folkman, Lazarus, Gruen, & DeLongis, 1986). Belief in fate or powerful others may dampen or inhibit coping efforts, as it leads to an appraisal of helplessness (Lazarus & Folkman, 1984). Therefore, adolescents who believe they have no control over stressful situations are not going to try to actively solve their problems.

Social support.

The second hypothesis, that social support would be a predictor of coping strategies, received partial support. Social Support was the strongest predictor of Active Coping. The hypothesis was confirmed that increased social support results in more efficient, active coping strategies. These findings are consistent with previous research on social support and its benefits in relation to coping strategies (Holahan & Moos,

1987;1990). Adolescents, as in previous research (Grossman & Rowat, 1995), are more likely to use active coping strategies when they perceive greater social support. Adolescents who feel they have someone to turn to are more likely to use effective coping strategies, as seeking social support is an active process of coping in which the individual takes initiative.

The hypothesis was not confirmed that social support would be a significant predictor of withdrawal coping. Although Social Support was negatively correlated with Withdrawal Coping, it was eliminated as a predictor variable when entered into the regression equation. Therefore, a lack of social support does not necessarily mean the use of withdrawal or avoidance coping. Perhaps adolescents that do not have any social support from friends and family may be utilizing other formal support systems. Adolescents who had low social support had high emotional, attitudinal, and functional independence from their parents. Thus, they may have learned to adapt to being alone and independently cope with their problems without resorting to withdrawal or avoidance coping.

The hypothesis was confirmed that females rely on social support more than males. This is consistent with previous research that has found social support to benefit females more than males (Holahan & Moos, 1986). Traditionally females put a great deal of importance on relationships with friends and family and do not hesitate to seek help when needed.

Self-Esteem.

The third hypothesis, that self-esteem would be a

significant predictor of coping strategies, received partial
support. While high Self-Esteem was marginally correlated with
Active Coping, it was not a significant predictor of Active
Coping when entered into the regression equation. However, Self-
Esteem was highly correlated with Withdrawal Coping and was the
most significant predictor of Withdrawal Coping. Thus,
individuals who had low self-esteem were more likely to engage in
ineffective or withdrawal coping strategies. This is consistent
with previous research which has found low self-esteem to be
associated with passive coping strategies (Chan, 1993; Schonpflug
& Jansen, 1995). However, unlike previous research, this study
failed to find high self-esteem to be a good predictor of active
coping. Perhaps high self-esteem alone does not ensure an
individual has the resources or the knowledge of effective coping
strategies. There are obviously other factors besides having
positive self-esteem which determine what types of coping
strategies an individual will use.

   Psychological Separation.

   The last hypothesis, that psychological separation would be
a significant predictor of coping styles was partially supported.
However, the relation between psychological separation and coping
style was opposite to the expected direction. It was predicted
that high levels of psychological separation (e.g., Emotional,
Attitudinal, Functional, and Conflictual Independence) would be
associated with Active Coping strategies. In contrast, the
results of this study showed significant negative correlations
between Emotional, Attitudinal, and Functional Independence and

Active Coping and no significant correlation was found between Conflictual Independence and Active Coping. Thus, adolescents who were emotionally distant from parents, who disagreed with parents, and who did not accept parental help, were less (not more) likely to use active coping strategies. This is not consistent with the hypothesis that individuals who are more independent or less dependent on their parents would be more likely to use active coping strategies.

The data relating psycholgical separation and social support may provide an explanation of these unexpected findings. Among all of the independent variables, Social Support has the strongest (positive) correlation with Active Coping. In regression analyses, Social Support is the strongest positive predictor of Active Coping. Apparently, adolescents require strong social support before they use an active coping style. The data of this study indicates significant negative correlations between Emotional, Attitudinal, and Functional Independence and Social Support. Thus, adolescents who are emotionally distant from their parents, who disagree with their parents, and who do not accept parental help, deprive themselves of an important source of social support, and thereby are less likely to use an active coping style.

Contrary to prediction, Emotional Independence had a high significant negative correlation with Active Coping. Thus, adolescents who were emotionally distant from their parents were less (not more) likely to use active coping strategies. This is inconsistent with previous findings that have found emotional

independence to be associated with less academic problems (Hoffman, 1984). One would assume, an adolescent's greater need for emotional support from parents would interfere with success, achievements, and productivity. However, in this study, the opposite was found to be true.

Again, contrary to prediction, Attitudinal Independence was negatively correlated with Active Coping and was a somewhat weak predictor of Active Coping. Thus, individuals who had similar attitudes to their parents (not different), were more likely to use active coping strategies. This is consistent with Hoffman's earlier findings that adolescents who perceived themselves as more similar to their parents had better personal adjustment (Hoffman, 1984). Thus, being more similar to one's parents, sharing their beliefs, attitudes, and values is a positive quality. Similarity to parents does not necessarily mean dependence. Rather, it indicates that family members do share many similar views which may allow for a more harmonious relationship between the parent and the adolescent. A harmonious relationship with parents would then be more conducive to encouraging active coping styles.

In the stepwise regression analyses, of the four types of Psychological Independence, only Functional Independence was found to be a strong predictor of Active Coping. Functional Independence (which had the strongest negative correlation with Active Coping) entered the regression as a strong predictor of Active Coping. Because Attitudinal and Emotional Independence shared much of their variance with Functional Independence, they

in themselves added slightly (Attitudinal) or insignificantly (Emotional) to the prediction of Active Coping. Thus, when Functional Independence was in the regression, the additional contributions of Attitudinal and Emotional Independence had become largely redundant.

Contrary to expectation, Conflictual Independence had an insignificant correlation with and was not predictive of Active Coping. However, Conflictual Independence had a strong negative correlation with and was a strong negative predictor of Withdrawal Coping. Thus, adolescents who had many conflicts with their parents tended to use withdrawal coping strategies. It is natural that a relationship which is characterized by excessive guilt, resentment, and anger would inhibit adolescents use of active or effective coping. This is consistent with coping research which has found that adolescents from high-conflict families were more likely to use withdrawal coping and less likely to use active coping (Seiffge-Krenke, 1995). For both male and female college students, conflictual dependence or greater conflict between adolescent and parent was associated with more problems (depression, anxiety, interpersonal problems, physical health problems, and substance-use problems) (Hoffman & Weiss, 1987). For females, greater Conflictual Independence is associated with better personal adjustment and for both males and females, Conflictual Independence is associated with better adjustment in love relationships. Those adolescents who have a great deal of conflict have more problems with love relationships (Hoffman, 1984). In a study of young adolescents, low family

conflict and high levels of family cohesion, expressiveness, and personal growth were related to better psychological adjustment (Kurdeck & Sinclair, 1988). Therefore, if conflict affects psychological well being, it may very well affect the adolescent's ability to cope with stressful situations. Thus, in this study, an adverse family environment seems to elicit withdrawal coping.

The hypothesis was confirmed that males would have greater psychological independence than females. However, this was only true for some of the types of psychological independence. Overall, males had greater Functional Independence from their mothers than did females. However, this difference may be due to an inconsistency or flaw in the measurement of Functional Independence. Hoffman (1984) previously reported test-retest results which indicated that the PSI measure remains consistent over time, with the exception of mother functional independence for males. This may account for the gender differences found between males and females on functional independence from mother.

The only other gender difference was found for Emotional Independence. Males were more likely to be emotionally independent from both their mothers and their fathers than females. This is consistent with other research that has found males to have higher separation scores than females (Lopez, Campbell, & Watkins, 1986), and males seek out greater autonomy from parents than females (Moore, 1987). Females have traditionally placed more importance on relationships than males (Baucom & Weiss, 1986) and conflict in the family seems to have a

greater impact on females (Hoffman & Weiss, 1987). No other
significant gender differences were found for the relationship
between mother/father and son/daughter. Overall, this study was
consistent with Hoffman's proposal that the distinction between
separation from mother and separation from father may not be
critical for a normal population (Hoffman, 1984).

Due to the contrary results found for psychological
separation, it was questionable whether the assumption of
linearity was being violated. To check this possibility, the
relationship between the four types of independence and all other
variables was graphed. These graphs revealed that all of the
variables were monotonic. Thus, as scores increased (decreased)
on one variable, they also increased (decreased) on the other
variable. Therefore, any inconsistencies in the findings were not
due to a non-linear/non-monotonic relationship.

Inconsistencies in the research of psychological separation
may be due to the broad constructs or definitions which have been
used. Hoffman (1984) has shown the importance of studying the
different dimensions of psychological separation "it is important
to consider the specific elements of psychological separation",
(Hoffman & Weiss, 1987, p. 162). However, even Hoffman's
Psychological Separation Inventory has its limitations. In this
study, individuals who scored very high on independence may not
have actually been independent of parents. When an adolescent
reports having different attitudes from parents, receiving no
help from parents, and being emotionally distant from parents, it
may be because they do not get along with their parents (not

because they are independent). In contrast, adolescents who report having similar attitudes to their parents and who are emotionally close are scored as being dependent on their parents. However, these individuals my in fact be independent, they just happen to share similar beliefs with their parents and are close to their parents. Therefore, inconsistency in the findings may be due to the measurement of the variable Psychological Separation. Some items which assess the quality of the parent/adolescent relationship may add some insight as to whether the adolescent is truly independent/dependent.

To gain a better understanding of the effects of different types of independence, future research should define healthy psychological separation in terms of "interdependence". Thus, adolescents can be connected with parents while also having their own autonomy. However, in the present study, the conceptualization of independence does not see any form of dependence on the parents as a positive trait. Future studies should try to improve upon the conceptualization of psychological separation.

There are several other possible reasons why opposite findings were obtained in this study. Perhaps psycholgical separation is not as critical for well-being as some psychologists believe. Earlier assertions that psychological separation is crucial for proper psychological adjustment (Blos, 1962) may not be true for today's adolescents. Forming a sense of self may not be necessary for an adolescent to have effective coping strategies. Earlier studies which found poor separation

from one's parents to result in poor psycholgical well-being
(Kalter, 1987) and rebellious behaviours (Crespi & Sabatelli,
1993) were not replicated. In this study, conflictual dependence
resulted in a negative behaviour (withdrawal coping). However,
failure to achieve other types of psycholgical independence
(Functional and Emotional) did not have a detrimental outcome for
the adolescent. Therefore, achieving psycholgical separation may
not have the benefits psychologists once believed.

Inconsistent findings with Hoffman's earlier studies may
also be due to the different behaviours being predicted. Perhaps
the achievement of psycholgical independence is more important in
different situations. For example, Hoffman (1984) was studying
the effects of psycholgical independence on personal and academic
adjustment whereas this study is examining the effects of
psychological independence on coping behaviours. For Hoffman's
sample, emotional independence may have been useful in predicting
academic adjustment, but it is not useful in predicting coping
strategies. Each study is focusing on independence in a very
specific context and one may not be able to generalize the
effects of independence across different situations and
behaviours. Because no other research has studied the effects of
psychological separation on coping, there are no previous studies
with which to compare.

In summary, the fact that psychological separation is a
somewhat good predictor of coping styles is not surprising, as
this variable has been studied in the context of well-being and
has been found to be a good predictor of other behaviours such as

adolescent rebellion (Crespi & Sabatelli, 1993) and bulimia

(Friedlander & Siegel, 1990). Future research may want to

conceptualize psycholgical separation or independence as a

multidimensional concept to get a clearer picture of the effects

of adolescent independence. "It may not be possible to make

statements about psychological separation without specifying to

which particular dimension one is referring" (Hoffman, 1987, p.

162).

Correlations Among Predictor Variables

Many significant correlations were found between the

independent variables and the dependent variables, Active and

Withdrawal Coping.

Locus of control.

The hypothesis that locus of control would be correlated

with self-esteem was confirmed. Internal Locus of Control was

positively correlated with Self-Esteem. Individuals with an

internal locus of control who feel they can control their

outcomes are more likely to have high self-esteem. This is

consistent with past research that has found an internal locus of

control to be associated with positive affect (Langston, 1994).

An External Locus of Control was negatively correlated with Self-

Esteem. Individuals with an external locus of control who felt

they could not change their lives had lower self-esteem. This is

consistent with the literature that has found an external locus

of control to be associated with low life satisfaction and

depression (Landau, 1995).

Locus of control was related to social support. An Internal

Locus of Control was positively related to Social Support and an External Locus of Control was negatively related to Social Support. Originally, it was not clear whether adolescents who had an internal locus of control would feel in control of their lives, therefore, would not ask for any support. There is now evidence that individuals who feel in control of their lives are more likely to utilize social support systems such as family and friends. Individuals who have an external locus of control are more likely to withdraw and not seek support from friends and family. This is consistent with previous research that has found an internal locus of control to be associated with seeking social support (Rees & Cooper, 1992). It makes sense that adolescents who have an external locus of control, who feel little control over their lives would not take the initiative to contact family and friends for help.

The hypotheses that locus of control would be related to psychological separation was not confirmed. An internal locus of control was not significantly related to any of the constructs of psychological separation. However, an External Locus of Control was negatively correlated with Conflictual Independence. Individuals who felt they had no control were more likely to have lower levels of conflictual independence or feel their relationships with their parents were not harmonious. These relationships were characterized by excessive guilt, resentment and anger. This type of relationships with the parents may cause an individual to feel he or she has no control over other aspects of his or her life.

The hypothesis was confirmed that locus of control and coping strategies were related. An Internal Locus of Control was associated with Active Coping. Previous research on coping strategies have found similar results (Folkman; 1984, Fleming, Baum, & Singer, 1984; Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986). An External Locus of Control was associated with Withdrawal Coping. This too is consistent with previous research which has found an external locus of control to be associated with the use of passive coping strategies (Lazarus & Folkman, 1984; Brosschot, Gebhardt, & Godaert, 1994).

In summary, significant correlations revealed that individuals with an Internal Locus of Control had high Social Support, high Self-Esteem, and were more likely to use Active Coping strategies. In contrast, individuals with an External Locus of Control had less Social Support, lower Self-Esteem, greater conflictual dependence on parents and used more Withdrawal Coping strategies.

Social support.

As predicted, individuals with high Social Support were more likely to have high Self-Esteem. This is consistent with other research that has found the presence of social support to be associated with good mental and physical health (Holahan & Moos, 1986). Similarly, individuals who report having high self-esteem would feel worthwhile and would therefore be more likely to value friends and family.

It was not clear whether high psychological separation would be associated with more or less social support. In this study,

Social Support was positively correlated with Conflictual

Independence. Individuals who had greater conflictual

independence, i.e. had less conflict in their relationships with

their parents, were more likely to report having greater social

support. Conflict with parents may lessen the adolescents'

eagerness to seek parent's social support. Adolescents who

reported excessive guilt and resentment towards parents were less

likely to turn to their parents for help. Adolescents that did

not have a high conflict relationship with their parents may have

a close relationship and seek help when needed.

In contrast, high levels of Emotional, Attitudinal, and

Functional Independence were associated with low Social Support.

Individuals who felt they had no social support were more

emotionally distant from their parents. They had different

attitudes, beliefs, and values from those of their parents and

did not rely on their parents for help with personal and

financial affairs. Therefore, in this study, higher psychological

separation did not mean increased use of social support.

Adolescents who had achieved these types of independence no

longer relied on their parents for social support.

As predicted, high Social Support was related to Active

Coping and low Social Support was related to Withdrawal Coping.

This is consistent with previous research on social support and

coping strategies (Holahan & Moos, 1987a; 1987b; 1990).

Therefore, not only is social support a resource to draw upon,

but it also elicits coping strategies.

In summary, greater Social Support was associated with an

Internal Locus of Control and higher Self-Esteem. High levels of

Social Support were also associated with Conflictual

Independence, i.e. absence of conflict, and greater emotional,

attitudinal, and functional dependence on parents. High Social

Support was associated with greater use of Active Coping. Lower

Social Support was associated with an External Locus of Control

and greater use of Withdrawal Coping.

Self-esteem.

As mentioned above, the hypothesis that Self-Esteem was

highly correlated with Internal Locus of Control and higher

Social Support was confirmed. Also, low Self-Esteem was

associated with an External Locus of Control and low Social

Support. It was hypothesized that high self-esteem would be

correlated with increased psychological separation. This

hypothesis did not receive much support. While Conflictual

Independence (i.e., absence of conflict) was positively related

to Self-Esteem, there was no other obtained relationship between

Self-Esteem and the other types of independence. An adolescent

that has a harmonious relationship with parents is likely to have

greater self-esteem. A relationship that is characterized by

anger, guilt, and resentment is more likely to elicit low self-

esteem in the adolescent. However, having achieved emotional,

attitudinal, and functional independence, as defined by the

Psychological Separation Inventory, has no effect on an

adolescent's self-esteem. If an adolescent has little emotional

attachment, different attitudes, and manages their own affairs,

it does not necessarily mean they have greater self-esteem than

an adolescent who is emotionally attached, has similar attitudes, and relies on parents to manage their affairs.

As predicted, high Self-Esteem was associated with Active Coping and Low Self-Esteem was associated with Withdrawal Coping. This is consistent with research that has found self-esteem to be a good predictor of coping behaviour (Chan, 1993; Schonpflug & Jansen, 1995).

In summary, high Self-Esteem is associated with an Internal Locus of Control, high Social Support, increased Conflictual Independence and Active Coping. Low Self-Esteem is associated with an External Locus of Control, low Social Support, lower Conflictual Independence, and greater use of Withdrawal Coping.

Psychological separation.

Consistent with previous research (Hoffman, 1984) three types of independence were highly correlated (Attitudinal, Emotional, & Functional), while Conflictual Independence was a distinct construct. As mentioned above, Emotional, Attitudinal, and Functional Independence were associated with low Social Support. These three types of independence were not related to Withdrawal Coping, although contrary to prediction, high levels of Emotional, Attitudinal, and Functional Independence were associated with less Active Coping.

Also mentioned above, high levels of Conflictual Independence (i.e., absence of conflict) were associated with high Social Support and high Self-Esteem. Low levels of Conflictual Independence were associated with an External Locus of Control. Also, conflictual dependence was associated with a

high degree of Withdrawal Coping. Thus, adolescents that did not have a harmonious relationship with their parents engaged in ineffective or withdrawal coping.

Conclusion

In conclusion, the results of this study suggest there are many significant predictors of adolescents' coping strategies. This study has supported the notion that an internal locus of control, high social support, and high self esteem are all important for effective coping strategies. In addition, another contribution of this study is the finding that psychological separation, which has received little attention in adolescents' coping, may also play an important role in coping strategies. Thus, this study adds strength to previous findings about coping during adolescence plus adds new insight to the role of psychological separation on coping strategies. Future studies may want to study the role of psychological separation in determining coping strategies. This is the first study to examine this variable in the context of coping and more research is needed to integrate these findings with other findings on psychological separation.

Knowledge about predictors of coping strategies may be very useful for practitioners who are trying to instill effective coping strategies among adolescents. The present study suggests some of the traits which would help individuals deal more effectively with stressful situations. Programs emphasizing adaptive patterns of coping should focus on building up specific traits in adolescents to enhance their self-esteem and increase

their perceptions of control. Practitioners should also encourage use of social support. Knowledge about predictor variables of coping can also help identify those adolescents who may be at greater risk for developing maladaptive coping strategies. Intervention programs for at risk individuals should focus on increasing the degree of support from both family and friends. Working on the relationship between an adolescent and their parents could also prove beneficial. It is at this age when the adolescent as well as the family must strive to let the adolescent gain the appropriate amount of independence from parents. These types of programs could reduce maladaptive coping strategies and increase the likelihood of more effective coping strategies in the future.

This study had several limitations or shortcomings. Firstly, the results of this study must be interpreted with caution. Like many other stress-related studies, this study is correlational. The results do support a relationship between the four predictor variables and coping. However, there are no causal effects. Secondly, the subjects in this study were first year university students who lived at home with both parents. Therefore, one must be cautious when generalizing the results to other more specific populations. Future research should examine the role of psychological separation in adolescents who come from single parent families, step families, or families that have experienced divorce or death. Also, the results of this study may have been affected by the homogenous sample and do not address the role of psychological separation among different cultures.

Another limitation in this study may have been the failure to measure stress. While five different problem areas were assessed in relation to coping, the overall level of stress in an adolescent's life was not obtained. This study failed to ask subjects whether their general level of stress or whether they were experiencing any major stressful life events. This may have had some impact on the results.

In conclusion, this study has added insight to the literature on adolescent coping strategies. It has replicated previous studies which have found locus of control, social support, and self-esteem to be related to coping. In addition, there is the new finding that certain aspects of psychological independence are good predictors of coping in adolescence. Coping during adolescence is a very complex issue. Many factors contribute to adolescent behaviour and there are more factors besides the ones in this study that play a role in the types of coping strategies used by adolescents. However, each new addition to the research of coping strategies provides beneficial information for the formation of effective coping strategies during adolescence. Stress is an inevitable aspect of life - both positive and negative life experiences involve stress. Thus, it is important to have effective coping strategies during stressful times to ensure overall psychological well-being.

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Appendix A

Seiffge-Krenke-20 Coping Style Scale

INSTRUCTIONS: This scale mentions some ways used by young people to deal with challenges in some areas of their lives. Please indicate how frequently you use a given method when confronted with problems such as: WHEN I HAVE DIFFICULTY WITH MY ACADEMIC WORK, WHEN I HAVE DIFFICULTIES WITH MY PARENTS OR OTHER FAMILY MEMBERS, WHEN I FEAR NOT BEING ACCEPTED BY SAME-SEX PEERS, WHEN I HAVE DIFFICULTIES WITH A BOY OR GIRL FRIEND OF THE OPPOSITE SEX, OR WHEN I AM DISSATISFIED WITH MYSELF.

almost never = 1; rarely = 2; sometimes = 3;
often = 4; very often = 5.

1) I discuss the problem with my parents or other adults.

2) I talk straight away about problems when they appear and do not worry about them.

3) I try to get help from places where help may be available (learning- resource centres, counselling centres, student self-help groups etc.).

4) I expect the worst.

5) I accept my limits.

6) I try to talk about problems with the person concerned.

7) I behave as if everything is all right.

8) I try to let out my aggression (with loud music, riding my motorbike, wild dancing, sports, and so on).

9) I do not worry, because usually everything turns out all right.

10) I think about problems and try to find different solutions.

11) I compromise.

12) I let out my anger or depression by shouting, crying, banging doors, and so on.

13) I tell myself there always will be problems.

14) I only think about problems when they appear.

15) I look for information in magazines, encyclopedias, or books.

16) I try not to think about the problem.

17) I try to forget my problems with alcohol and drugs.

18) I try to get help from people who are in a similar situation.

19) I try to solve problems with the help of my friends.

20) I withdraw, because I cannot change anything anyway.

Scoring

Active coping = $5* [\Sigma(\text{items \# } 1, 2, 6, 10, 11, 18, 19)] / 7$

Withdrawal Coping = $5* [\Sigma(\text{items \# } 4, 12, 13, 17, 20)] / 5$

Active and Withdrawal Coping have a minimum score of 5, a middle score of 15, and a maximum score of 25.

Appendix B

Levenson's Locus of Control Scale

INSTRUCTIONS: This is a questionnaire to find out the way certain important events in our society affect different people. There are no right or wrong answers. Please indicate your own personal feelings about each statement below by marking the number that best describes your feeling or attitude.

1 = disagree strongly; 2 = disagree moderately; 3 = undecided; 4 = agree moderately; 5 = agree strongly.

1) Whether or not I get to be a leader depends mostly on my ability.

2) To a great extent my life is controlled by accidental happenings.

3) I feel like what happens in my life is mostly determined by powerful people.

4) Whether or not I get into a car accident depends mostly on how good a driver I am.

5) When I make plans, I am almost certain to make them work.

6) Often there is no chance of protecting my personal interest from bad-luck happenings.

7) When I get what I want, it is usually because I am lucky.

8) Although I might have good ability, I will not be given leadership responsibility without appealing to those in positions of power.

9) How many friends I have depends on how nice a person I am.

10) I have often found that what is going to happen will happen.

11) My life is chiefly controlled by powerful others.

12) Whether or not I get into a car accident is mostly a matter of luck.

13) People like myself have very little chance of protecting our personal interests when they conflict with those of strong pressure groups.

14) It is not always wise for me to plan too far ahead, because many things turn out to be a matter of good or bad fortune.

15) Getting what I want requires pleasing those people above me.

16) Whether or not I get to be a leader depends on whether I am lucky enough to be in the right place at the right time.

17) If important people were to decide they did not like me, I probably would not make any friends.

18) I can pretty much determine what will happen in my life.

19) I am usually able to protect my personal interests.

20) Whether or not I get into a car accident depends mostly on the other driver.

21) When I get what I want, it is usually because I worked hard for it.

22) In order to have may plans work, I make sure that they fit in with the desires of people who have power over me.

23) My life is determined by my own actions.

24) It is chiefly a matter of fate whether or not I have a few friends or many friends.

Scoring:

Internal = Σ(items 1,4,5,9,18,19,21,23)

Chance = Σ(items # 2,6,7,10,12,14,16,24)

Powerful Others = Σ(items # 3,8,11,13,15,17,20,22).

External = (Σ score of Chance + Powerful Others/2)

Internal and Chance have a minimum score of 8, a middle score of 24, and a maximum score of 40. Powerful Others has a minimum score of 7, a middle score of 21, and a maximum score of 35.

Appendix C

Provision of Social Relations Scale (PSI)

INSTRUCTIONS: We would like to know something about your relationships with other people. Please read each statement below and decide how well the statement describes you. For each statement, show your answer by indicating on the answer sheet the number that best describes how you feel. The numbers represent the following answers.

1 = not at all like me; 2 = not very much like me;

3 = somewhat like me; 4 = much like me; 5 = very much like me.

1) When I am with my friends, I feel completely able to relax and be myself.

2) I share the same approach to life that many of my friends do.

3) People who know me trust me and respect me.

4) No matter what happens, I know that my family will always be there for me should I need them.

5) When I want to go out to do things, I know that many of my friends would enjoy doing these things with me.

6) I have at least one friend that I could tell anything to.

7) Sometimes I am not sure, if I can completely rely on my family.

8) My family lets me know they think I am a worthwhile person.

9) I feel very close to some of my friends.

10) People in my family have confidence in me.

11) People in my family provide me with help in finding solution to my problems.

12) People who know me think I am good at what I do.

13) My friends would take the time to talk over my problems.

14) I know my family will always stand by me.

15) Even when I am with my friends I feel alone.

Scoring

$$= \Sigma(\text{items} \# 1,2,3,4,5,6,8,9,10,11,12,13,14) + 12 - \Sigma(\text{items} \# 7,15)$$

The Social Support Scale has a minimum score of 15, a middle score of 45, and a maximum score of 75.

Appendix D

Rosenberg's Self-Esteem Scale (RSE)

   INSTRUCTIONS: Below is a list of statements dealing with your general feelings about yourself. Indicate your degree of agreement or disagreement with each of these statements by shading the appropriate alternative on the machine-scorable answer sheet.

Strongly disagree = 1; disagree = 2; uncertain = 3; agree = 4; strongly agree = 5.

1) On the whole, I am satisfied with myself.

2) At times I think I am no good at all.

3) I feel that I have a number of good qualities.

4) I am able to do things as well as most other people.

5) I feel I do not have much to be proud of.

6) I certainly feel useless at times.

7) I feel that I am a person of worth, at least on an equal plane with others.

8) I wish I could have more respect for myself.

9) All in all, I am inclined to feel that I am a failure.

10) I take a positive attitude toward myself.

Scoring

Self-Esteem = $\Sigma(\#1,3,4,7,10) + 30 - \Sigma(\#2,5,6,8,9)$

The Self-Esteem Scale has a minimum score of 10, a middle score of 30, and a maximum score of 50.

Appendix E

Psychological Separation Inventory (PSI)

INSTRUCTIONS: The following list of statements describes
different aspects of students' relationships with both their
mother and father. Imagine a scale ranging from 1 to 5 that tells
how well each statement applies to you. In the space next to the
statement, please enter a number form "1" (Not at all true of me)
to "5" (Very true of me). If the statement does not apply enter
"1". Please be completely honest. Your answers are entirely
confidential and will be useful only if they accurately describe
you.

Not at all true of me = 1; a little bit true of me = 2;
moderately true of me = 3; quite a bit true of me = 4;
very true of me = 5

1) Sometimes my mother is a burden to me.

2) I feel longing if I am away from my mother for too long.

3) My ideas regarding racial equality are similar to my mother's.

4) My mother's wishes have influenced my selection of friends.

5) I feel like I am constantly at war with my mother.

6) I blame my mother for many of the problems I have.

7) I wish I could trust my mother more.

8) My attitudes about obscenity are similar to my mother's.

9) When I am in difficulty I usually call upon my mother to help
   me out of trouble.

10) My mother is the most important person in the world to me.

11) I have to be careful not to hurt my mother's feelings.

12) My opinions regarding the role of women are similar to my mothers'.

13) I often ask my mother to assist me in solving my personal problems.

14) I sometimes feel like I'm being punished by my mother.

15) I wish my mother wasn't so overprotective.

16) My opinions regarding the role of men are similar to my mother's.

17) I wouldn't make a major purchase without my mother's approval.

18) I wish my mother wouldn't try to manipulate me.

19) I wish my mother wouldn't try to make fun of me.

20) My religious beliefs are similar to my mother's.

21) My mother's wishes have influenced my choice of major at school.

22) I feel I have an obligation to my mother.

23) My mother expects too much from me.

24) I wish I could stop lying to my mother.

25) My beliefs regarding how to raise children are similar to my mother's.

26) My mother helps me to make my budget.

27) I often wish that my mother would treat me more like an adult.

28) My values regarding honesty are similar to my mother's.

29) I generally consult with my mother when I make plans for an out of town weekend.

30) I am often angry at my mother.

31) I like to hug and kiss my mother.

32) I hate it when my mother makes suggestions about what I do.

33) My attitudes about solitude are similar to my mother's.

34) I consult with my mother when deciding about part-time employment.

35) I decide what to do according to whether my mother will approve of it.

36) Even when my mother has a good idea I refuse to listen to it because she made it.

37) When I do poorly in school I feel I'm letting my mother down.

38) My attitudes regarding environmental protection are similar to my mother's.

39) I ask my mother what to do when I get into a tough situation.

40) I wish my mother wouldn't try to get me to take sides with her.

41) My mother is my best friend.

42) I argue with my mother over many things.

43) My beliefs about how the world began are similar to my mother's.

44) I do what my mother decides on most questions that come up.

45) I seem to be closer to my mother than most people my age.

46) My mother is sometimes a source of embarrassment to me.

47) Sometimes I think I am too dependent on my mother.

48) My beliefs about what happens to people when they die are similar to my mother's.

49) I ask for my mother's advice when I am planning my vacation time.

50) I am sometimes ashamed of my mother.

51) I care too much about my mother's reactions.

52) I get angry when my mother criticizes me.

53) My attitudes regarding sex are similar to my mother's.

54) I like to have my mother help pick me out the clothing I buy for special occasions.

55) I sometimes feel like an extension of my mother.

56) I feel uncomfortable keeping things from my mother.

57) My attitudes regarding national defence are similar to my mother's.

58) I call my mother whenever anything goes wrong.

59) I often have to make decisions for my mother.

60) I'm not sure I could make it in life without my mother.

61) I sometimes resent it when my mother tells me what to do.

62) My attitudes regarding mentally ill people are similar to my mother's.

63) Sometimes my father is a burden to me.

64) I feel longing if I am away from my father for too long.

65) My ideas regarding racial equality are similar to my father's.

66) My father's wishes have influenced my selection of friends.

67) I feel like I am constantly at war with my father.

68) I blame my father for many of the problems I have.

69) I wish I could trust my father more.

70) My attitudes about obscenity are similar to my father's.

71) When I am in difficulty I usually call upon my father to help me out of trouble.

72) My father is the most important person in the world to me.

73) I have to be careful not to hurt my father's feelings.

74) My opinions regarding the role of women are similar to my father's.

75) I often ask my father to assist me in solving my personal problems.

76) I sometimes feel like I'm being punished by my father.

77) I wish my father wasn't so overprotective.

78) My opinions regarding the role of men are similar to my father's.

79) I wouldn't make a major purchase without my father's approval.

80) I wish my father wouldn't try to manipulate me.

81) I wish my father wouldn't try to make fun of me.

82) My religious beliefs are similar to my father's.

83) My father's wishes have influenced my choice of major at school.

84) I feel I have an obligation to my father.

85) My father expects too much from me.

86) I wish I could stop lying to my father.

87) My beliefs regarding how to raise children are similar to my father's.

88) My father helps me to make my budget.

89) I often wish that my father would treat me more like an adult.

90) My values regarding honesty are similar to my father's.

91) I generally consult with my father when I make plans for an out of town weekend.

92) I am often angry at my father.

93) I like to hug and kiss my father.

94) I hate it when my father makes suggestions about what I do.

95) My attitudes about solitude are similar to my father's.

96) I consult with my father when deciding about part-time employment.

97) I decide what to do according to whether my father will approve of it.

98) Even when my father has a good idea I refuse to listen to it because he made it.

99) When I do poorly in school I feel I'm letting my father down.

100) My attitudes regarding environmental protection are similar to my father's.

101) I ask my father what to do when I get into a tough situation.

102) I wish my father wouldn't try to get me to take sides with him.

103) My father is my best friend.

104) I argue with my father over many things.

105) My beliefs about how the world began are similar to my father's.

106) I do what my father decides on most questions that come up.

107) I seem to be closer to my father than most people my age.

108) My father is sometimes a source of embarrassment to me.

109) Sometimes I think I am too dependent on my father.

110) My beliefs about what happens to people when they die are similar to my father's.

111) I ask for my father's advice when I am planning my vacation time.

112) I am sometimes ashamed of my father.

113) I care too much about my father's reactions.

114) I get angry when my father criticizes me.

115) My attitudes regarding sex are similar to my father's.

116) I like to have my father help pick me out the clothing I buy for special occasions.

117) I sometimes feel like an extension of my father.

118) I feel uncomfortable keeping things from my father.

119) My attitudes regarding national defence are similar to my father's.

120) I call my father whenever anything goes wrong.

121) I often have to make decisions for my father.

122) I'm not sure I could make it in life without my father.

123) I sometimes resent it when my father tells me what to do.

124) My attitudes regarding mentally ill people are similar to my father's.

Scoring

Conflictual Independence from Mother

=   [120 - Σ(items # 1,5,6,7,14,15,18,19,23,24,27,30,32,36,40,
        42,46,50,52,61)]/20

Conflictual Independence from Father

=   [120 - Σ(items #,63,67,68,69,76,77,80,81,85,86,89,92,94,98,

102,104,108,112, 114,123)]/20

** 8 items (# 11,22,56,59,73,84,118,121) have been eliminated

from the scale.

Conflictual Independence from Parents

COINPA = [COINMO + COINFA]/2

Emotional Independence from Mother

= [66 - Σ(items # 2,10,31,35,37,41,45,47,51,55,60)]/11

Emotional Independence from Father

= [66 - Σ(items # 64,72,93,97,99,103,107,109,113,117,122)]/11

Emotional Independence form Parents

EMINPA = [EMINMO + EMINFA]/2

Attitudinal Independence from Mother

= [84 - Σ(items # 3,8,12,16,20,25,28,33,38,43,48,53,57,62)]/14

Attitudinal Independence from Father

= [84 - Σ(items #,65,70,74,78, 82,87,90,95,100,105,110,

115,119,124)]/14

Attitudinal Independence from Parents

ATINPA = [ATINMO + ATINFA]/2

Functional Independence from Mother

= [72 - Σ(items #4,9,13,17,26,29,34,39,44,49,54,58)]/12

Functional Independence from Father

= [72 - Σ(items #66,71,75,79,88, 91,96,101, 106,111,116,120)]/12.

** Two items (#21,83) have been eliminated from this scale.

Functional Independence from Parents

FUINPA = [FUINMO + FUINFA]/2

All scales have a minimum score of 1, a middle score of 3, and a

maximum score of 5.

Appendix F

Instructions

We would like you to participate in this study of challenges, experiences, and relationships in college-age youth: e.g., attitudes towards oneself, others, life, etc., and background variables related to these attitudes. Different attitudes and experiences will be assessed by different scales. There are no right or wrong answers. When you respond to a given item, do not spend too much time thinking about the item, but express the attitude which comes first into your mind. Be sure to answer all the items, even if you are not sure and have to guess. Use the machine-scorable answer sheet to record your answer. Before you start recording your answers on the answer sheet, please shade in the following information in your **student number box,** in the upper right hand corner of your answer sheet: **Lines 1 to 7, shade in your student number; line 8 indicate your gender, male = 1, female = 2; line 9 shade in 1 for Questionnaire One or 2 for Questionnaire Two.** Do not write your name on the answer sheet. We need your student number only to determine which set of two answer sheets belong together. We are not interested in your identity. Please answer all questions as honestly as you can. Answer the questions in numerical order, i.e., first questionnaire One, then Two. When you have finished, please be sure to hand in both questionnaires and both answer sheet. Thank you for your cooperation.

Appendix G

Subject Feedback

In studies of adolescent development, this period is described as a time of "internship to be an adult". There are many tasks of adolescence, e.g., to be emotionally and functionally independent, preparing for and choosing a future occupation, deciding on a future life partner, etc. In this society, adolescents want and are encouraged to be increasingly independent. This requires that adolescents learn to emotionally distance themselves from their parents, but at the same time not lose all contact. This process of balanced independence takes time. During the Late adolescent period, most persons have developed some degree of independence, but are still dependent on adults for support, education, etc. The demands placed by educational institutions, parents, friends, employers, and the social world at large put some stresses, and require developing adequate strategies for coping with these stressors.

In this research the aim is to understand how Late adolescents learn to cope with these multiple demands while trying to be psychologically independent. There may be some support available form adults and friends, and a sense of security built up in the relationships. At the same time a person's perceptions of these concepts will also enter the into an adolescents' preferred styles of coping. We want to understand the processes involved in coping strategies; and how these are influenced by some social and individual assets an individual may

have for coping.

In participating in this project you have contributed in an important way to the continuation of such search for relevant developmental variables and the changes. If you are interested in knowing about the results of the study, we would be pleased to tell you. All you need to do is write your name and address (postal code included) on the paper provided for this purpose. In a few months' time (about 4 to 5) when we have completed the data collection and statistical analyses, we can mail the tentative results. Since the study aims at group related information, there is no information available on any particular person. We have maintained your anonymity, and that's the way most researchers give the participants a chance to honestly give their responses. Thanks for your co-operation.

Author Note

C. Thorlakson, University of Manitoba. This manuscript was submitted in partial fulfilment for the requirements of a master's degree in psychology. This research is a sub-section of a larger study by Dr. S. Schludermann and Dr. E. Schludermann, Department of Psychology. Any questions concerning this article can be directed to Dr. S. Schludermann, Department of Psychology, University of Manitoba, Winnipeg, Manitoba, Canada.