

AGE AND GENDER DIFFERENCES
IN STRESSORS AND COPING STRATEGIES
IN SCHOOLAGE CHILDREN

By

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ABSTRACT

TITLE: Age and Gender Differences in Stressors and Coping Strategies in Schoolage Children

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This was a cross-sectional, descriptive, comparative study of stressors and coping strategies identified by schoolage children. The purpose of this study was to provide a description of the stressors identified and coping strategies used by schoolage children and to compare them between genders and across ages. A broad sampling of schoolage children was chosen because there are still gaps in the literature regarding "normal" children's own views of their stressors and coping strategies. For this purpose, 777 schoolage children (304 boys and 473 girls in grades 3 through 8) from a public school system in the Northwest were asked to fill out the Feel Bad Scale and the Schoolager's Coping Strategies Inventory. The Feel Bad Scale measured the frequency and stressfulness of stressors, and the Schoolager's Coping Strategies Inventory measured the frequency and helpfulness of coping strategies. Data were gathered in the schools.

Data obtained were analyzed descriptively and Analysis of Variance (ANOVA) was done to detect any main effects and/or interaction effects for age and gender. Significant interaction effects for age and gender were found for the stressfulness of the stressor "Pressured to try something new, like a cigarette, that you really don't want to try" ($p=0.05$, girls had higher mean scores); for the frequency of the coping strategies "Get mad" ($p=0.04$), "Talk to someone" ($p=0.01$) and "Yell or scream" ($p=0.03$); and for the helpfulness of the coping strategies "Talk to someone" ($p=0.05$) and "Yell or scream" ($p=0.03$). Girls generally reported using these coping strategies more often and found them to be more helpful. These results support the need for further study of gender differences in stressors and coping strategies in schoolage children.

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CHAPTER 1

Introduction

Stress is considered to be a fact of life. Learning to cope with stress is an important part of every child's development (Garmezy & Rutter, 1983). Stress has been linked to illness in both adults (Dorian & Garfinkel, 1987) and children and adolescents (Haggerty, 1986). Stress, especially as measured by negative events, has been found to be related to a variety of problems in children and adolescents: depression and anxiety (Burt, Cohen & Bjork, 1988; Cohen, Burt, & Bjork, 1987; Kanner, Feldman, Weinberger & Ford, 1987), Rowlison & Felner, 1988; Siddique & D'Arcy, 1984; Swearingen & Cohen, 1985), behavior problems (Berdien, Althaus & Verhulst, 1990; Compas, Howell, Phares, Williams & Ledoux, 1989), accidents (Lee, Jacobson & Levanas, 1989), suicide (Rubenstein, Heeren, Hourman, Rubin & Stechler, 1989), poorer diabetes control (Brand, Johnson & Johnson, 1986; Hanson & Pichert, 1986), alcohol use (Baer, Garmezy, McLaughlin, Pokorny & Wernick, 1987), drug use (Gad & Johnson, 1980), tobacco use (Bonaguro & Bonaguro, 1987), somatic complaints (Aro, 1987; Greene, Walker, Hickson & Thompson, 1985; Hodges, Kline, Barbero & Flanery, 1984; Yarcheski & Mahon, 1986; and Zeltzer & LeBaron, 1984) and poor health (Newcomb, Huba & Bentler, 1986). These studies have been done in a variety of geographic locations and settings (schools, clinics), and though done primarily on white, middle-class children, indicate that the effects of stress on children are multiple and complex.

Stress has been measured in schoolage children in a variety of ways. The most common measurements are life event scales, which measure major but generally infrequent events such as death of a parent, divorce of parent and move to a new

school; uplifts and hassles scales, which measure more frequent everyday events, such as "got a good mark at school", "had a good time playing with friends", and "kids at school teased you", "you didn't have enough privacy (a time and place to be alone) when you wanted it" (Kanner, et al, 1987); and scales that combine both life events and daily events. Also, most of the studies have been cross-sectional, and as previously mentioned, on predominantly white, middle-class children. Major themes have emerged from the studies, even though the measures and methodologies have varied: there is a significant relationship between life events and disorder, especially negative life events (Compas, 1987; Swearingen & Cohen, 1985); daily negative events are more closely related to psychological symptoms than are major events (Compas, et al, 1989; Wagner, Compas & Howell, 1988; Rowlison & Felner, 1988); uncontrollable events result in more negative outcomes than controllable events (Burt, Cohen & Bjorck, 1988; Newcomb, Huba, & Bentler, 1986); and girls report more distress and symptoms than boys (Compas, 1987; Lewis & Lewis, 1989; Lewis, Siegel & Lewis, 1984; Siddique & D'Arcy, 1984).

Coping, too, is a fact of life. Children are, as stated, confronted with many and varied stressors. How they learn to cope with them is important for their health and well-being. Little is known about children's coping strategies and much of what is known has been obtained from adults, thus this is a concept in need of further exploration, especially from the child's perspective. Wertleib (1987) points out that "an appreciation of and immersion in the child's own construction of a stress and coping process is likely to be crucial to therapeutic engagement." (p. 558).

Coping, then, seems to be an area that nursing is especially suited to address. Nurses deal with peoples' response to things that happen to them. Also, nursing is oriented toward prevention and health promotion. Coping is a response, or set of

responses, and effective coping promotes health and well-being. "There are intuitive and empirical grounds for believing that the ways people cope with stress are even more important to overall morale, social functioning, and health/illness than the frequency and severity of episodes of stress themselves." (Lazarus & Launier, 1978, p. 308).

The purpose of this study is to describe schoolage children's stressors and coping strategies from their perspective. Age and gender differences are examined. This information will contribute to what little is known about normal children and their everyday stresses and coping strategies.

CHAPTER 2

Review of the Literature

Stress in schoolage children

The assessment of stress in schoolage children is particularly important, as one's interventions are based on a thorough assessment. Stress in schoolage children has been measured in a variety of ways. The most common measurements are life event scales, hassles and uplifts scales and scales that measure both life events and hassles, or daily events. Physical symptomatology, hospital admissions and clinic visits and clinical interviews have also been used as measurements of stress in schoolage children; however, they are not used as frequently. For this review, stress in schoolage children will be described according to the type of measurement used to assess it. Life event research will be described first, then hassle and uplift research, followed by research that incorporates both life events and hassles. Age and gender differences will be discussed throughout. Much of the literature on measurement of stress in children was done in the 1970s and 1980s. Additionally, many of the studies focused on sick or chronically ill children. This review will examine some of that literature, but is focused

more on studies of "normal" healthy children, as they are the focus of this study.

Life event research

Life event research originated with the work of Holmes & Rahe (1967) who designed the Social Readjustment Rating Scale for adults. Coddington (1972), whose work was influenced by Holmes & Rahe, was the first to measure stress in children and adolescents. His scales, as well as scales that are based on his work, are widely used today. Coddington's underlying assumption was that both negative and positive events required readjustment and were therefore stressful. Readjustment ratings of items were done by professionals who worked with children: teachers, pediatricians and mental health workers (Coddington, 1972, 1984). Thus, the scale was developed from an adult perspective, though Coddington did pilot the adolescent version on adolescents and made some adjustments based on those results. The ten items thought to be the most stressful (generally by parents who completed the scale) on the 50-item Life Event Scale for Adolescents as it's currently used are: the death of a parent, the death of a brother or sister, divorce of your parents, marital separation of your parents, the death of a grandparent, hospitalization of a parent, remarriage of a parent to a step-parent, birth of a brother or sister, hospitalization of a brother or sister, and loss of a job by your father or mother (Coddington, 1984). Coddington's Life Events Scale for Children, as it is presently used, has 36 items, of which the 10 most stressful (according to their parents) are the same as on the adolescent scale (Coddington, 1984). Both have been used with schoolage children.

Using Coddington's scale, Hodges, Kline, Barbero & Flanery (1984) found that both children with recurrent abdominal pain and children with behavioral disorders reported significantly more life events and had significantly higher stress ratings than did healthy children. The sample consisted of 139 ten and eleven year old children. The

children with recurrent abdominal pain reported events which were health and death related (serious illness and/or hospitalization of the child, sibling and/or parent, death of a family member or close friend) whereas the children with behavioral disorders reported stressors such as divorce, school failure, changes in school district, and increased arguments between and with parents. Gender differences were not reported. Greene, Walker, Hickson & Thompson (1985), in a study of 172 eleven to nineteen year olds seen for the first time in an adolescent outpatient clinic, also found that negative life events were significantly correlated with recurrent abdominal or chest pain for which no organic etiology could be found. Additionally, children with behavior problems reported significantly higher stress scores than any of the other groups. There were no significant differences among the groups for Positive Life Change scores. A modified (by Greene et al based on pilot work that they had done) version of Johnson and McCutcheon's Life Events Checklist for older children and adolescents was used in this study. The children completed the questionnaires. The most frequently identified events by all subjects were: making failing grades on report card (33.9 percent); increased arguments between parents (28.3 percent); serious family illness (27.8 percent); broke up with a boyfriend/girlfriend (23.6 percent); death in family (21.7 percent); problems with siblings (21.1 percent); and increased arguments with parents (20.6 percent). They found no age or gender differences.

Aro (1987), in a longitudinal study of fourteen to sixteen year old Finnish adolescents (n=2013), used a modification of Coddington's scale to examine "the impact of life events and interpersonal problems on psychosomatic symptoms" (p. 192). The most common events reported were death of a grandparent, increased conflict between parents, and change in residence. "Girls reported more psychosomatic symptoms than boys throughout the study, but there was an increase in symptoms among both sexes

during the follow-up." (p. 193). Girls reported more conflict with parents and friends, and between parents, whereas boys reported more conflict with teachers. Aro's data suggested that both boys and girls react with psychosomatic symptoms in a stressful situation, but they have different patterns. Girls seemed to react in an earlier phase of the stress process; however, the overall impact of life stress on symptoms (in that they had more) was greater for boys.

Berden, Althaus & Verhulst (1990) also used a "highly modified version" of the Coddington scale in their longitudinal study of the relationship between major life events and changes, over a two year period, in the level of behavioral and emotional problems of children as reported by their parents. Their final sample consisted of 1397 children between the ages of six and sixteen from the Netherlands. Parents completed the scales for their children. The most frequently occurring events over the two year period were: substantial decrease of the financial status; hospitalization of a parent for 2 weeks or more, or serious disease of a parent for 2 weeks or more; increased absence of mother for 8 hours or more per week; and increase of conflicts between parents. Analysis of variance revealed significantly higher event scores for the older age groups (12-14, 15-16 yrs) and for children from lower SES. There was no significant effect for gender. Life events were found to be significantly related to changes in the level of behavioral/emotional problems of children and adolescents, however, the variance explained was small. Other life event scales were developed to include the individuals appraisal (if the event was positive or negative in impact, and the degree of impact) of the stressfulness of the events (Grey & Hayman, 1987). Yarcheski & Mahon (1986) used such a scale to examine early adolescent schoolchildren's (age 12 to 14, n=136) perceived stress and symptom patterns. Results indicated that the sample had a moderately high level of perceived stress and a moderate level of symptom patterns,

and that there was a positive correlation between the two. Thomas, Shoffner & Groer (1988) used a similar tool to assess gender differences in stress factors of 323 adolescents (mean age 15.5 years) from rural, urban and suburban schools. The most frequently reported stressors for both boys and girls were hassling with parents (70 percent of boys, 73 percent of girls), hassling with siblings (59 percent of boys, 62 percent of girls) and making new friends (46 percent of boys, 53 percent of girls). The next most frequently reported stressor was flunking a subject for boys (38 percent) and problems with body size for girls (49 percent). These particular items were about the only life events on the scale that could happen very frequently, as the other items are similar to Coddington's items. The children were also told that they could write in additional stressors. In all locations, mean scores of females were higher with urban females reporting the highest stress levels. "Females were more concerned with self-concept issues (appearance changes, size problems) and interdependence issues (dating problems, breaking up with close girlfriend or boyfriend, girlfriend becoming pregnant), whereas males were more concerned with role function issues (failing subjects in school, flunking a grade, and adjusting to a new job)." (p.24).

Newcomb, Huba, & Bentler (1986) hypothesized that whether an event was controllable or uncontrollable would be an important factor in the stressfulness of the event. They developed a 39 item scale that they tested on two populations: the original sample consisted of 1018 fifteen to eighteen year olds and a second sample of 376 adolescents from three birth cohorts (age 12, 15, and 18). They used measures of drug use, personality, health and the life event scale. They found that the total life events sum score was significantly correlated with all types of drug use (in each sample), that there was a significant and positive association between uncontrollable stress events and poor health, and that distressful events increased with age. Gad & Johnson (1980)

assessed life events, drug use, and perceived health status and also found negative life events to be more highly correlated with these variables. Additionally, they found that lower SES adolescents experienced significantly higher levels of negative life changes than adolescents in higher SES groups. Gender differences were not examined.

Swearington & Cohen (1985a, 1985b) also thought a limitation of Coddington's approach was his failure to distinguish positive from negative experiences. Therefore they developed the Junior High Life Experiences Survey (JHLES) on which subjects are asked to report events (in last 6 months) and to categorize them as positive, negative or neutral, as well as to rate the impact of the event on a 7-point Likert scale. Items were selected from the literature and weighted by clinical psychologists as to their desirability/undesirability and controllability/ uncontrollability (Swearington & Cohen, 1985a). They administered it to seventh graders ($n=233$, mean age=12.59 years) along with anxiety and depression measures. They found "high levels of negative life change were found to be related to increased depression, anxiety, and number of school days missed" (Swearington & Cohen, 1985a, p.81). Negative events were significantly related to the maladjustment criteria. Positive events were not related to the maladjustment criteria, thus they did not buffer the stress of the negative events. Uncontrollable and controllable negative events had the same predictive ability for maladjustment. In a followup study of 79 of the original 233 subjects, they found the same pattern. Negative events were a significant predictor of psychological distress, and positive events were not found to be stress-buffering (Swearington & Cohen, 1985b).

Motivated by the Swearington & Cohen studies, Cohen, Burt & Bjorck (1987) conducted another similar study. Using the JHLES, but with a larger longitudinal sample and additional measures of self-esteem and parents' life events they hypothesized "that in both cross-sectional and longitudinal analyses, negative life events would be positively

related to depression and anxiety and negatively related to self-esteem" (p.583). Three hundred twelve students (mean age 12.69) in grades seven and eight participated at Time 1, and 302 (97 percent) at Time 2 (5 months later). Correlational analyses at Time 1 and Time 2 revealed that negative events positively related to depression and anxiety and negatively related to self-esteem. Cross-sectional regression analysis (using negative events, positive events and the interaction between the two to predict depression, anxiety, and self-esteem) revealed significant effects for both negative and positive events, whereas the longitudinal analysis revealed a significant effect for the negative events only.

In regard to the controllability of negative events, the same pattern held in that "both uncontrollable and controllable negative events were significant cross-sectional predictors, but that only the latter was a significant longitudinal predictor" (p.588). This was true for boys and girls. They also found that positive events served as a stress buffer for girls' self-esteem longitudinally. There were no sex differences at Time 1; however, at Time 2 girls reported more controllable negative life events, more positive events, and more anxiety than boys. As a part of their 1987 longitudinal study, Burt, Cohen & Bjorck (1988) examined perceived family environment in the life stress adjustment of the early adolescents. They hypothesized that perceptions of families as cohesive, organized, and expressive would be related to positive psychological functioning. Conversely, perceiving families as conflict-ridden and controlling would be related to negative functioning. Their hypotheses were not supported. The authors concluded, in both studies, that the life events checklist may not be sensitive enough to capture the stress experienced by young adolescents. It is also important to note that these life event checklists are, for the most part, adults' conceptions of the stressors of the adolescent.

Greenberg, Siegel & Leitch (1983) were also interested in parental, as well as peer, influence on adolescent stress and well-being. Their idea was that the quality of the adolescents' relationships to peers and parents would influence their well-being, and that the quality of the relationship with the parents would be more predictive of well-being than the peer relationship. To test this, they used a life events checklist (Johnson and McCutcheon, 1980) that included appraisal of the event, a self-concept and life satisfaction measure, and an inventory of adolescent attachments on 213 adolescents (12 to 19 years). Their hypotheses were supported in that the quality of attachment to parents was significantly more powerful in predicting well-being than the attachment to peers, and that the quality of the attachment to parents indicated a moderating effect under conditions of high life stress on self-esteem measures. Parents were highly valued by these adolescents. There were no significant age differences and gender differences were not examined.

Siddique & D'Arcy (1984) were also interested in adolescents' stress and well-being. In addition to family and peer relationships, they examined school situations in their study of "mental-health consequences of stress" of 1038 Canadian adolescents in 9th through 12th grade. All three sources of stress (family and peer relationships and school situations) were found to be related to the four measures of mental health (anxiety, depression, social dysfunction, and lack of energy). Family stress had the strongest negative health impact. Locus of control had a moderating impact on social stress (peer and school stressors), and was found to be more external for girls than boys. The external locus of control was also more closely associated with several distress symptoms. Females also perceived more family and peer stress, and thus as a group seemed to function under greater stress than males. As a group, 27.5 percent of these adolescents did report high levels of psychological distress. Overall, however, the

majority of the subjects did not find life stressful: "some 33.5% of the adolescents surveyed reported no symptoms of psychological distress and another 39% reported five or fewer symptoms (a mild level of distress)..."(p.47).

Hassles and uplifts research.

"Hassles are the irritating, frustrating, distressing demands that to some degree characterize everyday transactions with the environment" and uplifts are their counterparts, "that is, positive experiences such as the joy derived from manifestations of love, relief at hearing good news, the pleasures of a good night's rest, and so on." (Kanner, Coyne, Schaefer & Lazarus, 1981, p. 3 & 6). In contrast to the major life events approach, these authors suggest that it is the "day-to-day events that ultimately should have proximal significance for health outcomes" and therefore should be assessed (Kanner, Coyne, Schaefer & Lazarus, 1981, p.3). In their study of adults, using their Hassles Scale, they supported their hypotheses that hassles were more strongly associated with adaptational outcomes than were life events and that they operated strongly and independently of life events in predicting psychological symptoms. Additionally, for women only, uplifts were positively related to life events and psychological symptoms.

Bobo, Gilchrist, Elmer, Snow & Schinke (1986) patterned their Adolescent Hassles Inventory (AHI) after the Hassles Scale and administered it to 246 sixth grade students (age 11 to 13) in an attempt to identify interactions between daily stressors, role strain and peer group relationships. Females had significantly higher mean frequency scores and severity scores on the AHI than boys. Role strain was found to correlate inversely with satisfaction with peer group relations, especially for boys.

Kanner, Feldman, Weinberger & Ford (1987) included uplifts as well as hassles in their study of 232 sixth graders. They used the Children's Hassles Scale (CHS, 25

items generated from children and adolescents responses to semistructured interviews about stress in their lives), and the Children's Uplifts Scale (CSU, 25 uplifts, item generation not reported) as well as several instruments to assess adaptational outcome. Analysis of results of the Children's Hassles Scale indicated that the events occurred frequently, in that each item was endorsed by 30-83 percent of the sample, with having to clean up their room (83 percent) and feeling bored (81 percent) the most frequently occurring events. However, these didn't seem to bother the adolescents very much, as they did not always make the adolescent "feel bad". "Only one of the 25 events (being punished for doing something wrong) both occurred and was experienced as bad by more than half the sample." (Kanner, Geldman, Weinberger & Ford, 1987, p.380). In regard to the Children's Uplifts Scale, 24 of the 25 events occurred for over half of the sample, thus these early adolescents reported having more uplifts than hassles occurring in their lives. The most frequently reported events that made them feel good were getting a good mark at school (82 percent), having a good time with friends (82 percent), and having a school holiday (76 percent). In regard to adaptational outcome, bad hassles were highly associated with negative outcomes (such as anxiety, depression and distress) and moderately associated with the lack of positive outcomes (such as friendship support, general self-worth), whereas good uplifts were consistently linked to positive outcomes and negatively associated with depression and distress. For girls, however, there was a tendency for good uplifts to correlate positively with anxiety. Also, girls experienced the hassles as bad more often than boys, even though they reported the same number of hassles and uplifts. Even though the boys indicated fewer bad hassles than girls, the relationship between the bad hassles and adaptational outcome was stronger for them. This result is similar to those reported by Bobo, Gilchrist, Elmer, Snow & Schinke (1986).

Research that includes both major life and daily events

Since studies on daily stressors provided information that was different than that provided by studies on major life events, researchers began to use both types of measures to assess adolescent stress, and to develop measures that included both types of stressors. The transactional model of stress and coping (Lazarus & Folkman, 1984) has also influenced this work. In addition, the schoolage child's input was solicited in the development of these instruments.

Yamamoto (1979) conducted a study, the purpose of which was to see if children's ratings of the stressfulness of life events agreed with adult's ratings. A 20 item scale was developed for this study. Items for the scale were derived from the literature and from suggestions from classroom teachers. The sample (n=367) consisted of fourth, fifth and sixth graders from six schools. The children were asked to rate each experience on a scale ranging from least upsetting (1) to most upsetting (7), and to indicate whether the event had been personally experienced. Results indicated that children were "discriminating" in their assessment of the stressfulness of the events. Gender differences were noted only for school change, with older girls rating it as much more stressful than younger girls. No such variation was seen for boys. Events like parental fights and being suspected of lying were fairly common and stressful, whereas events such as loss of sight, academic retainment, and pants-wetting were infrequently experienced yet considered very upsetting. To see if children's ratings agreed with adults' ratings, the results of this study were compared with the ratings of events by professionals on the Coddington scale for schoolage children. Children and adults agreed on items such as the loss of a parent and hospitalization, whereas the children rated parental fights and academic retainment as more stressful and the birth of a sibling as less stressful than the professionals rated them.

Yamamoto, Soliman, Parsons, & Davies (1987) continued work with the Yamamoto scale, and conducted some of the very few cross-cultural studies. This 1987 study is a follow-up study of three previous studies done by Yamamoto and colleagues in which values for the stressfulness of life events (using Yamamoto's 20 item scale) were found to correlate 0.91 between American and Japanese children, 0.85 between American and Filipino children, and 0.81 between Filipino and Japanese children. This study reports the results from Egyptian (n=296, third-sixth grade), Australian (n=191, third-eighth grade) and Canadian (n=283, third-eighth grade) children and compares them to the previous work. All six groups rated the experience of "losing my mother or father" as most upsetting and the experience of "having a new baby sister or brother" as least upsetting. "Going blind" was the next most upsetting event for all groups except Japan, which rated "academic retainment" as the second most upsetting event. All groups rated the following event on the stressful end of the scale: "being kept in the same grade next year", "hearing my parents quarrel and fight", "wetting pants in class", "being caught stealing something", and "telling the truth but no one believing me". Girls from all the cultures rated events as more stressful than boys. In regard to the stressfulness ratings, the largest correlations (all above 0.93) were among Australia, Canada, and USAa (large, urban city) & USAb(rural city), all basically Anglo-Saxon cultures. The Egyptian children rated 15 out of 20 life events above 6 (range 1=least upsetting to 7=most upsetting) in stressfulness, followed by the Japanese (10 events) and USAb (8 events), Australian (6 events), Filipino (5 events) and USAb and Canadian children (both 4). Egyptian children also reported experiencing more of the most stressful events (42 percent experienced loss of a parent, whereas the next highest was USAb at 21.6 percent; 39.1 percent reported going blind, followed by Japan at 25 percent, the next most frequent was USAb with 8.9 percent; 47.5 percent academic

retainment, followed by USAb with 24.2 percent and Australian children reporting 14.1 percent).

Compas, Davis & Forsythe (1985) also questioned the accuracy of the instruments developed by adults (with little or no child or adolescent input) for use with adolescents on two grounds: that adult professionals and researchers may not accurately identify the experiences of adolescents due to, among others, differences in age and perspective; and physicians, mental health workers and researchers are more likely to identify items that are related to maladaptive, rather than adaptive outcomes. Thus, they conducted two studies to determine the characteristics of adolescent life events. In the first study, open-ended reports of major life events and daily events were obtained from 658 early (12 to 14 years), middle (15 to 17 years), and late (18 to 20 years) adolescents. Subjects reported significantly more positive than negative events, and as expected, more daily than major events. Females reported significantly more daily events, major events, and events over all than males. Late adolescents reported the most events and middle adolescents the fewest. Early adolescent males reported significantly more positive than negative daily events, whereas early adolescent females reported significantly more negative than positive events. Additionally, 213 events were identified, 148 of which were not included on existing adolescent life event measures, according to the authors. The second study consisted of 71 late adolescents. These subjects were asked to categorize the list of 213 items into major or daily events, indicate whether they were positive or negative, and determine to which, of nine, content categories the event belonged. There was 90 percent agreement on whether an event was positive or negative. There was more variability on subjects' rating of type of event (major or daily) and content categorization of the event. "A high proportion of the sample (90% or greater) could agree that only a small percentage (22%) of the events

were either major or daily events." (p.688). Similarly, only 38 percent of the events were placed in the same category by 90 percent of the sample. When a criterion of 70 percent or more was used, for both, there was still at least one third of the sample that did not agree. Thus, these authors recommended "substantial revisions" in the methods used to assess adolescent stress. As for the overall stressfulness of the adolescents' lives, the authors report: "In general, this nonclinical sample of adolescents did not report that they were plagued by aversive experiences. Quite to the contrary, they indicated that they found their recent past and expected their immediate future to be characterized by positive experiences." (p.688).

Building on the above work, Compas, Davis, Forsythe & Wagner (1987) developed The Adolescent Perceived Events Scale and did some additional testing of it. They reported "relatively high" rates of test-retest reliability and concurrent validity. They then used the scale to test the hypothesis that negative daily events mediate the relationship between major negative events and psychological symptomatology in a longitudinal study of 58 older adolescents (Wagner, Compas & Howell, 1988). Their hypothesis was supported. "Major events led to an increase in daily stress which, in turn, led to increased psychological symptoms. The findings also serve to underline the strength of the relationship between daily stress and psychological symptoms..." (p. 200-201). Major events were defined as high impact/low frequency events and daily events were defined as high frequency, regardless of impact, as perceived by the individual. Overall, this sample did not experience "unusually high or low levels of symptomology" (p.196).

The Adolescent Perceived Events Scale was used in another study, this time to assess major and daily stressors and psychological symptoms in a sample of adolescents and their parents to examine the interactions between them (Compas,

Howell, Phares, Williams & Ledoux, 1989). The subjects were 211 children and adolescents (10 to 14 years) and their parents. The families of the girls and boys were similar on the parent stress and symptom measures; however, the mothers reported more total symptoms as well as symptoms of interpersonal sensitivity, depression and anxiety. Girls reported more major and daily stress than boys. For families with girls, major events were correlated with daily stressors, and daily stressors were correlated with symptoms for mothers, fathers, and girls. Mothers' hassles were related to fathers' symptoms and fathers' hassles were related to mothers' symptoms. Girls' daily stressors were related to their mothers symptoms. For boys, correlations between major and daily stressors and between daily stressors and symptoms were significant for mothers, fathers and boys. Fathers' symptoms were significantly related to boys emotional and behavior problems, and the mother's symptoms were significantly related to the boy's daily stressors. Thus, these findings, like those reported by Wagner, Compas & Howell (1988), suggest that the relation between major life events and psychological distress is mediated by daily stressors.

Rowlison & Felner (1988) were also interested in the relationship between major and daily stressors and adaptive outcome. They used a social support instrument in addition to a life event checklist, a daily hassles questionnaire, and six instruments to assess adaptive outcome. Their sample consisted of 682 students in grades 7 through 12. Unlike most other samples, this sample consisted of 50 percent white, 48.6 percent black, and 1.4 percent Hispanic or other who were predominantly from lower SES families. Results indicated that both major events and daily hassles were associated with adolescent adjustment. Consistent with other research (Gad & Johnson, 1980; Swearington & Cohen, 1985a, 1985b), they found negative major life events to be a significant predictor of maladaptive outcome. Also, for five of the six adjustment

domains, "hassles were shown to be a significant and independent predictor of outcome over and above any effects that could have been attributed to major life events" (p.441).

Thus, both types of events make independent contributions to an adolescent's overall level of functioning. Social support was not found to be stress-buffering.

Rather than using separate scales for major and daily events, Dise-Lewis (1988) incorporated both in the scale she developed to assess stress in middle adolescents. Items for The Life Events and Coping Inventory were developed in response to group and individual interviews with 104 junior high school children. Ninety other school children then participated in revisions of the item list. Normative data were obtained by administering the inventory to 502 adolescents (age 11 to 14, mean age of 12.6 years with a standard deviation of 0.5 year). Subjects reported experiencing 45 events on the average. Males and females concurred in their rating and ordering of events; however, females assigned higher average stress ratings to items and also had significantly higher mean scores for psychosomatic symptoms.

Greene (1988) examined early adolescents' (4th through 6th grade) stress, also using a tool developed (previously by the author) from the perspective of the early adolescent. Both major and daily events are included. The most frequently mentioned stressors were death of a pet (69%), death of a relative (60%), grades (32%), and illness/injury (32%). Six of the 18 most frequently identified stressors were related to school, such as grades, homework and exams. Females reported significantly more stress related to school and peers. The incidence of school related stressors was found to increase with grade, thus "school-related events emerged as the most stressful, generating the highest mean impacts and the second highest mean affective responses." (p. 399).

Fenzel (1989), viewing adolescent stress from a different perspective,

hypothesized that early adolescents experience role strain in their role as students, thus modeled the Early Adolescent School Role Strain Inventory (EASRSI) on occupational role strain theory for adults. The items for the EASRSI were obtained from informal interviews with elementary and middle school teachers and students. In a pilot study, the first version of the EASRSI was administered to 25 fifth-grade boys and girls. The instrument was revised and then administered to 120 fifth grade children (mean age 10 years, 7 months at first sampling) during the spring semester of fifth grade and then twice more in sixth grade in October and February. The final version of the EASRSI is based on an ecological framework, and consists of 27 items that capture "potential sources of school-related strain emanating from three settings: school, home, and peer group" (p. 29). Factor analysis distinguished four factors that reflected these three domains: schoolwork demands, teacher relations, parental control issues, and peer relations. The author states that the EASRSI provides a more direct measure of student role strains than do studies that infer stress from declining scores on self-esteem or other indicators of maladjustment or distress.

Lewis, Siegel and Lewis (1984) used individual interviews and small group sessions with 50 to 60 5th and 6th graders to develop the items for their 20-item "Feel Bad Scale" which assessed events experienced as well as their frequency and intensity. Girls rated 14 of the items as more bad than the boys rated them, though both boys and girls ranked the items the same. The most frequently reported items were: feeling sick, having nothing to do, not being able to dress the way you want, pressured to get good grades and feeling left out of the group; however, the items that caused the most distress were: not spending enough time with parents, having your parents argue in front of you, being late with homework, having nothing to do, and not having enough money to spend.

Conclusion

The overall picture that emerges is that schoolage children experience stress and that it sometimes has an adverse effect; however, high degrees of stress and maladjustment are not the norm. There is also a gender pattern that girls report experiencing more stress and psychological symptomatology than boys. Reasons offered for this are that girls may be more likely to disclose this information than boys (Thomas, Shoffner & Groer, 1988), that they are more aware of stress (Dise-Lewis, 1988), that they have greater role strain and more external locus of control (Siddique & D'Arcy 1984), that for early adolescents it is a function of their earlier development (Kanner, Feldman, Weinberger, & Ford, 1987) or that it could be a reflection of differences in socialization or measurement artifact (Bobo, Gilchrist, Elmer, Snow & Schinke, 1986). Girls seem to respond more to positive events as well. Why these differences really occur remains an unanswered question.

Another pattern that emerges is that the assessment of stress in schoolage children is becoming more complex. Assessing major life events or hassles and adaptational outcome has not provided a very rich description. Also, more longitudinal studies need to be done, especially if we are to get a picture of stress in schoolage children from a developmental perspective. The majority of the studies done have been cross-sectional studies of predominantly white, middle class children; thus sampling is an issue as well as design.

The use of instruments that were developed from the child's perspective rather than an adult's also resulted in a richer description of the stress that schoolage children are experiencing. Thus, these tools should continue to be used and improved. It is possible that schoolage children could report more events and weight them more than his/her parent (Williams & Uchiyama, 1989); therefore, reports from parents, teachers

and peers are still helpful.

For this study, the Feel Bad Scale (Lewis, Siegel and Lewis, 1984) was used to measure stress as the items were developed with input from the children, it incorporates both major and daily stressors, and it is appropriate for use with younger children. Compas, for example, found his Adolescent Perceived Events Scale too complex for younger adolescents to complete. Thus, the Feel Bad Scale was the best choice.

Coping in schoolage children

Coping in schoolage children, like stress, has been studied from a variety of perspectives. Schoolage children's coping has been described and evaluated and by health care professionals, parents, teachers, and more recently the children themselves. Though coping has been conceptualized and investigated in a number of ways (e.g., attachment and separation during infancy, interpersonal cognitive problem solving, Type A and B behavior patterns; see Compas, 1987), the primary focus of this review will be coping styles and coping strategies, both in response to stressful experiences. Ryan-Wenger (1994) points out that coping styles and coping strategies are derived from different theoretical perspectives and explains the difference: "Coping styles are partly learned, partly innate behavior patterns that are characteristic of the way one adapts to the environment. Coping styles are usually described in unidimensional terms (e.g., monitors vs blunders, avoidant vs vigilant). Coping strategies, on the other hand, are specific cognitive and behavioral methods of dealing with stressors (e.g., talk to someone, ignore it). Coping strategies change with age and experience, whereas coping styles become personality traits that are relatively stable over time." (Ryan-Wenger, 1994, p. 183). Most of the studies of coping in children were done in the late 1970s and the 1980s. The focus of this study is also "normal" healthy children, so the review of the literature focuses on studies of community and school populations of children as

opposed to clinic or hospitalized children who are coping with specific illnesses, though some of those studies are also reviewed.

Studies of coping style

Murphy & Moriarty (1976) did some of the early work on coping in children. They studied 32 children longitudinally (for 15 years) to find out "what coping patterns were used by children who managed to stay 'normal'." (p. 5). They described two styles of coping: Coping I was the capacity to cope with the opportunities, challenges, frustrations, and threats in the environment. Coping II was the maintenance of internal integration which is the capacity to manage one's relation to the environment so as to maintain integrated functioning. They concluded that the difference between the normal children and the disturbed children was how the children managed their problems rather than the amount of stress they experienced.

Miller (1980) and Miller & Green (1985) proposed that there were two modes or styles of coping with threat which were monitoring and blunting. Monitoring "involves being alert for and sensitized to the negative aspects of and experience", and blunting "involves distraction from and cognitively shielding oneself from objective sources of danger." (Miller & Green, 1985, p.264). Monitors are information seekers and blunters are information avoiders.

Coping behaviors of hospitalized children have been studied. LaMontagne (1984) examined preoperative coping behaviors of children (n=51, 8 to 12 years old) in regard to their locus of control beliefs. A preoperative interview rated children on The Avoidant-Active Coping Dimension, a tool modified for use with children from an adult tool developed by Cohen and Lazarus. "Classifying subjects as active meant they sought information about the operation or that they remembered information presented preoperatively. By contrast, subjects classified in the avoidant direction had restricted

knowledge about the medical problem and surgery and were hesitant to discuss the operation." Results indicated that active coping was significantly associated with internal locus of control ($r=-0.39$, $p<.01$). A replication of that study (LaMontagne, 1987a) with 8 to 18 year-olds revealed that internal locus of control was significantly ($r= -.36$, $p= .02$) correlated with active coping. Older children sought and remembered more preoperative coping. They were more active copers. Gender differences were not explored in either of these studies.

Savedra & Tesler (1981) found in their exploratory study of 33 hospitalized 6 to 12 year-olds that the predominant behavior before surgery was "pre-coping" or "orienting" (looking and listening for information, asking questions) and that a wider range of coping behaviors were used before surgery than were used after surgery. All of the children, except one, demonstrated "attempting to control" (involves action which has not been suggested or directed by another) behaviors after surgery. They defined three levels of involvement in the coping process: inactive, pre-coping or orienting and active coping.

Studies of coping strategies

Caty, Ellerton & Ritchie (1984) conducted a content analysis of 39 published nursing case studies of hospitalized children age 20 months to 10 years to identify the range of coping behaviors observed by the various authors. They used a category system based on the Lazarus (1980) stress and coping paradigm. Twelve of the studies were on schoolage children which were defined as 6 to 10 year-olds. They found that as the child's age increased, more information-focused behaviors were used and that the schoolage children used information-seeking behaviors predominantly. In addition, the schoolage children used controlling behaviors "much more frequently" than other groups, which is a finding similar to the results of Savadra & Tesler (1981). Gender differences

were not examined. In an attempt to examine coping from a broader context that included a wider and more general range of stressful situations, Wertlieb, Weigel & Felsdtein (1987) developed a "method and coping schema for generating descriptions of coping by schoolage children." The schema was from preliminary data of a longitudinal study of stress, coping and health in 176 children from families in a large health maintenance organization. A transactional model of stress and coping framework based on the work of Lazarus was used. Data was reported by groups of 7 year-old and 10 year-old boys and girls. Children were recruited when they were 6 to 9 years old. Children reported (via a semi-structured interview at home, the Child Stress Inventory, which was adapted from Lazarus & Folkman, 1984) a wide range of coping strategies. The most prevalent coping strategies were a focus on the self, problem-solving rather than emotion management, and overt and direct action models. The most important age difference identified was that emotion management was more prevalent among the older group of children. Intrapsychic coping was also reported more among the older group. The most pronounced gender difference in their data was centered on the focus of coping, boys were more self-centered than girls. The focus of the girls coping was in the environment, particularly in seeking support from people in the environment.

Spirito, Stark & Williams (1988) developed the Kidcope, a brief 10 item coping checklist, to further the study of the process of coping skill development in children and adolescents. The checklist was intended for clinicians who work with children and adolescents. Items were selected from the coping literature. The scale was initially administered to 134 ninth grade public school students, most of whom were white. The checklist was administered to six other samples of children (including one pediatric and one diabetic sample) to examine reliability and validity. Neither were adequately established, though the authors considered the results "promising". Results indicated

that social support and problem-solving coping strategies had the highest correlations between the frequency and efficacy ratings, meaning that these coping strategies were the most effective when used frequently. Gender differences were also reported. Females reported more frequent use of social support, emotional regulation, wishful thinking and problems solving than males, and males perceived resignation to be a more effective coping strategy than did females. Regarding differences among the groups sampled: the most frequently reported coping strategies for the controls were cognitive restructuring and wishful thinking; for the pediatric patients (referred for psychological intervention) the most frequently reported strategies were distraction (significantly more than the other groups) and wishful thinking; and for the diabetic group the most frequently reported strategies were resignation and cognitive restructuring.

Ryan (1989) addressed the problem of lack of information about coping strategies from the children's perspective in her work. In the first of her studies, Ryan (1989) used a qualitative approach to gather data from 103 schoolage children who were 8 to 12 years old. The theoretical framework was based on the work of Lazarus & Folkman (1984). Data were gathered in the classroom setting via group discussion and then by questionnaire. A list of 518 coping strategies were organized into 13 categories of coping behaviors: physical exercise, aggressive motor activities, social support, aggressive verbal activities, isolating activities, avoidant activities, habitual activities, spiritual activities, relaxation activities, cognitive activities, emotional behaviors, distracting activities and other behaviors. Gender differences were found. Girls named significantly more coping strategies ($p = .05$) than boys in the categories of social support and emotional behaviors. Boys named significantly more physical exercise activities. Age differences were related to frequency of use of all categories except for aggressive motor and spiritual activities. The children were able to identify different strategies for

different stages in the coping process as well as strategies that were helpful to them versus those that were not helpful to them.

Ryan-Wenger (1990) then developed the Schoolagers' Coping Strategies Inventory (SCSI) based on the qualitative research described above. It was pilot tested with ten 8 to 10 year old children and then given to 107 eight to 12 year old children for testing. The SCSI originally yielded three scores: a Frequency Scale score, an Effectiveness Scale score and a Total SCSI score, which was obtained by summing the two scales. Ryan-Wenger no longer recommends the use of the Total score. The scale had an internal consistency of .85. The scale was further tested with 250 white children in grades 2 through 6.

Ryan-Wenger used the multitrait-multimethod (MTMM) technique described by Campbell & Fiske (1959) to measure construct validity. Six separate instruments were used to measure coping, sources of stress, and self-esteem, and both self-report and observation by others were used. Results indicated that there were significant age differences in Frequency Scale scores, and mean SCSI Total scores, but not in Effectiveness Scale scores. Eight and 9 year olds mean Frequency scores were significantly higher than 10, 11, and 12 year olds and their mean SCSI Total scores were significantly higher than 10 and 11 year olds' scores. There were no significant gender differences in mean Frequency, Effectiveness or Total scores. Based on the MTMM matrix, The SCSI was found to demonstrate adequate reliability and discriminant validity. Adequate construct validity was determined using the known groups technique.

The SCSI was developed and tested primarily on white children, so Ryan-Wenger and Copeland (1994) conducted a study to determine the reliability and validity of the SCSI with a sample of black schoolage children, and to assess the coping strategies that they use. Ryan's 1989 study was replicated with this sample of primarily

disadvantaged black children (n=123) who ranged in age from 8 to 12 and were in grades 3 through 5. The sample consisted of 24 boys and 35 girls. Results indicated that this sample of children reported 298 coping strategies that all fit into one of the original 13 categories, and that all 13 categories were represented. Content validity, internal consistency reliability, and criterion-related validity (using known groups technique) were demonstrated with this sample of black children.

As the result of these studies, the following gender differences were concluded. Results (of the open ended questionnaire data) indicated that the categories of coping strategies most frequently named by both boys and girls were Distraction and Social Support. Boys named strategies in the Relaxation category significantly more often than girls, and girls named strategies in the Avoidance, Aggressive Motor Activities, Accepting Responsibility, and Spiritual Activity categories significantly more than boys. T-test analysis of the SCSJ scores indicated that girls' mean scores on the coping frequency and coping effectiveness scales were significantly higher than the boys' mean scores on those scales "which suggests that girls use a greater variety of coping strategies and perceive them to be more effective than boys do" (p. 36). The most frequently used strategies by boys were "watch TV or listen to music" (79.1%), "draw, write, or read something" (70.9%), "play a game or something" (70.9%), and "sleep or take a nap" (70.9%). The most frequently used strategies for girls were "watch TV or listen to music" (77.2%), "get mad" (68.6%), "say I'm sorry or tell the truth" (68.6%) and "think about it" (68.6%). Girls used six strategies significantly more than boys: "cry or feel sad"; "do work around the house"; "hit, throw, or break things"; "pick on someone"; "run or walk away"; and "yell or scream." Social Support was the category of coping strategies that was used most frequently before a stressful event, and Social Support and Distracting Behaviors were used most often during and after the event.

Examination of questionnaire and SCSI data in regard to effectiveness revealed that the coping categories of Social Support, Physical Exercise, and Relaxation were listed as helpful, whereas Aggressive Motor and Emotional categories were more often viewed as not helpful. The most helpful strategies for boys were "watch TV or listen to music" (62.5%), "sleep or take a nap" (54.2%), "say I'm sorry or tell the truth" (50%), "and "draw, write, or read something" (50%). For girls the most helpful strategies were "watch TV or listen to music" (65.7%), "pray" (62.9%), "say I'm sorry or tell the truth" (62.9%), "talk to someone" (62.9%), and "walk, run, or ride my bike" (62.9%). The strategy "be by myself" was found to be significantly more effective for boys than girls. Girls found six strategies to be significantly more effective than boys did: "cry or feel sad"; "daydream"; "hit, throw, or break things"; "talk to someone"; "walk, run, or ride my bike"; and "yell or scream." Overall, the boys' mean SCSI scores were consistently lower than the girls' scores. Additionally, the boys had significantly lower coping effectiveness scores than the girls and many of the boys recognized that they used coping strategies that were not effective.

Ryan-Wenger & Walsh (1994) used the Schoolagers' Coping Strategies Inventory to identify the coping strategies that children with asthma use when having a problem with asthma. The sample consisted of 78 children (42 boys and 36 girls) who were 8 to 13 years old and attending a Lung Association camp. There were no significant differences in Frequency or Effectiveness scores for age, gender, race or severity of asthma. The most frequently used coping strategies were: "Watch TV or listen to music", "Try to relax; stay calm", "Say I;m sorry or tell the truth", "Do something about it", and "Walk, run or ride my bike". The most effective coping strategies were: "Try to relax; stay calm". "Watch TV or listen to music", "Pray", "Say I'm sorry or tell the truth", and "Do something about it".

Compas, Malcarne, and Fondacaro (1988) sampled 130 children and young adolescents (73 girls and 57 boys ranging in age from 10 to 14 years, $M=11.89$, $SD=1.01$) to examine the capacity of the children to generate alternative solutions to cope with stressful events as well as the strategies they used to cope with interpersonal and academic stressors. The children completed open-ended questionnaires in which they identified a recent (within the past 3 months) "particularly" stressful interpersonal event and one academic event. They were then asked to list all the possible ways they could have handled the event and to check the strategies they actually used. All responses were then classified as problem-focused coping or emotion-focused coping. Two measures to assess emotional/behavioral problems were also used: the Child Behavior Checklist (CBCL; Achenback & Edelbrock, 1983) completed by the subjects' mothers and the Youth Self-Report version of the CBCL (YSR; Achenback & Edelbrock, 1987) completed by the subject. Results indicated that the generation of emotion-focused solutions and the use of emotion-focused coping strategies increased from the sixth to eighth grade, whereas the generation and use of problem-focused coping stayed relatively consistent from sixth to eighth grade. Girls reported using more emotion-focused strategies than did boys in response to academic events, however, strong gender differences in the generation and use of coping strategies were not found. Modest correlations were reported between coping and emotional/behavioral problems. Coping with social stressors was correlated significantly with emotional/behavioral problems, but academic stressors were not. Additionally, more adjustment problems were identified in the children who had difficulty generating and using problem-focused coping strategies.

A few studies measured both stressors and coping strategies in schoolage children. Sorensen (1994) used semistructured diaries that were kept by 21 rural

children and 23 suburban children over a period of six weeks to assess daily stressors and coping "efforts" and coping resources that the children experienced. There were differences between the rural and suburban children in both the stressors and coping efforts. Both rural boys' suburban boys' major sources of stress for were home chores and school. Rural boys major sources of stress also included friends and siblings, whereas suburban boys' major sources of stress also included emotional discomfort. Rural girls major sources of stress were disappointment, emotional discomfort, physical symptoms, school and friends, whereas suburban girls listed friends, disappointment, school, home chores and siblings. In regard to coping efforts and resources, suburban boys listed submission ("waiting it out" and "doing what I have to do") five times more often than rural boys, whereas the rural boys listed organized activities about three times more often than suburban boys. Girls reported problem-solving efforts more than boys, and boys reported sports as a coping resource more than girls. All children reported home comforts (with suburban boys having the most) as coping resources, and all children were likely to seek friends for social support, and to seek the mother for social support within the family.

Sharrer & Ryan-Wenger (1991) also measured both stressors and coping strategies in their study of schoolage children with ($n=25$) and without ($n=25$) recurrent abdominal pain (RAP). The Feel Bad Scale was used to measure stressors and the Schoolagers' Coping Strategies Inventory was used to measure coping strategies. Children with RAP had higher mean scores for frequency, severity and total scores ($p=0.03$ for total scores), suggesting that the children with RAP perceived their stress to be more severe than other children. The children with RAP reported their most frequently experienced stressors to be: "having nothing to do", "feeling sick", "not spending enough time with your mom and dad", and "having your parents argue in front

of you". The non-RAP most frequently identified stressors were: "feeling sick" and "feeling left out of the group", and their most stressful (rated as "terrible" or "real bad") items were: "having parents separate", "feeling left out of the group", and "being pressured to try something new".

There were no significant differences between groups on the coping scores. Both groups reported frequently using physical, avoidant, distracting (cognitive activities), and other ("say I'm sorry or tell the truth") coping strategies. The non-RAP children used more distracting, relaxation, and cognitive activities than the RAP group, whereas the RAP group used more isolating and social support activities than the non-RAP group. There were significant differences between the groups for the effectiveness of two coping strategies: "watch TV or listen to music" was more effective for the RAP group than for the non-RAP group, and "draw, write or read something" was more effective for the non-RAP group.

Sharrer & Ryan-Wenger (1995) then did a 2-year longitudinal study to assess age and gender differences of stressors and coping strategies in schoolage children. The sample at Time 1 was 101 mostly white children aged 8 to 11 years old, and the Time 2 sample size was 84. The Feel Bad Scale was used to measure the stressors and the Schoolagers' Coping Strategies Inventory was used to measure the coping strategies. There were no significant differences for age, gender or time for mean stressor frequency scores or mean coping frequency scores. Overall, the highest severity of stressor scores were for 8 and 9 year old boys and 8 year old girls at Time 1 ($p < 0.05$), and 11 year old boys (who were 9 at Time 1) at Time 2 ($p < 0.05$). There was a significant interaction between age and time for mean coping effectiveness scores ($p = 0.02$). The 9 year old children had the highest coping effectiveness scores at Time 1, and at Time 2, 12 year old children had the lowest coping effectiveness scores. The

most frequent stressors for children by age were: age 8 "Feeling sick"; age 9 "Not spending enough time with Mom and Dad; age 10 "Having nothing to do"; age 11 "Not being able to dress the way you want to"; age 12 "Pressured to get good grades"; and age 13 "Being too small for your age". Girls experienced two stressors significantly more than boys: "Not being good enough at sports" (at age 11 and 13), and "Fighting with parents about house rules" (age 13). Girls also perceived four stressors as more severe than boys: "Not being good enough at sports" (age 10), "Being pressured to try something new" (age 11), "Moving from one place to another" (age 12), and "Feeling left out of the group" (age 12). Thirteen year old boys fought more often with their parents than did girls.

The most frequently used coping strategies by age: age 8 "Say I'm sorry or tell the truth", age 9 and 10 "Draw, write, or read something", age 11 and 13 "Watch TV or listen to music" and age 12 "Think about it". Girls used six coping strategies more frequently than boys and boys used nine coping strategies more than did the girls. Overall, strategies were more effective for girls, however the boys did find two strategies to be more effective than girls ("Walk, run or ride my bike" for 10-12 year old boys, and "Play a game or something" for boys age 11-13).

Over time, only 8 year olds girls had significant changes in perception of the stressors: two stressors decreased in frequency and eight stressors decreased in severity. There were also some significant changes in coping strategies over the two year time period: Eight year old girls reported a decrease in the frequency of "Eat or drink" and "Cuddle my pet", and an increase in the coping strategy "Think about it". Boys reported an increase in effectiveness for two distraction strategies, and girls reported an increase in effectiveness of the strategy "Think about it" and a decrease in the effectiveness of the strategy "Bite my nails". Overall, there was a decrease in the

severity of stress over the two year period.

The above studies by Ryan and colleagues and Compas and colleagues are similar in that the researchers gathered data from the child's perspective rather than using a tool that had been developed for adults and then modified for use with children.

For this study, the Schoolager's Coping Strategies Inventory (Ryan-Wenger, 1990) was used to gather data about children's coping. It was the best choice because the items were developed with input from children, it has established reliability and validity and it is appropriate for use with younger children. In combination with the Feel Bad Scale that was used to gather data about children's stress, this study will add to what we know about stress and coping from the child's perspective. The large sample size of children from a small town rather than an urban community will also add to this knowledge of the child's perspective of stress and coping.

Theoretical Framework

The theoretical framework underlying this study is derived from Lazarus and Folkman's (1984) theory of stress and coping. Their research and theory is based on adult perceptions. There is no stress and coping theory specific to children. Lazarus and Folkman's theory has been the theory most frequently used to guide studies of stress and coping in children.

Lazarus and Folkman's (1984) theory is a cognitive theory and their definition of psychological stress is "a 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" (p. 19). They define coping as "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person." (p.141).

Cognitive appraisal is a key concept in the stress-coping process. "Cognitive

appraisal is an evaluative process that determines why and to what extent a particular transaction or series of transactions between the person and the environment is stressful." (Lazarus & Folkman, 1984, p.19). Primary appraisal is the individual's cognitive appraisal of the stressor; whether an encounter is appraised as irrelevant (nothing lost or gained), benign-positive (if the outcome of an encounter is construed as positive), or stressful. Stressful appraisals can be harm/loss (some damage to the person has already occurred), threat (anticipated harms or losses) or challenge (potential for gain or growth is inherent in such an encounter). Secondary appraisal is the appraisal of one's own coping resources ("what might and can be done" p. 35), and reappraisal is appraisal of the stressor again in light of one's coping resources. This is a process approach to coping with stress.

According to Lazarus and Folkman (1984) there are three main features to a process approach to coping with stress:

First, observations and assessment are concerned with what the person **actually** thinks or does, in contrast to what the person usually does, would do, or should do, which is the concern of the trait approach. Second, what the person actually thinks or does is examined within a **specific context**. Coping thoughts and actions are always directed toward particular conditions. Third, to speak of a coping process means speaking of **change** in coping thoughts and acts as a stressful encounter unfolds. (p.142).

Lazarus' theory, as stated previously, is based on work with adults. There are a few researchers who study coping in children who use Lazarus' theory, but add a developmental perspective to their frameworks. (Compas, 1987; LaMontagne, 1983, 1984, 1987a, 1987b; Ryan, 1988, 1989, 1992). Lazarus' theory was chosen as the guiding framework for this study because of its central concept of appraisal. The items

on both the Feel Bad Scale and the Schoolagers Coping Strategies Inventory were derived from the children's perspective, thus support the cognitive appraisal aspect of Lazarus' theory (Ryan-Wenger, 1990, 1994). Additionally, the children are asked to determine the severity of the stressors and the helpfulness of the coping strategies, which is also part of the appraisal process. Further study of children using Lazarus' work will help determine if it is as applicable to children as it seems to be.

Statement of the Problem

Most of what we know about stress and coping in children is based on studies with very small samples. Additionally, the majority of the studies that have been done have been adult perspectives of the child's world, thus we know little about stress and coping from the child's perspective. The purpose of this study was to describe stress and coping from the child's perspective. Developmental as well as gender differences in stress and coping were the focus of this descriptive study.

The research questions

The overall research question for this study was: How do schoolage children experience and cope with stress in their lives? This broad question was broken down into several specific questions which are listed with the corresponding analyses in the next section.

CHAPTER 3

Research Design and Methods

Design

This was a cross-sectional, descriptive, comparative study of stressors and coping strategies identified by schoolage children. The purpose of this study was to provide a description of the stressors identified and coping strategies used by schoolage children and to compare them between genders and across ages. A broad sampling of

schoolage children was chosen because there are still gaps in the literature regarding "normal" children's own views of their stressors and coping strategies. For this purpose, 777 schoolage children were asked to fill out the Feel Bad Scale and the Schoolager's Coping Strategies Inventory. Testing was done in the school, either in the classroom or the school library. Data obtained were analyzed descriptively and Analysis of Variance (ANOVA) was done to detect any main effects and/or interaction effects for age and gender.

Setting

Data were collected in a public school system in the Northwest. The school district is located in a primarily lower middle/middle class town of about 33,000 people, most of whom are white. Six schools, four elementary (of seven in the district) and two middle schools (of two), were chosen to represent the school district. These schools were chosen for the representitiveness of the schoolchildren of the district in that these schools have children from all socioeconomic and ethnic groups. Both middle schools in the district were used, which represents all of the middle schools in the city, in order to obtain enough children in each age group. The ethnicity of the schoolchildren in the six schools that participated in this study was: 93.5 percent Caucasian, 3.5 percent Hispanic, 3.4 percent Asian, 1.5 percent American Indian and .6 percent Afro American (School enrollment reports, Oct 1994). At the time the data were collected, the median household income for residents of the county in which this school district resides was \$32,971, which was less than the state median income of \$38, 838. The percentage of people under 18 in poverty was 18.1 percent. (US Census Bureau). This population of schoolchildren will also add to what we know about stress and coping in this age group. Since the majority of studies have been done on children from middle and upper-middle class urban environments, the use of this sample from a smaller, primarily lower

middle/middle class (blue-collar) community will extend our knowledge about stress and coping in schoolage children.

The sample

The sample consisted of 777 children in the grades three through eight. The children ranged in age from seven through sixteen. A power analysis for Analysis of Variance (ANOVA) was done with an alpha of 0.05, a power of 0.81 and a moderate effect size (0.15). It indicated that the sample needed to consist of at least 600 children; a minimum of 50 boys and 50 girls in each grade from third through eighth (age range 8 to 14 years). The school district had seven elementary schools and two middle schools. Four of the elementary schools and both of the middle schools participated in this study. Three of the elementary schools had about 300-320 eligible children (in grades 3-5); the fourth had about 200 children that were eligible. The middle schools had approximately 950 and 825 students. All of the children in the grades 3 through 8 in the six schools were asked to participate. Those who returned signed consent forms comprised the sample. There was a 33 percent response rate for children in the elementary schools and a 23 percent response rate for the middle school children for an overall response rate of 27 percent.

Protection of Human Subjects

The proposal was approved by the Committee on Human Research (CHR) at Oregon Health Sciences University. The Superintendent of Schools and the Principals of the elementary and middle schools from the school district also approved the study.

Confidentiality of the data was protected. Identification numbers were used instead of names on the data collection materials.

This study involved minimal risk to the children who participated. The self-report stress scale and the self-report coping scale may have resulted in some anxiety. Since

the children were asked personal information, there was a potential risk for a child to experience some distress related to feelings that some items may trigger, and some school time was used.

The data collection was conducted in small groups and took approximately 30 minutes. This time was coordinated with the teachers so that it did not interrupt or infringe on instructional time.

Children who participated in this study might have benefited by being made aware of their stressors and the coping strategies that are available for them to use.

Instruments

The Feel Bad Scale was used to measure the level of stress (Lewis, Seigel & Lewis, 1984; Appendix A). The Feel Bad Scale is a 20 item, self-report measure that measures the frequency and severity of daily hassles and some life events on a five-point scale (0-4). The children responded how frequently ("How often does it happen?"; 0=never, 1=1 or 2 times, 2=sometimes, 3=often, 4=all the time) the stressor occurs and how bad it is ("How bad is it?"; 0=not bad, 1=a little bad, 2=pretty bad, 3=real bad, 4=terrible). The items represent family ("Having your parents argue in front of you"; "Fighting with your parents about house rules"), academic ("Not having homework done on time"; "Not getting along with your teacher"), peer ("Being pressured to try something new, like a cigarette, that you really don't want to try"; "Feeling left out of a group") and personal stressors ("Feeling sick"; "Feeling like your body is changing"). The items were generated via individual and small group interviews with 50 to 60 fifth and sixth graders. The total Feel Bad score is a sum of the products of the frequency times intensity ratings for all the items. Higher scores indicate greater stress than lower scores. A sample of 2,480 fifth graders participated in the psychometric testing the scale. Internal consistency of the Feel Bad Scale was alpha coefficient = 0.82. Convergent validity was

established.

The Schoolagers' Coping Strategies Inventory (SCSI, Ryan, 1989; Ryan-Wenger, 1990; Appendix B) was used to measure the children's coping. It is a 26 item self-report instrument that measures frequency and effectiveness of coping strategies on a four-point scale (0-3). Children responded how frequently they used each coping strategy (Frequency Scale: "How often do you do this?"; 0=never, 1=once in a while, 2=a lot, 3=most of the time) and how helpful each strategy was (Effectiveness Scale: "How much does it help?"; 0=never do it, 1=does not help, 2=helps a little, 3=helps a lot). High scores suggest a wide repertoire of coping strategies, and/or highly effective coping strategies.

Items on the Schoolagers' Coping Strategies Inventory were generated from small group discussions and on individual questionnaires with 8 to 12 year old children (n=103). Examples of the items are "Be by myself; be alone", "Daydream", "Eat or drink", and "Play a game or something". It was pilot tested on 107 eight to 12 year old children, and tested for validity and reliability on a sample of 250 eight to 12 year old children. All of the samples of children were primarily Caucasian and from lower to upper middle class environments; however, the scale has been recently validated for use with black children from low income families (Ryan-Wenger & Copeland, 1994). Internal consistency of the Schoolagers' Coping Strategies Inventory is sufficient. The Frequency Scale Cronbach alpha = 0.76 and the Effectiveness Scale Cronbach alpha = 0.77. According to Nunnally (1978) an internal consistency of 0.70 is considered sufficient for newer scales. Test-retest reliability correlations (after 2 weeks) were $r = 0.73$ for the Frequency Scale and $r = 0.82$ for the Effectiveness Scale. Discriminant validity was supported with a self-esteem measure ($r = -0.03$ & -0.08) and a stress measure ($r = 0.10$). Construct validity was supported using known groups:

Schoolagers' Coping Strategies Inventory scores have been found to differentiate between children with psychosomatic, academic and/or behavioral problems and asymptomatic children, in that the children with symptoms had significantly lower coping frequency and effectiveness scores ($p < 0.05$).

Data collection procedures

Initially, this author met with the Superintendent of the school district to determine the feasibility of using the children in the school district. The superintendent stated approval would be granted if the principals of the schools agreed and was contingent upon approval by the Committee on Human Research at Oregon Health Sciences University. All the school principals agreed to participate.

Letters were sent home from school with the children to the parents/guardians explaining the study and requesting permission for their child to participate (Appendix D and E). Consent forms (Appendix F) were also sent with the letters. The parent/guardian letters and consent forms were distributed to the children by the author in the elementary classrooms, by the teachers in middle schools. The returned consent forms were collected by the teachers.

Upon the return of the consent forms, the author coordinated with the teachers to set up times to administer the scales. The data collection was conducted in small groups of 3 to 20 children in the libraries or a vacant classroom. The author introduced herself and her purpose and gave the directions for completing the forms. An overhead projector was used with an example to demonstrate the process. The first form to be completed was the Feel Bad Scale. Using an overhead of the form, each item was then read by the investigator to all the grade school children. The overhead of the forms was used only for an example with the middle school children. When the Feel Bad Scale was completed, the Schoolagers' Coping Strategies Inventory was explained and the

same process completed. When both of the above scales were completed, the author handed out papers that asked questions for demographic description (age, grade, school and gender)(Appendix C). Upon completion of the forms, the forms were collected and the children were released back to their classrooms.

Data collection took 30 minutes for the grade school children and 15 to 20 minutes for the middle school children. The data collection period took three months.

The research questions and data analysis

The following are the fourteen specific research questions posed for this study and the appropriate analyses to answer them.

1. How frequently are each of the stressors listed on the Feel Bad Scale experienced by the children in this sample?

Mean scores were computed on each individual item in the "How often does it happen?" column of the Feel Bad Scale.

2. How "bad" do the children think each of the items on the Feel Bad Scale is?

This question was analyzed by computing mean scores on each individual item in the "How bad is it?" column of the Feel Bad Scale.

3. How frequently are each of the coping strategies listed on the Schoolagers' Coping Strategies Inventory used by the children?

Mean scores were computed on each individual item in the "How often do you do this?" column of the Schoolagers' Coping Strategies Inventory.

4. How "helpful" do the children experience each of the coping strategies on the Schoolagers' Coping Strategies Inventory?

This question was analyzed by computing mean scores on each of the individual items in the "How much does it help" column of the Schoolagers' Coping Strategies Inventory.

5. How frequently are each of the stressors listed on the Feel Bad Scale experienced by the children by grade and gender in this sample?

Mean scores were computed on each individual item in the "How often does it happen?" column of the Feel Bad Scale by grade and gender.

6. How "bad" do the children think each of the items on the Feel Bad Scale is by grade and gender?

This question was analyzed by computing mean scores on each individual item in the "How bad is it?" column of the Feel Bad Scale by grade and gender.

7. How frequently are each of the coping strategies listed on the Schoolagers' Coping Strategies Inventory used by grade and gender?

Mean scores were computed on each individual item in the "How often do you do this?" column of the Schoolagers' Coping Strategies Inventory by grade and gender.

8. How "helpful" do the children experience each of the coping strategies on the Schoolagers' Coping Strategies Inventory by grade and gender?

This question were analyzed by computing mean scores on each of the individual items in the "How much does it help" column of the Schoolagers' Coping Strategies Inventory by grade and gender.

9. What is the effect of age and gender on the frequency with which the children encounter each of the stressors listed in the "How often does it happen?" column of the Feel Bad Scale?

This question was analyzed by 20 2-way ANOVAs in which the independent variables are age and gender. The dependent variables were the mean of each of the 20 items.

10. What is the effect of age and gender on the children's experience of how "bad" each of the stressors listed in the "How bad is it?" column of the Feel Bad Scale makes them feel?

This question was analyzed by 20 2-way ANOVAs in which the independent variables were age and gender. The dependent variables were the mean of each of the 20 items.

11. What is the effect of age and gender on the frequency of use of coping strategies listed in the "How often do you do this?" column of the Schoolagers' Coping Strategies Inventory?

This question was answered by 26 2-way ANOVAs in which the independent variables were age and gender. The dependent variables were the mean of each of the 26 items.

12. What is the effect of age and gender on the children's experience of how helpful each of the coping strategies listed in the "How much does it help?" column of the Schoolagers' Coping Strategies Inventory?

This question was answered by 26 2-way ANOVAs in which the independent variables were age and gender. The dependent variables were the mean of each of the 26 items.

13. What is the effect of age and gender on frequency and stressfulness of stressors and total stress in schoolage children as measured by total scores on the Feel Bad Scale?

This question was answered by three 2-way ANOVAs. For the first 2-way ANOVA the independent variables were age and gender and the dependent variable was the average total score from the "How often does it happen?" column of the Feel Bad Scale. For the second 2-way ANOVA the independent variables were age and gender and the dependent variable was the total "badness" score from the "How bad is it?" column of the Feel Bad Scale. For the third 2-way ANOVA the independent variables were age and gender and the dependent variable was the Total score of the Feel Bad Scale (derived by multiplying the badness times the frequency rating for each item and

summing these products).

14. What is the effect of age and gender on frequency and helpfulness of coping strategies in schoolage children as measured by scale scores on the Schoolagers' Coping Strategies Inventory?

This question was answered by two 2-way ANOVAs. For the first 2-way ANOVA the independent variables were age and gender and the dependent variable was the total score in the "How often do you do this?" column of the Schoolagers' Coping Strategies Inventory. For the second 2-way ANOVA the independent variables were age and gender and the dependent variable was the total score in the "How much does it help?" column of the Schoolagers' Coping Strategies Inventory.

In addition to these analyses, internal consistency for this sample on all scales was done.

CHAPTER 4

Results

The sample

The sample consisted of 777 children in the grades three through eight from age seven through sixteen. It included 304 boys and 473 girls. The following table illustrates the breakdown of boys and girls by grade.

Table 1

The sample by grade and gender

Grade	3	4	5	6	7	8	Total
Boys	59	49	52	40	51	53	304
Girls	70	72	63	99	77	92	473
Total	129	120	115	139	128	145	777

Analysis of instrument reliability and mean scores

The following table illustrates the instrument reliability and scale mean scores for the sample.

Table 2

FBS and SCSi Scale Mean and Reliability Scores for the sample

Scale	N	Mean	Standard Deviation	Coefficient Alpha
FBS-Total Scale	617	102.2577	20.8370	.8733
FBS-Frequency Scale	645	44.6046	10.1857	.7939
FBS-Badness Scale	673	57.7058	15.8980	.8888
SCSi-Frequency Scale	624	59.2564	9.1238	.7760
SCSi-Helpfulness Scale	568	67.3134	9.4679	.7467

The next table (Table 3) describes the sample in terms of their general responses to the two tools used.

Table 3

Descriptive Statistics for the FBS and SCSi

Scale	N	Mean	Standard Deviation
FBS-Total Scale	777	2.5599	.5264
FBS-Frequency	777	2.2194	.5240
FBS-Badness	777	2.8966	.8903
SCSi-Frequency	776	2.2898	.3609
SCSi-Helpfulness	773	2.5848	.3731

Analysis of research questions

To answer Question 1 "How frequently are each of the stressors listed on the Feel Bad Scale experienced by the children in this sample?" the average score for each item on the "How often does it happen" column of the FBS were computed. Table 4

reports the ten most frequently identified items as determined by the highest means for each individual item. (See Appendix F , Table 8 for the complete list). The most frequently occurring stressor, "Feeling sick" with a Mean of 2.934, indicates that for this sample of children, the most they are stressed overall is "sometimes". The range of means (1.523-2.932) also indicates that overall this sample of children experiences these stressors infrequently.

Table 4

The frequently reported stressors ("How often does it happen?") of the sample.

Item	Mean	S.D.	N	n*
1. Feeling sick	2.934	0.851	750	730
2. Having nothing to do	2.825	1.105	761	669
3. Not spending enough time with your Mom or Dad	2.597	1.244	766	588
4. Having your parents argue in front of you	2.547	1.036	766	639
5. Fighting with your parents about house rules	2.531	1.266	768	574
6. Not having enough money to spend	2.517	1.261	756	567
7. Feeling left out of the group	2.466	1.112	757	615
8. Being pressured to get good grades	2.459	1.418	761	499
9. Not having homework done on time	2.434	1.078	772	619
10. Feeling like your body is changing	2.385	1.156	761	570

The FBS is a five point scale where 1=never, 2=1 or 2 times, 3=sometimes, 4=often, and 5=all the time.

*number of children that experienced the stressor

Means were also computed for each item in the "How bad is it?" column of the FBS to answer Question 2 "How bad do the children think each of the items on the Feel Bad Scale is?" Table 5 lists the ten most stressful items. (See Appendix G , Table 9 for

all 20 items) As shown in Table 9, the range of Mean scores is 2.055 to 3.734, which indicates that the children report these stressors overall as “a little bad” (2), “pretty bad” (3) or “real bad” (4).

Table 5

The item stressfulness (“How bad is it?”) of the sample of children.

Item	Mean	S.D.	N
1. Having parents separate	3.734	1.401	764
2. Being pressured to try something new, like a cigarette, that you really don't want to try	3.493	1.401	763
3. Feeling left out of the group	3.446	1.358	763
4. having your parents argue in front of you	3.214	1.324	770
5. Feeling sick	3.173	1.335	771
6. Not having homework done on time	3.069	1.382	769
7. Being overweight or bigger than others your age	2.959	1.529	759
8. Not spending enough time with your Mom and Dad	2.944	1.378	769
9. Changing schools	2.877	1.454	763
10. Not having enough money to spend	2.876	1.514	758

The FBS is a five point scale where 1=not bad, 2=a little bad, 3=pretty bad, 4=real bad and 5=terrible.

Six of the most frequently occurring stressors were also reported to be among the most stressful or “bad” items by this sample. “Feeling sick”, which was the most frequently reported stressor by this sample, was also reported to be the fifth for badness.

“Not spending enough time with your Mom or Dad” was reported to be the third most frequently occurring as well as the eighth most stressful/bad item. Likewise, “Having your parents argue in front of you” was reported as the fourth most frequently occurring,

and the fourth most stressful/bad item by this sample of children. "Not having enough money to spend" was reported as the sixth most frequently occurring stressor and to be the tenth for badness. "Feeling left out of the group" was reported to be the seventh most frequently occurring stressor, but was identified as the third most stressful/bad item. "Not having homework done on time" was ninth for frequency and sixth overall for badness.

While "Having nothing to do" was reported as the second most frequently occurring stressor, it was not considered to be terribly stressful/bad (seventeenth). "Fighting with your parents about house rules" also does not seem particularly stressful for these children as it is rated fifteenth place overall for badness even though it was the fifth most frequently experienced stressor.

To answer Question 3, "How frequently do the children use each of the coping strategies on the Schoolagers' Coping Strategies Inventory?", the most frequently identified coping strategies were assessed by computing the average score for each individual item on the "How often do you do this?" column of the Schoolagers' Coping Strategies Inventory. Table 6 lists the 10 most frequently reported coping strategies. The children reported using these coping strategies "once in a while" to "a lot" of the time, with the range of Mean scores 1.597 to 3.102. (See Appendix H, Table 10 for all 26 items).

The five most frequently used coping strategies indicate that children use a combination of diversionary, cognitive and active coping skills "alot" of the time.

Table 6

The most frequently reported coping strategies (How often do you do this?) of the sample.

Item	Mean	S.D.	N
1. Watch TV or listen to music	3.102	0.868	765
2. Draw, write or read something	2.673	0.950	774
3. Say I'm sorry or tell the truth	2.650	0.906	760
4. Think about it	2.601	0.866	762
5. Walk, run or ride my bike	2.558	0.963	763
6. Try to relax, stay calm	2.528	0.912	760
7. Get mad	2.496	0.799	774
8. Talk to someone	2.493	0.916	754
9. Eat or drink	2.475	0.969	768
10. Do work around the house	2.371	0.943	766

The coping scale is a 4-point scale on which 1=never, 2=once in a while, 3=a lot and 4=most of the time.

The most helpful coping strategies identified by this sample of children (Table 7) were assessed by computing the average score of each of the individual items on the "How much does it help?" column of the SCSI to answer Question 4, which was "How 'helpful' do the children experience each of the coping strategies on the Schoolagers' Coping Strategies Inventory?". (See Appendix I, Table 11 for all 26 items) This sample of children report that some of the coping strategies that they use help and some do not. Sixteen of the strategies are reported to be helpful (Means of 2.902 to 3.329) and ten of them are reported not to be (Means of 1.776 to 2.439) or not used at all.

The children report that they generally use the most effective coping strategies most often. Seven of the ten most frequently used strategies are also considered to be among the ten most helpful coping strategies. "Watch TV or listen to music" was the most frequently used strategy as well as the most helpful. This was closely followed by

“Draw, write or read something” (second for frequency and third for helpfulness) and “Say I’m sorry or tell the truth” (third for frequency and second for helpfulness). “Think about it” (fourth for frequency and eighth for helpfulness), “Talk to someone” (eighth for frequency and fourth for helpfulness, “Walk, run or ride my bike” (fifth for both), and “Try to relax, stay calm” (sixth for both) were the other strategies that were most frequently used and most helpful.

The children were also able to identify strategies that they used frequently but that were not helpful to them, such as “Get mad” (seventh for frequency and twenty-first for helpfulness) and “Eat or drink” (ninth for frequency and fourteenth for helpfulness). Conversely, these children also identified strategies that were helpful to them that they did not use as often as other strategies, such as “Pray” (eighteenth for frequency and tenth for helpfulness) and “Be by myself, be alone” (sixteenth for frequency and ninth for helpfulness).

Table 7

The most helpful coping strategies (“How much does it help?”) by sample.

Item	Mean	S.D.	N
1. Watch TV or listen to music	3.329	0.809	759
2. Say I'm sorry or tell the truth	3.230	0.922	752
3. Draw, write or read something	3.071	0.978	762
4. Talk to someone	3.037	0.993	750
5. Walk, run or ride my bike	3.016	1.003	757
6. Try to relax, stay calm	2.922	0.943	752
7. Do something about it	2.902	1.038	735
8. Think about it	2.900	0.872	753
9. Be by myself; be alone	2.876	0.894	764
10. Pray	2.765	1.254	754

This portion of the scale is also a 4-point scale where 1=never do it, 2=does not help, 3=helps a little and 4=helps a lot

To answer Question 5, "How frequently are each of the stressors listed on the Feel Bad Scale experienced by the children by grade and gender?", mean scores were computed by grade and gender on each individual item in the "How often does it happen?" column of the Feel Bad Scale (Appendix J, Table 12).

To answer Question 6, "How bad do the children think each of the items on the Feel Bad Scale is by grade and gender?", means scores by grade and gender on each individual item in the "How bad is it?" column of the Feel Bad Scale. (Appendix K, Table 13).

To answer Question 7, "How frequently are each of the coping strategies listed on the Schoolagers' Coping Strategies Inventory used by the children by grade and gender?" mean scores were computed by grade and gender on each individual item in the "How often do you do this?" column of the Schoolagers' Coping Strategies Inventory. (Appendix L, Table 14).

To answer Question 8, "How helpful do the children experience each of the coping strategies on the Schoolagers' Coping Strategies Inventory by grade and gender?", mean scores were computed by grade and gender on each of the individual items in the "How much does it help" column of the Schoolagers' Coping Strategies Inventory. (Appendix M, Table 15).

Analysis of the interaction effects

Analysis of Variance (ANOVA) computations were done to answer question number 9, "What is the effect of age and gender on the frequency with which the children encounter each of the stressors listed in the 'How often does it happen?' column of the Feel Bad Scale?". Twenty 2-way ANOVAs in which the independent variables were age and gender and the dependent variables were the average score of each of the 20 items were computed. No significant effects were found.

Question 10 "What is the effect of age and gender on the children's experience

of how “bad” each of the stressors listed in the “How bad is it?” column of the Feel Bad Scale makes them feel?” was answered by computing 20 2-way ANOVAs in which the independent variables were age and gender and the dependent variables were the average score of each of the 20 items.

The item “Pressured to try something new, like a cigarette, that you really don’t want to try” was the only item to have a statistically significant effect for age and gender ($p=0.05$). The younger the children were, the more “bad” they perceived it to be. Analysis using the post hoc Scheffe test revealed that each grade perceived it to be more “bad” than higher grades. Thus third graders thought it to be worse than children in fifth ($=0.0002$), sixth ($p<0.0001$), seventh ($p<0.0001$) and eighth ($p<0.0001$) grades; fourth graders perceived it as more “bad” than sixth ($p=0.0339$), seventh ($p<0.0001$) and eighth ($p<0.0001$) graders; fifth graders reported it as more “bad” than seventh ($p=0.0011$) and eighth ($p<0.0001$) graders; sixth graders reported it as more “bad” the seventh (0.0442) and eighth ($p<0.0001$) graders and seventh graders thought it to be more “bad” than eighth graders ($p=0.0452$).

To answer question 11, “What is the effect of age and gender on the frequency with which the children encounter each of the coping strategies listed in the ‘How often do you do this?’ column of the Schoolager’s Coping Strategies Inventory” 26 2-way ANOVAs were done in which the independent variables were age and gender and the dependent variables were the average score of each of the 26 items.

The coping strategies “Get mad”, “Talk to someone”, and “Yell or scream” (Tables 16, 17, and 18, Appendix N) all revealed significant effects for age and gender. Girls reported using all three of these coping strategies significantly more than boys reported using them. Third grade girls and eighth grade girls reported using the coping strategy “Yell or scream” significantly more than any of the other children.

To answer Question 12, “What is the effect of age and gender on the children’s

experience of how helpful each of the coping strategies listed in the "How much does it help?" column of the Schoolagers' Coping Strategies Inventory?", 26 2-way ANOVAs were computed in which the independent variables were age and gender and the dependent variables were the mean of each of the 26 items.

Girls found the coping strategies "Talk to someone" and "Yell or scream" to be significantly more helpful than boys reported them to be (Tables 19-20, Appendix O).

Question 13, "What is the effect of age and gender on frequency and stressfulness of stressors and total stress in schoolage children as measured by total scores on the Feel Bad Scale?", was answered by the computation of three 2-way ANOVAs (Table 21, Appendix P). The assumptions of ANOVA were met. There were significant grade differences ($p < 0.0001$) and significant gender differences ($p = 0.0190$); however, there were no significant grade-gender differences.

Question 14, "What is the effect of age and gender on frequency and helpfulness of coping strategies in schoolage children as measured by scale scores on the Schoolagers' Coping Strategies Inventory?" was answered by the computation of 2-way ANOVAs (Table 21, Appendix P). The SCSI Frequency scale had significant grade differences, significant gender differences and significant grade by gender differences. There were no significant differences on the SCSI Helpfulness Scale.

CHAPTER 5

Discussion

The Sample

One of the strengths of this study is the large sample size. Each age group is amply represented which allows for comparison across ages. Another strength is that the children in this study are all from the public school system in a Northwest city of approximately 30,000 people. Most of the previous research has been done on children

from private schools in urban settings. In this community, the majority of children attend the public school system in the elementary schools and all but a very small number attend the public middle schools. Thus, the sample from which these children were drawn is likely to be representative of all the school children in the community.

The response rate was 33 percent for children in the elementary schools and 23 percent for middle school children for an overall response rate of 27 percent. This compares to response rates of 68-81 percent in similar studies in the literature; however, this was a much larger population than the other studies. The data were also collected in the spring, when the children have a tendency not to turn in assignments or return paperwork (ie, consent forms), according to the teachers.

The Instruments

The Feel Bad Scale and Schoolagers Coping Strategies Inventory were thought to be appropriate for use with these schoolage children because they have been used in other studies with similar aged children (Sharer & Ryan-Wenger, 1991& 1995; Ryan-Wenger & Walsch, 1994; Kahn, 1998), and found to have reliability coefficient scores ranging from 0.77-0.91 for the FBS scales and 0.71-0.89 for the SCSi scales. Additionally, the items on by the FBS and the SCSi were derived from schoolage children themselves which supports the validity of the instruments (Lewis, Seigel & Lewis, 1984; Ryan, 1989). The third graders required the most assistance, primarily because of their difficulty with reading and writing skills. The researcher devised several successful strategies to resolve this problem that were not mentioned in previous literature and may be helpful to future researchers. The four most useful were: 1) using an assistant to help with the data collection with the 3rd grade children, to help them with spelling and to help keep them focused and on task; 2) using an overhead to show the children the form (for all grades) 3) reading the items one at a time (elementary school

children); and 4) using pencils with erasers since the children were observed to be frustrated if unable to erase a response they made by mistake. The overhead was the most helpful aid.

Stressors

The children were asked to rate each of the stressors for two characteristics: how frequently they experienced them and how stressful ("bad") they found them. The following is a discussion of the most frequently experienced stressors as well as those found to be most stressful or bad.

The most frequently reported stressor in this study is "Feeling sick" ($X=2.934$). The highest rating it received was "sometimes" and the range of means was between "not at all" and "sometimes" (1.523-2.932). Not only was it ranked as the most frequently experienced stressor, it was also ranked as the fifth most stressful item ($X=3.173$) which means that its average rating was "pretty bad". This rating of "Feeling sick" as the most frequent stressor is consistent with findings from other studies of healthy school-age children (Lewis, Seigel & Lewis, 1984; Kahn, 1998; Sharrer & Ryan-Wenger, 1991), as well as some studies of ill children (Walsh & Ryan-Wenger, 1992; Kahn, 1998; Sharrer & Ryan-Wenger, 1991). From a developmental point of view, this is not surprising. Children only gradually develop a sense of knowledge and control over their bodies, so the idea of having their body act unpredictably, i.e. "sick", is probably unsettling to children. Older children rated "Feeling sick" as significantly less stressful than younger children, which is consistent with findings from other studies. Gratz & Piliavin (1984) studied children's beliefs about why they got sick, and found that children's understanding of what caused their illness increased with age. One inaccurate explanation, that misbehavior was a cause of sickness decreased with age. Additionally, weather as a perceived cause of illness resulted in an equal response across ages. They also found that older children had a greater belief in external causes of illness

which they attributed to a greater awareness of environmental hazards, and that some of those illnesses were a "fact of childhood". For example, most children get the flu and colds, and at the time the study was done, chickenpox, thus a "fact of childhood" and not attributed to themselves. This same thinking may explain why "Feeling sick", though frequent, is not as stressful for the older children in this study.

The stressor "Having nothing to do" was the second most frequently reported stressor for this sample of children. This is also consistent with the findings of the healthy school age children in other studies (Lewis, Seigel & Lewis, 1984; Kahn, 1998). While "Having nothing to do" was reported as the second most frequently occurring stressor, it was not considered to be terribly stressful (it ranked 17th of the 20 reported stressors). Similarly, Kanner, Feldman, Weinberger & Ford (1987) found that "feeling bored" was one of the most frequent "hassles" (81 percent of their sample of 232 sixth graders), but that it did not make them "feel bad". This is also consistent with many parents' observations. Children frequently complain about "being bored", but it is seldom felt by families to be more than an annoyance.

"Not spending enough time with your Mom or Dad" was the third most frequent stressor in this study ($X=2.597$) occurring "1 or 2 times" to "sometimes" and was ranked eighth overall for stressfulness ($X=2.944$) indicating it was "a little bad" to "pretty bad", which is consistent with previous studies (Lewis, Seigel and Lewis 1984). Several children wrote on their survey that they never saw, or rarely saw, their non-custodial parent, so this item apparently captured those children who are separated from a parent as well as the children whose parents are busy. No analysis was possible to separate the experience of these two groups of children.

Predictably, "Not spending enough time with your Mom or Dad" was less stressful for 8th graders (who ranked it as the 14th most stressful item) than for children in earlier grades (who ranked it as the 7th to 8th most stressful item). That children miss

spending time with their families is not surprising. "Family relationships remain a primary context for development well into the adolescent years, and adolescents typically remain positive toward their parents and warmly engaged with their families" concluded Collins (1990) in a review of the literature of research on parent-child relationships in the transition to adolescence.

"Having your parents argue in front of you" was reported as the fourth most frequently occurring and the fourth most stressful item by this sample of children. It was significantly more stressful for younger children (3rd grade, $X=3.664$) than older children (6th, 7th and 8th grades, $X=3.94-3.035$) and significantly more stressful for girls ($X=3.396$) than boys ($X=3.336$). In contrast Forehand, Long and Brody (1988) suggests that males are more adversely affected by marital conflict than are females. Their study, however, used acting out behaviors rather than the children's reports as their dependent variable. It is possible that this can be explained by boys' use of physical rather than verbal means of expressing their emotional experiences.

The converse is that girls try to reduce the friction by becoming less problematic rather than acting out (Forehand, 1988). Also, girls' propensity to express emotion verbally (as seen in this study) may account for their reporting higher stress with parental arguments. Green, Walker, Hickson & Thompson (1985) and Yamamoto (1979) also reported that arguments between parents were one of the most stressful events in their studies, but did not report gender differences.

The fifth most frequent stressor was "Fighting with your parents about house rules" ($X=2.547$). However, this item was not rated as very stressful by the children in this study, as it was ranked by these children as 15th for stressfulness ($X= 2.751$). Elementary school children reported it to be significantly more stressful than middle school children. One explanation for this is that as children mature, they become less rigid about rule conformity. Macoby (1983) points out that younger children take an

obedient stance toward adult authority, but that throughout the preadolescent years they gradually shift from reliance on external guidance to reliance on internal regulation.

There were no gender differences. Greene, Walker, Hickson & Thompson (1985) found increased arguments with parents to be one of the most stressful events in their study, but they did not specify what the arguments were about. It may be that the question in this study, which referred specifically to arguments about house rules was less problematic to children since house rules are continuing and generally non-negotiable. Perhaps the arguments the children rated as stressful in the Hickson & Thompson (1985) study were arguments about more serious matters. This could explain the discrepancy between the two findings.

"Having parents separate", which was experienced by 41 percent of the children, was the most stressful item overall for both boys and girls ("real bad" to "terrible"). This is consistent with other studies (Lewis, Seigel and Lewis, 1984; Kahn, 1998).

It was the most stressful item for 5th through 8th grade children, and the second most stressful item for 3rd and 4th grade children. This makes sense, as it directly affects their lives, usually quite dramatically. The older children's cognitive development also permits them to understand the many changes that occur when parents separate, and many of the children assume additional responsibilities as a result of the separation. In an extensive review of the literature of research on children of divorce, Wallerstein & Kelly (1979) found agreement among researchers that divorce had a major impact on children and adolescents and was stressful for long periods of time. Wallerstein (1983) states that "assimilating the grief over the departure of one parent from the home, and coming to terms with the partial or total loss of that parent, is the single most difficult task for many children to master." (p. 288).

The items that the children in this study reported to be the most stressful are

consistent with findings from studies of other healthy schoolage children. "Having parents separate" ($n=764$, $X=3.734$) and "Being pressured to try something new, like a cigarette, that you really don't want to try" ($n=763$, $X=3.493$) were also the most stressful items for the children in other studies (Lewis, Seigel & Lewis, 1984; Kahn, 1998). Similar to Lewis, Seigel and Lewis's (1984) findings, the children in this study who had not experienced these stressors rated them significantly worse than did children who had actually experienced them. For example, the children who had experienced "Having a parent separate" ($n=321$, $X=3.33$) rated it less bad than the children who had not experienced it ($n=439$, $X=4.04$, $p=0.0001$), and the children who had experienced "Being pressured to try something new, like a cigarette, that you really don't want to try" ($n=237$, $X=2.82$) rated it less bad than those who had experienced it ($n=523$, $X=3.80$, $p=0.0001$) and the children who had experienced, "Not getting along with your teacher" ($n=417$, $X=2.68$) rated it less bad than those who had not experienced it ($n=341$, $X=3.00$, $p=0.0040$).

On the other hand, there were some experiences that seemed worse to children who had experienced them than to those who had not. Children who had experienced the following stressors rated them as worse than children who had not experienced them: "Feeling sick" ($p=0.0160$), "Fighting with your parents about house rules" ($p=0.0050$), "Being overweight or bigger than others" ($p=0.0240$), "Not having enough money to spend" ($p=0.0110$), "Not being able to dress the way you want" ($p=0.0001$), "Feeling left out of the group" ($p=0.0001$), "Being pressured to get good grades" ($p=0.0010$), "Not being good enough at sports" ($p=0.0080$), and "Being smaller than others your age" ($p=0.0010$).

In one study (Sowa & Barsanti, 1986) that explored differences between experienced and anticipatory distress in relation to adolescent stressors, the experienced events were rated as significantly more stressful than unexperienced events; thus the

authors recommended not even measuring unexperienced events. The fact that several of the events in this study were rated worse by those who had not experienced them indicates that it is still wise to measure both. Exploring which items seem to be worse in anticipation than actuality and vice versa may help us devise useful strategies for working with children. For instance, it may be useful for parents to realize that helping children with specific knowledge ahead of a separation or divorce may be important in mitigating the fears of anticipation. On the other hand, anticipatory guidance may have more limited value in helping children cope with problems such as being different from other children (being left out of the group, having less money, being overweight, etc) and other means of helping these children need to be found.

"Pressured to get good grades" was the most frequently reported stressor for 8th graders ($X=3.071$, $n=141$) and showed a developmental trend in that the means ranged from 3.071 for the 8th grade children, as stated, to 1.967 for 3rd grade children ($n=125$), with progressively decreasing numbers by grade. This makes sense developmentally, as grades become much more significant in middle school, which is 6th-8th grades in the community in which these children live. In fact, letter grades are not even used in the 3rd grade in this school system. Additionally, there may be added parental pressure as parents begin to stress the importance of the relation of grades in the higher grades to future goals. Though the older children reported experiencing this stressor more often, the 3rd grade children ($n=126$) thought it was more significantly more stressful than the 6th–8th grade children ($p=0.0003$, $p=0.0044$ and $p=0.0196$ respectively). "Being pressured to get good grades" was more stressful for girls ($n=462$) than for boys ($n=297$), ($p=0.0519$).

Similarly, the stressor "Homework not done on time" was reported to occur more frequently as the children got older, which reflects both the increasing amounts and importance of homework as children advance in grade. It was equally stressful for boys

and girls in the present study. Greene (1988) also found that school related stressors increased with age so much so that school related events emerged as the most stressful for the 6th graders in that study of children in fourth through sixth grades.

"Feeling left out of the group", which was in the top 10 for frequency and stressfulness for all, also showed a developmental trend in that it was more stressful for younger children, and progressively declined in stressfulness with each grade. Peer relationships are thought to be stronger as children age, particularly in middle and high school, but perhaps this group of children has settled into their social groups by middle school. Also, these data were collected in the spring, so school relationships are well established by then.

The least frequently reported stressor for all except 8th graders (for which it was ranked as 13th) was "Pressured to try something new"; however, even though it was infrequent, when it was experienced, it was experienced as very stressful. Younger children (3rd-5th grade, n=355) found it more stressful than older children (6th-8th grade, n=407). There were also differences within these grade groups, in that it was more stressful for 3rd grade children than for 4th grade children, and it was more stressful for 6th grade children than 7th grade children. This makes sense, since older children have had more opportunities for trying new things and, hopefully, finding success for younger children, it is likely to be a newer, and consequently more frightening, experience.

"Being overweight or bigger than others your age" was the most stressful of the body related stressors. It was ranked as the 7th most stressful item overall, the 6th most stressful item for girls (n=461), and was significantly more stressful for girls than boys ($p=0.0001$); however, it was not frequently experienced in that it ranked 16th. "Being smaller than others your age" and "Feeling like your body is changing" ranked 19th and 20th respectively overall, and thus were not considered to be very stressful. All three body stressors were more stressful for girls than for boys. Thomas, Shoffner & Groer

(1988) also found that girls were more concerned about body size than boys.

Both boys and girls infrequently experienced "Changing schools". This is to be expected since most children do not change schools frequently. Girls reported "Not getting along with your teacher" as infrequently experienced and didn't find it particularly stressful ("not bad" to "a little bad") and for boys it was "a little bad" to "pretty bad". Overall, however, girls rated most stressors as more stressful/bad than boys. This is also similar to the findings of other studies (Siddique & D'Arcy, 1984; Bobo, Gilchrist, Elmer, Snow & Schnicke (1986); Thomas, Shaffner & Groer, 1988; Kanner, Gildman, Winberger & Ford, 1987; Yamamoto, 1979 and 1987; Lewis, Seigel & Lewis, 1984; and Dise-Lewis, 1988). Reasons offered for this are that girls may be more likely to disclose this information than boys (Thomas, Shoffner & Groer, 1988), that they have greater role strain and more external locus of control (Siddique & D'Arcy, 1984), that for early adolescents it is a function of their earlier development (Kanner, Feldman, Winberger & Ford, 1987) or that it could be a reflection of differences in socialization or measurement artifact (Bobo, Gilchrist, Elmer, Snow & Schinke, 1986).

Coping strategies

The children were asked to rate each of the coping strategies for two characteristics: how frequently they used them and how helpful they found them. The following is a discussion of the most frequently used coping strategies as well as those found to be the most helpful.

The children in this study reported that the five most frequently used coping strategies were 1) "Watch TV and listen to music", 2) "Draw, write or read something", 3) "Say I'm sorry or tell the truth", 4) "Think about it" and 5) "Walk, run or ride my bike".

The five most frequently used coping strategies indicate that the children use a variety of coping strategies (behavioral distraction, cognitive distraction, social support and problem solving) "alot" of the time. These results are consistent with those of other

studies of healthy children and children with asthma ((Kahn, 1998; Ryan-Wenger & Walsch, 1994).

The children rated the helpfulness of each strategy separately from its frequency. The five most helpful coping strategies are very similar to those rated as most frequently used; they were: 1) "Watch TV or listen to music", 2) "Say I'm sorry or tell the truth", 3) Draw, write or read something", 4) "Talk to someone", and 5) "Walk, run or ride my bike". Four of the five most frequent were also reported to be the most helpful coping strategies. The only difference between the top five most frequently used coping strategies and the top five most helpful strategies listed was that "Think about it" (listed in the top 5 of the most frequently used) was replaced by "Talk about it" in the top five of those listed as most helpful. One wonders if children intuitively know that "talking about it" is a helpful strategy, but can't find enough opportunities to use this strategy, or find it too difficult to initiate, and consequently substitute "thinking about it".

It is clear that these children use and find a variety of coping strategies to be helpful (behavioral distraction, cognitive distraction and social support), and they find that they "help a little to alot" most of the time. These results are similar to those reported by Kahn (1998) and Ryan-Wenger & Walsch (1994).

In this study, "Watch TV or listen to music" was the most frequently used and most helpful coping strategy for both genders. By grade/age, it was the most frequently used coping strategy for each grade group, and the most helpful coping strategy for 5th-8th grade children. Sharer & Ryan-Wenger (1995) also reported that "Watch TV and listen to music" was the most frequent and most helpful coping strategy for 11 and 13 year old children. In a review of studies on time use of children and adolescents from several countries, Larson & Verma (1999) found that watching TV was the largest category of media use (which included watching TV, reading and listening to music) for youth in the United States and other postindustrial societies. Their review found that

boys watched more TV than girls, which is not supported by this study, though this study did not measure actual amounts of time in the activity. Larson & Verma (1999) believed that TV viewing was a default free-time activity that was chosen when nothing more enticing was available, since most TV watching occurred in late evening hours, "a period of time when mental activation is reduced regardless of activity" (p.718) and thus concluded that "at this time of night", TV may serve as a form of relaxation. They also pointed out that other authors (Arnett, 1995 & Medrich, Roizen, Rubin & Buckley, 1982) found that young people used TV watching for coping with stress, entertainment, providing company when lonely and as a source of play material for interactions with peers. This study supports the concept that children and adolescents use television watching to cope with stress. It also seems to support Larson & Verma's (1999) assessment that watching TV is a default activity, in that the second most frequently reported stressor in this study was "Having nothing to do", thus to cope with this stressor, children may default to television viewing. It may be the coping strategy of choice for children who "feel sick" which was the most frequently reported stressor, since other activities may not be available to them because of their sickness.

"Draw, write or read something" was the second most frequently used and third most helpful coping strategy for all children. It was used more by girls ($n=472$, $p=0.0099$) than boys ($n=302$) and was more helpful to girls ($n=466$, $p=0.0227$) than boys ($n=296$). Larson & Verma (1999) also found in their review of studies that girls spent more time reading than boys, thus it is logical that girls would chose reading as a coping strategy more than boys. It was used more frequently by elementary school children (3rd—5th grade, $p=0.0022-0.0171$) and than middle school children (6th-8th grade), which is also supported by the Larson & Verma (1999) review. It was also a more helpful strategy for the elementary school children than for the middle school children ($p=0.0092-0.0499$). This is consistent with results reported by Sharer & Ryan-Wenger (1995) in which "Draw,

write or read something" was the most frequently reported strategy for 9 and 10 year old children and for which it was most effective 85 percent and 83 percent respectively. It would not be surprising that drawing would be more helpful to younger children since, in this culture, we become more critical of technique as a child gets older, and probably inhibit its use as a means of freely expressing inner emotions. On the other hand, it is surprising that reading and writing would be more helpful for younger children since one would expect that their skill at these processes would not yet be smooth enough to be comfortable using them as a means of expression. But because the question lumps all three into one choice, it is difficult to discern the developmental meaning of this result.

"Say I'm sorry or tell the truth" was the third most frequently used coping strategy and the second most helpful strategy for all children. There were no gender differences in the frequency use or helpfulness of this strategy. Third grade children ($n=123$, $X=2.837$) and sixth grade ($n=139$, $X=2.806$) children used it most frequently. There were statistically significant differences: between 3rd and 7th grade ($p=0.0063$), 3rd and 8th grade ($p=0.0070$), between 6th and 7th grade ($p=0.0122$), and 6th and 8th grade ($p=0.01360$). These findings are similar to those reported by Kahn (1998) and Ryan-Wenger & Walsch (1994) in which children (without asthma and with asthma, respectively) ranked "Say I'm sorry or tell the truth" as the third most frequently used coping strategy. It was the most helpful coping strategy for children without asthma (Kahn, 1998), for 3rd and 4th grade children (Sharer & Ryan-Wenger, 1995), the second most helpful coping strategy for children with asthma (Kahn, 1998) and the fourth most helpful coping strategy for the schoolage children in the Ryan-Wenger & Walsh (1994) study.

"Think about it" was the fourth most frequently used coping strategy for all children and ranked eighth overall for helpfulness. Middle school children (especially eighth grade children) reported using the strategy "think about it" more frequently ($n=400$, $X=2.508-2.864$) than elementary school children ($n=361$, $X=2.407-2.643$, $p=$

0.0003-0.0448). This is consistent with middle school children's increased level of cognitive development and problem solving ability. Similar findings were reported by Sharer & Ryan-Wenger (1995) and Kahn (1998).

The fifth most frequently used and most helpful coping strategy for all children was "Walk, run or ride my bike". Boys used this strategy more ($n=300$, $X=2.663$, $p=0.015$) than girls ($n=463$, $X=2.490$) and boys also found it to be more helpful ($n=298$, $X=3.134$, $p=0.0088$) than girls ($n=459$, $X=2.939$). Elementary school children (especially third grade children $n=127$) used it ($n=384$, $X=2.787-2.639$) more frequently than middle school children ($n=402$, $X=2.482-2.385$, $p=0.0138$). Both elementary school children and middle school children found it to be a helpful strategy that "helps a little" to "helps a lot". Larson & Verma (1999), in their review of children and adolescents time use, found that sports participation is higher for boys than girls within most cultural groups; however, in this study "sports" were not specifically stated as such. Many boys in this study did comment that they do "shoot hoops" or "play ball" (it was baseball season) instead of riding bikes, which prompted other children to say which sport they did do instead of walk, run or ride a bike.

The coping strategy of "Get mad" was reported to be used with increasing frequency as the children developed, and though there weren't statistically significant grade differences or gender differences, there was a grade by gender interaction ($p=0.0381$) that indicated that younger (3rd grade, $n=70$, $X=2.629$) and older (7th grade, $n=77$, $X=5.558$ and 8th grade, $n=92$, $X=2.685$) girls get mad more often than do the other girls or boys (except 6th grade boys, $n=39$, $X=2.692$). However, 4th-6th grade boys used this strategy more than 4th-6th grade girls. Overall, "Get mad" was ranked seventh for frequency ($n=774$, $X=2.496$) and 21st for helpfulness ($n=765$, $X=2.316$), which indicates that the children could clearly differentiate between strategies that they used that helped

them and those they used that weren't helpful. While anger is a form of emotional expression that seems to be more accepted in males in our culture, it is still a form of emotional expression, and emotional expression is overall more common and accepted in females than males, thus it makes sense that this strategy is used by both genders.

Folkman & Lazarus (1988) point out that "a key factor in coping effectiveness is whether or not the choice of coping strategy fits the possibilities for coping in an encounter. The major criterion has to do with the extent to which an outcome is within the person's control." (p.315). If the outcome is not within the person's control, then problem-focused coping strategies won't work, and emotion-focused strategies that promote the reduction of distress are appropriate. "Problem-solving strategies that are applied to a situation in which no solution is possible are likely to generate frustration and anger, regardless of the quality of the problem-solving activity." (p.315). Many stressors are outside the children's control: parental fights and/or separation or divorce; time spent with parents, especially the non-custodial parent, to name a few. Females may also have more frustrating experiences and less control. The fact that the children "Get mad" may be because they have no or little control over the situation, and the fact that such behavior may lead to negative emotions/responses, which then can result in a downward spiral in the person-environment relationship (Lazarus & Folkman, 1988) may be why the children find this strategy to be less effective.

The coping strategy of "Talk to someone" was ranked eighth overall for frequency and fourth overall for helpfulness. There was a significant grade by gender interaction ($p=0.0138$) in that older girls (seventh and eighth grade) used this strategy more often than younger girls or boys (except fourth grade boys). Older girls also found this strategy to be more helpful ($p=0.0490$) than did younger girls or boys. Larson & Verma (1999) report that play disappears as a category of activity in adolescence, and

that in Western societies, it is replaced by time spent talking, which they postulate may be a more symbolic form of play. Also, the amount of time girls spend talking doubles between ages 10 –15 (from 9 percent to 18 percent of waking time). Reasons offered for this by Larson and Verma are that our culture believes that fun is part of the adolescent's role, and that interactions with friends are thought to provide unique opportunities for the development of social skills, the exploration of roles, and the learning of moral schemas. How much time in conversation is needed to learn these skills is not known, however.

The coping strategy "Play a game or something" was used more frequently by grade school children (3rd-5th grade, $n=357$, $X=2.325-2.496$) than by middle school children ($n=394$, $X=2.057-2.147$, $p=0.0013-0.0212$). It was also rated as more helpful for the grade school children ($n=350$, $X=2.780-2.991$) than it was by the middle school children ($n=394$, $X=2.478-2.551$, $p=0.0006-0.0483$). Boys ($n=293$, $X=2.570$) used this strategy more often than girls ($n=458$, $X=2.052$, $p=0.0001$) and boys ($n=293$, $X=2.952$) also found it to be a more helpful coping strategy than did girls ($n=451$, $X=2.499$, $p=0.0001$). Boys in all grades used this strategy more often than girls and found it to be more helpful than girls. This could be related to the fact that boys play more organized sports overall than do girls (Larson & Verma, 1999), so may go play a game of basketball or baseball, where girls do not play a game of dance or gymnastics, both popular physical activities for girls in this community. Also, as stated above, play is used by younger children more than adolescents (Larson & Verma, 1999). "Play a game or something" was ranked 13th overall for frequency and 12th overall for helpfulness.

The coping strategy of "Cry or feel sad" was used most frequently by third grade children ($n=126$, $X=3.73$) and was used significantly more by them than by seventh grade children ($n=127$, $X=2.016$, $p=0.0015$). Younger children (4th graders) also found it to be more helpful than 6th-8th grade children ($p=0.0012-0.0358$). Girls ($n=468$, $X=2.3720$)

used this strategy more often than boys ($n=303$, $X=1.944$, $p=0.0001$) and girls ($n=461$, $X=2.744$) also found it to be more helpful than boys ($n=299$, $X=2.328$, $p=0.0001$). It is not surprising that younger children and girls use this strategy more often and find it more helpful than older children and boys, since emotional expression is more tolerated in young children and females in our culture. Overall, "Cry or feel sad" was the 17th most frequently used coping strategy and was ranked 13th for helpfulness.

"Cuddle my pet or stuffed animal" also indicated a developmental trend in that it was more frequently used by younger children (3rd–5th grade, $n=355$) and least used by eighth grade children ($n=143$), which makes sense, as stuffed animals are deemed more appropriate culturally for younger children. "Cuddle my pet or stuffed animal" was used as a coping strategy significantly more by the 3rd–5th grade children than for the 6th–8th grade children ($p=0.0001$ – 0.0012). Overall, girls ($n=464$) used this strategy more than boys ($n=297$, $p=0.0001$). Additionally, girls in all grades used this strategy more than boys in the same grades. This also makes sense, as stuffed animals are deemed more culturally appropriate for girls than for boys.

The coping strategy "Yell or scream" was ranked 23rd overall for frequency and helpfulness. There was a grade and gender interaction effect for frequency in that the youngest girls (third grade) and the oldest girls (eighth grade) used it the most ($p=0.0254$). Girls used "Yell or scream" more often than boys for all grades except fifth grade. There was also a grade and gender interaction effect for the helpfulness of this coping strategy that mirrored the frequency data: 3rd grade and 8th grade girls found it to be more helpful than the other girls or boys ($p=0.0313$). Girls in all grades thought it was more helpful than boys did. Again, expression of emotions is more accepted in females in our culture than males, which may explain this finding. Similar to "Get mad", this could be a strategy that is used when the outcome is outside the child's control, and could be a result of the "downward spiral in the person-environment relationship"

previously discussed..

The coping strategies of "Pick on someone" and "Hit, throw or break things" were the strategies that were least often used (25th and 26th) and were likewise the least helpful coping strategies (also 25th and 26th). "Hit, throw or break things" was used more by seventh (n=) and eighth (n=141) grade children than third (n=129) and fourth (n=120) grade children ($p=0.0002-0.0218$). It was also rated as more helpful for seventh (n=124) and eighth (n=141) grade children than for third (n=127) and fourth (n=116) grade children ($p=0.0007-0.0195$). Boys in all rated "Hit, throw or break things" as more frequently used and more helpful than did girls. By gender overall, boys (n=298, $X=1.718$) used this strategy more than girls (n=468, $X=1.519$, $p=0.0005$) and boys (n=296, $X=1.949$) rated it as more helpful than girls (n=263, $x=1.665$, $p=0.0002$). Physical expression of emotion is more accepted in our culture for boys than it is for girls, so these results are not unexpected. Overall, however, this strategy is infrequently used and not considered very helpful by these children.

In summary, it is clear that children can use a variety of types of coping strategies and that they distinguish between those that are helpful and those that are not, which lends support to Lazarus' theory of appraisal and coping.

Strengths and Limitations of the Study

One of the major strengths of this study is the sample size of 777 children, which permits analysis by grade/age rather than grouping grades, such as grade school and middle school. Additionally, these children are from the public school system unlike most children from previous studies which were from private schools. Another strength is that these children are from a primarily blue-collar union town as opposed to a university area school. These settings add another group of children that increase our confidence in what we know about stress and coping in children. Since all of the children were from the same community and part of the same school district, there is some

consistency in the environment. Because of the setting, however, the data are not generalizable to children in other environments.

Another strength of this study is that it is from the children's perspective rather than their parents, teachers or clinicians. Sorensen (1993) reported that children and parent's responses differed because parents "simply failed to notice the children's inner responses of emotional feeling, thinking, reframing, or assuming a sense of responsibility". (p. 95). Likewise, Kahn (1988), who sampled children and their parents with the same instruments, found that parents were not reliable respondents regarding their children's perceptions of stressors and coping strategies. However, parents assessments of the stressors and coping strategies that their children experience are also valuable, and Sorenson (1994) notes that overall her research reinforced the effectiveness of including the perspectives of all family members. Thus, this study could be strengthened by also including parents and/or teachers, as they do provide valuable insight.

A limitation of this study is that demographic data were not collected, so it is not possible to assess subgroups of children, ie, children with chronic illness, children of divorce, etc. It is not possible to know, for example, what children were responding to when they answered the item "Having parents separate". It could be a divorce, a parent moving out, a parent going away for an extended period of time and it could have happened at any time in the child's life. Thus, the addition of some demographic data about the children may have helped provide some clarity to some data. Qualitative data may also help clarify the children's thinking in regard to their responses.

Implications for Nursing Practice and Research

"Feeling sick" was the most frequently reported stressor overall and was also ranked fifth for stressfulness. Since this has been a finding in similar research, it seems to be a consistent stressor in children's lives, thus it merits further discussion and

research. Is it due to normal childhood illnesses (colds, flu, tonsillitis, etc), fatigue from busy schedules of school, sports and other after school activities, or physiological changes that occur as they grow and transition through puberty? Nurses who work with children are wise to assess children's overall view of their health status, (ie. Do they feel sick, and what does that mean for that child), given the frequency of this stressor as reported by these and other children. Further research to examine children's thinking about "Feeling sick" would be helpful. Feeling sick could include being bored or tired of things, as in "I'm sick of this..." or "Sick and tired of...", as well as physical ailments. Research examining the relationship of these stressors to health outcomes, physical and mental, would be helpful. A better understanding of children's concepts of "feeling sick" or illness may aid nurses in their attempts to reduce anxiety and fears (Bruback & Peterson, 1986).

While "Watch TV and listen to music" may be the most frequent and effective coping strategy for children, further assessment of this coping strategy by nurses is recommended. As indicated earlier, this may also be a default activity that is used when no other appealing activities are available. It is probably not a concern unless the child spends a great deal of time watching TV or listening to music. However, it is also an activity that does not challenge children and the research suggests that activities that provide both challenge and intrinsic motivation, such as sports, arts and organizations, are associated with the development of initiative and with positive outcomes later in life. (Larson & Verma, 1999). Lazarus (1992) warns us to be "wary about making hasty and unwarranted judgments about the functional or dysfunctional character of the coping process" (p. 22) and to look at the coping process in context. Given the increasing amounts of time that children spend watching TV, and the fact that it may replace other activities that promote their development, nurses may be wise to assess the use of this coping strategy with the children they see, and assess it in the overall context of the

child's coping repertoire. Additional research is needed to examine the relationship between coping and health outcomes and developmental outcomes.

The use of the scales with individual children and their parents as interview guides, screening tools or teaching tools may be helpful. Anecdotal comments from children and parents suggests that the children learned or became more aware of the stressors they experienced and the coping strategies they used as a result of filling out the scales. Parents may find the information helpful in helping their children cope or in modifying the stressors. Sometimes just becoming aware of what is bothering you, or how you can deal with it is the intervention itself. Some of the children wanted to talk about their responses when they completed them, which indicates their interest in the topic. Also, since the children are able to determine which coping strategies they use that are helpful and those that aren't, the SCSI could be used to remind them of the coping strategies they use that they do find helpful.

Similar studies of children from diverse ethnic and cultural groups would be helpful, as this and most other studies of children's stressors and coping strategies have been primarily of Caucasian children. Longitudinal studies also would be helpful to see if and how stressors and coping strategies change over time. For example, do the same groups of youngest and oldest girls still used "Yell and scream" and do they still find it helpful over time. Qualitative studies need to be done to help us understand what the children are thinking when they assess a stressor as "bad" or appraise a coping strategy as "helpful". Qualitative data also may be able to capture the changing, but on-going stressful environments of many of today's children. Such information would be enormously helpful in helping nurses target an intervention. Studies of gender differences also warrant further investigation.

The Feel Bad Scale, while still the scale of choice for use with younger children because it is the most age appropriate, does not address some of the pertinent stressors

that youth face today, such as safety in their school, home or neighborhood, drugs and alcohol, and sex. Additionally, some of the middle school children told me that items about friends, boyfriends and girlfriends needed to be included. Thus, research to update the FBS or create another stress scale that captures the perspective of the child is needed. Friendships can be sources of stress but they are also sources of comfort and coping, thus merit further study. (Berndt & Perry, 1990). The items that generated the most questions were about parents: "Having parents separate' (Did they have to divorce, or just move out? What if they got back together?), "Not spending enough time with your Mom and Dad? (What if it's just my Dad, but I spend enough time with my Mom). This suggests that either revisions to the questions, or qualitative research would be helpful, since these questions reflect the ongoing stressful situations in which children live that do not seem to be captured with the present scales.

Intervention studies to determine the best ways to teach coping strategies, what coping strategies have the most favorable health outcomes, and to determine which interventions work best with children at different developmental stages are also needed.

Summary

The study of stressors and coping strategies from the child's perspective has yielded information that is helpful to nurses and other professionals that work with children. Additionally, the information obtained from the examination of age and gender differences challenges researchers to continue to study stressors and coping strategies in schoolage children, and the developmental and health outcomes that may be associated with them. While the view of the parents, teachers and health professionals is important, it is clear that the child's voice must also be heard. It is, after all, the child who will be the focus of further study and/or intervention.

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APPENDIX A
FEEL BAD SCALE

790 ID NUMBER

FEEL BAD SCALE

DIRECTIONS: The following is a list of things that some kids say make them feel bad, nervous, or make them worry. For each, circle HOW BAD you would feel if this happened to you, or if this happened to you, how you did feel. Then circle HOW OFTEN these things happen to you.

	HOW BAD IS IT?					HOW OFTEN DOES IT HAPPEN?				
	Not Bad	A Little Bad	Pretty Bad	Real Bad	Terrible	Never	1 or 2 Times	Some-times	Often	All the Time
1. Having parents separate										
2. Being pressured to try something new, like a cigarette, that you really don't want to try										
3. Having your parents argue in front of you										
4. Not spending enough time with your Mom and Dad										
5. Feeling sick										
6. Fighting with your parents about house rules										
7. Not having homework done on time										
8. Moving from one place to another										
9. Not getting along with your teacher										

	HOW BAD IS IT?					HOW OFTEN DOES IT HAPPEN?				
	Not Bad	A Little Bad	Pretty Bad	Real Bad	Terrible	Never	1 or 2 Times	Some-times	Often	All the Time
10. Being overweight or bigger than others your age										
11. Changing schools	Not Bad	A Little Bad	Pretty Bad	Real Bad	Terrible	Never	1 or 2 Times	Some-times	Often	All the Time
12. Not having enough money to spend	Not Bad	A Little Bad	Pretty Bad	Real Bad	Terrible	Never	1 or 2 Times	Some-times	Often	All the Time
13. Not being able to dress the way you want to	Not Bad	A Little Bad	Pretty Bad	Real Bad	Terrible	Never	1 or 2 Times	Some-times	Often	All the Time
14. Feeling left out of the group	Not Bad	A Little Bad	Pretty Bad	Real Bad	Terrible	Never	1 or 2 Times	Some-times	Often	All the Time
15. Having nothing to do	Not Bad	A Little Bad	Pretty Bad	Real Bad	Terrible	Never	1 or 2 Times	Some-times	Often	All the Time
16. Being pressured to get good grades	Not Bad	A Little Bad	Pretty Bad	Real Bad	Terrible	Never	1 or 2 Times	Some-times	Often	All the Time
17. Not being good enough at sports	Not Bad	A Little Bad	Pretty Bad	Real Bad	Terrible	Never	1 or 2 Times	Some-times	Often	All the Time
18. Being late for school	Not Bad	A Little Bad	Pretty Bad	Real Bad	Terrible	Never	1 or 2 Times	Some-times	Often	All the Time
19. Feeling like your body is changing	Not Bad	A Little Bad	Pretty Bad	Real Bad	Terrible	Never	1 or 2 Times	Some-times	Often	All the Time
20. Being smaller than others your age	Not Bad	A Little Bad	Pretty Bad	Real Bad	Terrible	Never	1 or 2 Times	Some-times	Often	All the Time

APPENDIX B
SCHOOLAGER'S COPING STRATEGIES INVENTORY

DIRECTIONS: This is not a test! Do not put your name on this paper.

When some children feel stressed, nervous, or worried about something, they do some of the things listed below. Think about when YOU feel stressed, nervous or worried. Circle HOW OFTEN you do each of these things either before the stressful thing happens, while you feel stressed, or after the stressful thing is over. Then tell me HOW MUCH each thing helps you feel better when you feel stressed, nervous or worried.

Stressful Thing

	HOW OFTEN DO YOU DO THIS?				HOW MUCH DOES IT HELP?			
	Never	Once in a while	A lot	Most of the time	Never do it	Does not help	Helps a little	Helps a lot
1. Be by myself; be alone.								
2. Bite my nails or crack my knuckles.								
3. Cuddle my pet or stuffed animal.								
4. Cry or feel sad.								
5. Daydream.								
6. Do something about it.								
7. Do work around the house.								
8. Draw, write, or read something.								
9. Eat or drink.								
10. Fight with someone.								
11. Get mad.								

	HOW OFTEN DO YOU DO THIS?				HOW MUCH DOES IT HELP?			
	Never	Once in a while	A lot	Most of the time	Never do it	Does not help	Helps a little	Helps a lot
12. Hit, throw or break things.								
13. Pick on someone.	Never	Once in a while	A lot	Most of the time	Never do it	Does not help	Helps a little	Helps a lot
14. Play a game or something.	Never	Once in a while	A lot	Most of the time	Never do it	Does not help	Helps a little	Helps a lot
15. Pray.	Never	Once in a while	A lot	Most of the time	Never do it	Does not help	Helps a little	Helps a lot
16. Run or walk away.	Never	Once in a while	A lot	Most of the time	Never do it	Does not help	Helps a little	Helps a lot
17. Say I'm sorry or tell the truth.	Never	Once in a while	A lot	Most of the time	Never do it	Does not help	Helps a little	Helps a lot
18. Sleep, take a nap.	Never	Once in a while	A lot	Most of the time	Never do it	Does not help	Helps a little	Helps a lot
19. Talk to myself.	Never	Once in a while	A lot	Most of the time	Never do it	Does not help	Helps a little	Helps a lot
20. Talk to someone.	Never	Once in a while	A lot	Most of the time	Never do it	Does not help	Helps a little	Helps a lot
21. Think about it.	Never	Once in a while	A lot	Most of the time	Never do it	Does not help	Helps a little	Helps a lot
22. Try to forget about it.	Never	Once in a while	A lot	Most of the time	Never do it	Does not help	Helps a little	Helps a lot
23. Try to relax, stay calm.	Never	Once in a while	A lot	Most of the time	Never do it	Does not help	Helps a little	Helps a lot
24. Walk, run or ride my bike.	Never	Once in a while	A lot	Most of the time	Never do it	Does not help	Helps a little	Helps a lot
25. Watch TV or listen to music.	Never	Once in a while	A lot	Most of the time	Never do it	Does not help	Helps a little	Helps a lot
26. Yell or scream.	Never	Once in a while	A lot	Most of the time	Never do it	Does not help	Helps a little	Helps a lot

APPENDIX C
LETTER TO GRADESCHOOL CHILDREN AND PARENTS
EXPLAINING THE STUDY

March 14, 1995

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Dear Parent/Guardian:

Let me introduce myself. I am Kris Campbell, a registered nurse and a doctoral candidate at Oregon Health Sciences University School of Nursing in Portland, Oregon. I am completing my studies, which involves a research project, or dissertation. For my dissertation, titled "Age and Gender Differences in Stressors and Coping Strategies in Schoolage Children", I am interested in the stressors and coping strategies that are identified by children who are in grades three through eight.

I would like your permission to include your child in my study. This is what will be involved: After the consent forms have been collected, the children will be scheduled by classroom to complete 2 questionnaires that will take about 30 minutes total. The time will be scheduled with the teachers so that it does not interrupt any lessons or the classroom schedule. The first questionnaire lists 20 stressors the child may experience, for example: "moving from one place to another," "feeling left out of a group," and "having nothing to do". They will be asked to mark a box for how often it occurs and how bad they think it is. The second questionnaire has a list of 26 strategies your child may use to cope with stress, such as "be by myself; be alone," "get mad", "watch TV or listen to music". Like the first questionnaire, they will be asked to mark a box for how often they use the coping strategy and how much it helps them. A final paper will be handed out that gives them the opportunity to write down, if they want to, any stressors or coping strategies that they experience that were not on the lists, but that they think are important.

Names will not be used on the questionnaires to ensure confidentiality. Your child will be told that his or her participation is voluntary and that they may quit at any time and not get into trouble for quitting if they choose to do so.

If you are willing to let your child participate, and if your child is also willing, please sign the enclosed consent form and have your child return it to his or her teacher as soon as possible. I will collect the consent forms from the teachers. If you have any questions or concerns about the study, please call me at 423-8226. If I am not home, please leave a message on my answering machine and I will call you back as soon as I can.

Thank you very much for considering this request.

Sincerely,



Kristine K. Campbell, RN, MS

APPENDIX D
LETTER TO MIDDLESCHOOL CHILDREN AND PARENTS
EXPLAINING THE STUDY

March 14, 1995

93

Dear Parent/Guardian:

Let me introduce myself. I am Kris Campbell, a registered nurse and a doctoral candidate at Oregon Health Sciences University School of Nursing in Portland, Oregon. I am completing my studies, which involves a research project, or dissertation. For my dissertation, titled "Age and Gender Differences in Stressors and Coping Strategies in Schoolage Children", I am interested in the stressors and coping strategies that are identified by children who in grades three through eight.

I would like your permission to include your child in my study. This is what will be involved: After the consent forms have been collected, the children will be scheduled by classroom to complete 2 questionnaires that will take about 20 to 30 minutes total. The time will be scheduled with the Quality Time teachers so that it does not interrupt any lessons or the classroom schedule. The first questionnaire lists 20 stressors the child may experience, for example: "moving from one place to another," "feeling left out of a group," and "having nothing to do". They will be asked to mark a box for how often it occurs and how bad they think it is. The second questionnaire has a list of 26 strategies your child may use to cope with stress, such as "be by myself; be alone," "get mad", "watch TV or listen to music". Like the first questionnaire, they will be asked to mark a box for how often they use the coping strategy and how much it helps them. A final paper will be handed out that gives them the opportunity to write down, if they want to, any stressors or coping strategies that they experience that were not on the lists, but that they think are important.

Names will not be used on the questionnaires to ensure confidentiality. Your child will be told that his or her participation is voluntary and that they may quit at any time and not get into trouble for quitting if they choose to do so.

If you are willing to let your child participate, and if your child is also willing, please sign the enclosed consent form and have your child return it to his or her teacher as soon as possible. I will collect the consent forms from the teachers. If you have any questions or concerns about the study, please call me at 423-8226. If I am not home, please leave a message on my answering machine and I will call you back as soon as I can.

Thank you very much for considering this request.

Sincerely,



Kristine K. Campbell, RN, MS

APPENDIX E
CONSENT FORM

OREGON HEALTH SCIENCES UNIVERSITY
Consent Form

A. TITLE: Age and Gender Differences in Stressors and Coping Strategies in Schoolage Children

PRINCIPLE INVESTIGATOR: Kristine K. Campbell, RN, MS
(503)494-3668; Dissertation Chairperson: Marie Scott Brown, RN, PhD

B. PURPOSE

Your child has been invited to participate in this research study because he/she is in grade 3 through 8 and attends one of the Longview Public Schools. The purpose of this research study is to determine the stressors and coping strategies that are most frequently identified by schoolage children. This will involve a one-time meeting in the classroom with your child that will take approximately 30 minutes.

C. PROCEDURES

After the signed consent forms have been collected, the children will be scheduled by classroom to complete 2 questionnaires that will take 20 to 30 minutes total. The time will be scheduled with the teachers so that it does not interrupt any lessons or the classroom schedule. The first questionnaire lists 20 stressors the child may experience, for example: "moving from one place to another," "feeling left out of a group," and "having nothing to do". They will be asked to mark a box for how often it occurs and how bad they think it is. The second questionnaire has a list of 26 strategies your child may use to cope with stress, such as "be by myself; be alone," "get mad", "watch TV or listen to music". Like the first questionnaire, they will be asked to mark a box for how often they use the coping strategy and how much it helps them. A final paper will be handed out that asks for their age, birthdate and grade and gives them the opportunity to write down, if they want to, any stressors or coping strategies that they experience that were not on the lists, but that they think are important.

D. RISKS AND DISCOMFORTS

There are no harmful effects expected as a result of participation in the study. There may be a remote chance of increased anxiety from focusing on stressors and coping strategies.

E. BENEFITS

Your child will not personally benefit from participating in this study, other than possibly gaining an increased awareness of stressors and coping strategies. However, by serving as a subject, he or she may contribute new information which may benefit children in the future.

F. CONFIDENTIALITY

All information will be kept strictly confidential. Names will not be used on the questionnaires. Neither your child's name or his or her identity will be used for publication or publicity purposes. According to Oregon law, suspected child abuse must be reported to appropriate authorities.

G. COSTS

There is no cost for participation in this study, nor is any compensation offered.

H. LIABILITY

The Oregon Health Sciences University, as an agency of the State, is covered by the State Liability Fund. If your child suffers any injury from the research project, compensation would be available to you only if you establish that the injury occurred through the fault of the University, its officers or employees. If you have further questions, please call the Medical Services Director at (503) 494-8014.

I. Kristine Campbell, at (360)423-8226 in Longview, will answer any questions you might have about this study. If I am not home, please leave a message on my answering machine and I will call you back.

If you have questions about your child's rights as a research subject, you may contact the Oregon Health Sciences University Institutional Review Board at (503) 292-7887.

Participation is voluntary, and you and/or your child may refuse to participate, or he or she may withdraw from this study at any time without affecting your relationship with or treatment at the Oregon Health Sciences University, the Longview School District or your child's school.

You will receive a copy of this consent form. Your signature below indicates that you have read the foregoing and agree to allow your child to participate in this study.

Signed: _____ Date: _____
parent/guardian

Signed: _____ Date: _____
child participant

Signed: _____ Date: _____
investigator

APPENDIX F
APPROVAL OF HUMAN SUBJECTS



OREGON
HEALTH SCIENCES UNIVERSITY

3181 S.W. Sam Jackson Park Road, Portland, OR 97201-3098
Mail Code L106, (503) 494-7887 Fax (503) 494-7787

Institutional Review Board/Committee on Human Research

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DATE: March 8, 1995

TO: Kristine Campbell, MS SN-ADM

FROM: Heidi Moore *LMoore*
The Committee on Human Research

SUBJECT: IRB#: 3811
TITLE: Age and Gender Differences in Stressors and Coping
Strategies in Schoolage Children.

This confirms receipt of the revised consent form(s), and/or answers to questions, assurances, etc., for the above-referenced study.

It satisfactorily meets the recommendations made by the Committee on Human Research. The protocol and proposal to use human subjects is herewith approved. The IRB# and the date of this memo must be placed in the top right corner of the first page of the consent form. This is the approval date of this revised consent form.

Investigators must provide subjects with a copy of the consent form, keep a copy of the signed consent form with the research records, and place a signed copy in the patient's hospital/clinic medical record (if applicable).

Approval by the Committee on Human Research does not, in and of itself, constitute approval for implementation of this project. Other levels of review and approval may be required, and the project should not be started until all required approvals have been obtained. Also, studies funded by external sources must be covered by an agreement signed by the sponsor and the Oregon Board of Higher Education.

If this project involves the use of an Investigational New Drug, a copy of the protocol must be forwarded to the Pharmacy and Therapeutics Committee (Pharmacy Services - Investigational Drugs, OP-16A).

Thank you for your cooperation.

wp:rcfapp 3/92

APPENDIX G
THE FREQUENTLY REPORTED STRESSORS
OF THE SAMPLE

Table 8

100

The frequently reported stressors ("How often does it happen?") of the sample.

Item	Mean	S.D.	N	n*
1. Feeling sick	2.934	0.851	750	730
2. Having nothing to do	2.825	1.105	761	669
3. Not spending enough time with your Mom or Dad	2.597	1.244	766	588
4. Having your parents argue in front of you	2.547	1.036	766	639
5. Fighting with your parents about house rules	2.531	1.266	768	574
6. Not having enough money to spend	2.517	1.261	756	567
7. Feeling left out of the group	2.466	1.112	757	615
8. Being pressured to get good grades	2.459	1.418	761	499
9. Not having homework done on time	2.434	1.078	772	619
10. Feeling like your body is changing	2.385	1.156	761	570
11. Not being able to dress the way you want to	2.042	1.179	758	432
12. Being smaller than others your age	2.038	1.383	763	356
13. Moving from one place to another	1.993	1.045	759	471
14. Being late for school	1.992	0.942	760	515
15. Not being good enough at sports	1.991	1.119	764	440
16. Not getting along with your teacher	1.895	1.069	765	417
17. Changing schools	1.800	0.947	756	411
18. Being overweight or bigger than others your age	1.754	1.224	764	276
19. Having parents separate	1.703	1.095	772	321
20. Being pressured to try something new, like a cigarette, that you really don't want to try	1.523	0.948	772	237

The FBS is a five point scale where 1=never, 2=1 or 2 times, 3=sometimes, 4=often, and 5=all the time.

*number of children that experienced the stressor

APPENDIX H
THE ITEM STRESSFULNESS OF THE SAMPLE

Table 9

102

The item stressfulness ("How bad is it?") of the sample of children.

<u>Item</u>	<u>Mean</u>	<u>S.D.</u>	<u>N</u>
1. Having parents separate	3.734	1.401	764
2. Being pressured to try something new, like a cigarette, that you really don't want to try	3.493	1.401	763
3. Feeling left out of the group	3.446	1.358	763
4. having your parents argue in front of you	3.214	1.324	770
5. Feeling sick	3.173	1.335	771
6. Not having homework done on time	3.069	1.382	769
7. Being overweight or bigger than others your age	2.959	1.529	759
8. Not spending enough time with your Mom and Dad	2.944	1.378	769
9. Changing schools	2.877	1.454	763
10. Not having enough money to spend	2.876	1.514	758
11. Being pressured to get good grades	2.850	1.468	760
12. Moving from one place to another	2.843	1.516	765
13. Not being able to dress the way you want to	2.836	1.446	762
14. Not getting along with your teacher	2.827	1.469	769
15. Fighting with your parents about house rules	2.751	1.306	764
16. Not being good enough at sports	2.747	1.460	760
17. Having nothing to do	2.709	1.429	764
18. Being late for school	2.294	1.364	768
19. Being smaller than others your age	2.216	1.422	760
20. Feeling like your body is changing	2.055	1.283	761

The FBS is a five point scale where 1=not bad, 2=a little bad, 3=pretty bad, 4=real bad and 5=terrible.

APPENDIX I
THE MOST FREQUENTLY REPORTED
COPING STRATEGIES

The most frequently reported coping strategies (How often do you do this?) of the sample.

<u>Item</u>	<u>Mean</u>	<u>S.D.</u>	<u>N</u>
1. Watch TV or listen to music	3.102	0.868	765
2. Draw, write or read something	2.673	0.950	774
3. Say I'm sorry or tell the truth	2.650	0.906	760
4. Think about it	2.601	0.866	762
5. Walk, run or ride my bike	2.558	0.963	763
6. Try to relax, stay calm	2.528	0.912	760
7. Get mad	2.496	0.799	774
8. Talk to someone	2.493	0.916	754
9. Eat or drink	2.475	0.969	768
10. Do work around the house	2.371	0.943	766
11. Do something about it	2.334	0.903	754
12. Try to forget about it	2.323	0.930	762
13. Play a game or something	2.254	0.899	751
14. Daydream	2.243	0.972	766
15. Bite my nails or crack my knuckles	2.232	1.050	771
16. Be by myself; be alone	2.224	0.742	772
17. Cry or feel sad	2.204	0.765	771
18. Pray	2.164	0.997	760
19. Cuddle my pet or stuffed animal	2.106	1.011	761
20. Fight with someone	2.125	0.885	773
21. Sleep, take a nap	2.077	0.903	764
22. Run or walk away	2.028	0.899	761
23. Yell or scream	1.952	0.983	766
24. Talk to myself	1.930	0.942	758
25. Pick on someone	1.767	0.790	761
26. Hit, throw or break things	1.597	0.766	766

The coping scale is a 4-point scale on which 1=never, 2=once in a while, 3=a lot and 4=most of the time.

APPENDIX J
THE MOST HELPFUL COPING STRATEGIES

Table 11

106

The most helpful coping strategies ("How much does it help?") by sample.

<u>Item</u>	<u>Mean</u>	<u>S.D.</u>	<u>N</u>
1. Watch TV or listen to music	3.329	0.809	759
2. Say I'm sorry or tell the truth	3.230	0.922	752
3. Draw, write or read something	3.071	0.978	762
4. Talk to someone	3.037	0.993	750
5. Walk, run or ride my bike	3.016	1.003	757
6. Try to relax, stay calm	2.922	0.943	752
7. Do something about it	2.902	1.038	735
8. Think about it	2.900	0.872	753
9. Be by myself; be alone	2.876	0.894	764
10. Pray	2.765	1.254	754
11. Sleep, take a nap	2.697	1.165	759
12. Play a game or something	2.677	1.004	744
13. Cry or feel sad	2.580	0.906	760
14. Eat or drink	2.571	1.009	757
15. Cuddle my pet or stuffed animal	2.527	1.201	754
16. Do work around the house	2.902	1.038	735
17. Try to forget about it	2.439	0.955	756
18. Daydream	2.412	1.052	760
19. Run or walk away	2.408	1.064	753
20. Talk to myself	2.207	1.099	745
21. Get mad	2.316	0.744	765
22. Fight with someone	2.100	0.869	759
23. Yell or scream	2.803	1.073	762
24. Bite my nails or crack my knuckles	2.053	0.930	757
25. Pick on someone	1.858	0.862	748
26. Hit, throw or break things	1.776	0.961	759

This portion of the scale is also a 4-point scale where 1=never do it, 2=does not help, 3=helps a little and 4=helps a lot

APPENDIX K
FEEL BAD SCALE, FREQUENCY SCALE
MEAN SCORES BY GRADE AND GENDER

Table 12

FBS, Frequency Scale. Mean scores (and sample size) by grade and gender.

Items	3 rd Boys	3 rd Girls	4 th Boys	4 th Girls	5 th Boys	5 th Girls	6 th Boys	6 th Girls	7 th Boys	7 th Girls	8 th Boys	8 th Girls
Parents Separate	1.559 (59)	1.667 (69)	1.468 (47)	1.681 (72)	1.442 (52)	1.635 (63)	1.400 (40)	1.838 (99)	1.560 (50)	1.842 (76)	1.830 (53)	2.044 (91)
Pressured try new	1.153 (59)	1.130 (69)	1.087 (46)	1.056 (72)	1.327 (52)	1.393 (61)	1.425 (40)	1.606 (99)	1.686 (51)	1.688 (77)	2.113 (53)	2.228 (92)
Parents Argue	2.357 (56)	2.652 (69)	2.447 (47)	2.264 (72)	2.654 (52)	2.710 (62)	2.375 (40)	2.592 (98)	2.500 (50)	2.571 (52)	2.404 (52)	2.800 (90)
Not enough time with parents	2.250 (56)	2.739 (69)	2.217 (46)	2.427 (72)	2.750 (52)	2.738 (61)	2.600 (40)	2.598 (97)	2.490 (51)	2.513 (76)	2.566 (53)	3.000 (92)
Feel sick	3.017 (58)	3.288 (66)	2.783 (46)	2.943 (70)	3.080 (50)	2.968 (62)	2.842 (38)	3.000 (97)	2.755 (49)	2.766 (77)	2.774 (53)	2.901 (91)
Fight about house rules	2.271 (59)	2.200 (70)	2.298 (47)	2.141 (71)	2.580 (50)	2.661 (62)	2.350 (40)	2.660 (97)	2.471 (51)	2.600 (75)	2.698 (53)	3.087 (92)
Homework not done	2.186 (59)	2.000 (70)	2.130 (46)	1.861 (72)	2.577 (52)	2.435 (62)	2.675 (40)	2.485 (97)	2.784 (51)	2.338 (77)	2.811 (53)	2.957 (92)
Moving	1.607 (56)	2.309 (68)	1.733 (45)	1.958 (71)	2.160 (50)	2.032 (62)	1.875 (40)	2.124 (97)	1.760 (50)	2.000 (77)	2.000 (53)	2.067 (89)
Not get along With teacher	1.632 (57)	1.338 (68)	1.778 (45)	1.389 (72)	2.404 (52)	1.823 (62)	2.289 (38)	1.765 (98)	2.353 (51)	2.013 (77)	2.132 (53)	2.187 (91)
Overweight/ Bigger	1.482 (56)	1.536 (69)	1.500 (48)	1.444 (72)	1.673 (52)	2.000 (62)	1.700 (40)	1.939 (99)	1.600 (50)	2.000 (74)	1.765 (51)	2.056 (90)
Change schools	1.589 (56)	2.059 (68)	1.556 (45)	1.667 (72)	1.788 (52)	1.726 (62)	2.000 (39)	1.947 (95)	1.67 (51)	1.720 (75)	1.900 (50)	1.878 (90)
Not enough money	2.441 (59)	2.754 (69)	2.289 (45)	2.257 (70)	2.784 (51)	2.726 (62)	2.475 (40)	2.439 (98)	2.490 (51)	2.301 (73)	2.549 (51)	2.709 (86)
Not dress the way you want	2.000 (59)	2.433 (67)	2.000 (47)	1.971 (70)	2.160 (50)	2.339 (62)	2.154 (39)	1.959 (98)	1.647 (51)	1.822 (73)	1.961 (51)	2.056 (90)
Left out of group	2.345 (58)	2.909 (66)	2.362 (47)	2.542 (72)	2.519 (52)	2.847 (59)	2.333 (39)	2.510 (96)	1.882 (51)	2.533 (75)	2.176 (51)	2.367 (90)

Nothing to do	2.368 (57)	3.157 (70)	2.532 (47)	2.722 (72)	3.059 (51)	3.049 (61)	2.641 (39)	2.959 (97)	2.588 (51)	2.811 (74)	2.843 (51)	2.878 (90)
Pressured good grades	2.125 (56)	1.826 (69)	2.022 (46)	1.597 (72)	2.462 (52)	2.508 (61)	3.125 (40)	2.567 (97)	2.627 (51)	2.573 (75)	3.039 (51)	3.089 (90)
Not good at sports	1.508 (59)	2.014 (70)	1.660 (47)	1.819 (72)	1.804 (51)	2.323 (62)	1.900 (40)	2.030 (99)	1.677 (51)	2.419 (74)	2.196 (51)	2.207 (87)
Late for school	2.000 (57)	2.000 (68)	1.935 (46)	1.986 (71)	2.019 (52)	2.033 (61)	1.800 (40)	1.798 (99)	1.882 (51)	2.000 (74)	2.059 (51)	2.303 (89)
Body changing	2.263 (57)	2.304 (69)	2.174 (46)	1.861 (72)	2.500 (52)	2.459 (61)	2.225 (40)	2.505 (99)	2.800 (50)	2.562 (73)	2.529 (51)	2.433 (90)
Smaller than others	2.121 (58)	2.400 (70)	2.043 (47)	1.847 (72)	2.096 (52)	2.016 (62)	1.750 (40)	2.061 (98)	2.040 (50)	1.836 (73)	2.176 (51)	2.034 (89)

APPENDIX L
FEEL BAD SCALE, BADNESS SCALE,
MEAN SCORES BY GRADE AND GENDER

Table 13

FBS, Badness Scale, Mean scores (and sample size) by grade and gender.

Items	3 rd Boys	3 rd Girls	4 th Boys	4 th Girls	5 th Boys	5 th Girls	6 th Boys	6 th Girls	7 th Boys	7 th Girls	8 th Boys	8 th Girls
Parents Separate	3.948 (58)	4.362 (69)	3.542 (48)	4.000 (69)	3.941 (51)	3.672 (61)	3.775 (40)	3.622 (98)	3.700 (50)	3.547 (75)	3.385 (52)	3.413 (92)
Pressured try new	4.446 (56)	4.515 (68)	3.646 (48)	4.304 (69)	3.442 (52)	3.919 (62)	3.700 (40)	3.412 (97)	2.740 (50)	3.145 (76)	2.385 (52)	2.533 (92)
Parents Argue	3.464 (56)	3.826 (69)	2.646 (48)	3.535 (71)	3.288 (52)	3.258 (62)	3.150 (40)	3.071 (99)	2.922 (51)	3.169 (77)	2.906 (53)	3.110 (91)
Not enough time with parents	3.224 (58)	3.797 (69)	2.979 (47)	3.099 (71)	2.942 (51)	3.063 (63)	2.897 (39)	2.908 (98)	2.608 (51)	2.803 (76)	2.547 (53)	2.500 (92)
Feel sick	3.351 (57)	4.043 (69)	2.958 (48)	3.408 (71)	3.137 (51)	3.127 (63)	3.250 (40)	3.162 (99)	2.765 (51)	2.948 (77)	2.830 (53)	3.000 (91)
Fight about house rules	3.123 (57)	3.000 (65)	2.851 (47)	2.761 (71)	2.880 (50)	2.968 (63)	2.625 (40)	2.531 (98)	2.353 (51)	2.711 (76)	2.585 (53)	2.717 (92)
Homework not done	3.508 (59)	3.174 (69)	2.957 (47)	3.186 (70)	3.231 (52)	3.459 (61)	2.850 (40)	3.093 (97)	2.784 (51)	2.688 (77)	2.981 (53)	2.902 (92)
Moving	2.667 (57)	3.529 (68)	2.438 (48)	2.914 (70)	2.392 (51)	2.774 (62)	2.750 (40)	3.133 (98)	2.392 (51)	2.805 (77)	2.596 (52)	3.056 (90)
Not get along With teacher	3.357 (56)	3.899 (69)	2.809 (47)	3.443 (70)	2.750 (52)	3.048 (62)	2.700 (40)	2.606 (99)	2.569 (51)	2.377 (77)	2.377 (53)	2.217 (92)
Overweight/ Bigger	2.965 (57)	3.731 (67)	2.362 (47)	3.420 (69)	2.500 (52)	3.095 (63)	2.550 (40)	3.133 (98)	2.314 (51)	3.174 (75)	2.380 (50)	2.989 (89)
Change schools	3.190 (58)	3.743 (70)	2.375 (48)	3.157 (70)	2.692 (52)	2.902 (61)	2.615 (39)	3.031 (97)	2.588 (51)	2.720 (75)	2.490 (51)	2.578 (90)
Not enough money	3.153 (59)	3.557 (70)	3.000 (45)	2.648 (71)	3.196 (51)	2.810 (63)	2.900 (40)	2.745 (98)	2.510 (51)	2.466 (73)	2.740 (50)	2.872 (86)
Not dress the way you want	3.069 (58)	3.522 (69)	2.660 (47)	3.015 (68)	3.019 (52)	3.159 (63)	2.410 (39)	2.980 (99)	2.157 (51)	2.514 (74)	2.392 (51)	2.689 (90)
Left out of group	3.627 (59)	4.309 (68)	3.085 (47)	3.732 (71)	3.404 (52)	3.934 (61)	2.900 (40)	3.633 (98)	2.647 (51)	3.480 (75)	2.824 (510)	3.146 (89)

Nothing to do	3.193 (570)	3.174 (69)	2.702 (470)	2.817 (71)	3.058 (52)	2.873 (63)	2.359 (39)	2.449 (980)	2.333 (51)	2.493 (75)	2.392 (51)	2.644 (90)
Pressured good grades	3.158 (57)	3.676 (68)	2.587 (46)	2.957 (70)	2.827 (52)	2.839 (62)	2.425 (40)	2.643 (98)	2.529 (51)	2.787 (75)	2.667 (51)	2.854 (89)
Not good at sports	3.357 (56)	3.406 (69)	2.340 (47)	2.826 (69)	2.788 (52)	2.937 (63)	2.625 (40)	2.687 (99)	2.275 (51)	2.703 (74)	2.392 (51)	2.455 (88)
Late for school	2.966 (59)	2.971 (69)	2.271 (48)	2.479 (71)	2.192 (52)	2.286 (63)	2.050 (40)	2.367 (98)	1.686 (51)	2.013 (75)	2.118 (51)	1.944 (90)
Body changing	2.172 (58)	2.970 (67)	1.652 (46)	2.423 (71)	1.923 (52)	2.492 (63)	1.795 (39)	2.091 (99)	1.471 (51)	2.000 (74)	1.600 (50)	1.689 (90)
Smaller than others	2.797 (59)	3.377 (69)	2.014 (48)	2.348 (69)	2.196 (51)	2.460 (63)	1.625 (40)	2.051 (98)	1.660 (50)	1.890 (73)	1.902 (51)	1.932 (88)

APPENDIX M
SCHOOLAGER'S COPING STRATEGIES INVENTORY,
FREQUENCY SCALE,
MEANS SCORES BY GRADE AND GENDER

Table 14

SCSI, Frequency scale, Mean scores (and sample size) by grade and gender.

Item	3 rd Boys	3 rd Girls	4 th Boys	4 th Girls	5 th Boys	5 th Girls	6 th Boys	6 th Girls	7 th Boys	7 th Girls	8 th Boys	8 th Girls
Be by myself	2.017 (59)	2.257 (70)	2.125 (48)	2.181 (72)	2.000 (51)	2.413 (63)	1.975 (40)	2.255 (98)	2.118 (51)	2.342 (76)	2.192 (52)	2.467 (92)
Bite nails	2.07 (58)	2.188 (69)	2.146 (48)	1.1931 (72)	2.308 (52)	2.159 (63)	2.487 (39)	2.283 (99)	2.220 (50)	2.197 (76)	2.170 (53)	2.478 (92)
Cuddle pet	2.232 (56)	2.754 (65)	2.250 (48)	2.347 (72)	1.824 (51)	2.540 (63)	1.625 (40)	2.124 (97)	1.592 (49)	2.039 (77)	1.434 (53)	2.078 (90)
Cry or feel sad	2.068 (59)	2.642 (76)	1.979 (48)	2.208 (72)	2.154 (52)	2.397 (63)	1.975 (40)	2.327 (98)	1.627 (51)	2.276 (76)	1.849 (53)	2.413 (92)
Daydream	1.982 (57)	2.188 (69)	1.771 (48)	2.014 (72)	2.490 (51)	2.222 (63)	2.256 (39)	2.303 (99)	2.100 (50)	2.333 (75)	2.294 (51)	2.652 (92)
So something	2.246 (57)	2.104 (67)	2.146 (48)	2.271 (70)	2.196 (51)	2.613 (62)	2.308 (39)	2.260 (96)	2.400 (50)	2.366 (71)	2.340 (53)	2.622 (90)
Do housework	2.259 (58)	2.638 (69)	2.313 (48)	2.296 (71)	2.354 (52)	2.355 (62)	2.564 (39)	2.378 (98)	2.320 (50)	2.351 (74)	2.132 (53)	2.435 (92)
Draw, write or read	2.763 (59)	2.928 (69)	2.813 (48)	2.903 (72)	2.750 (52)	2.937 (63)	2.538 (39)	2.687 (99)	2.294 (51)	2.571 (77)	2.208 (53)	2.554 (92)
Eat or drink	2.724 (58)	2.580 (69)	2.761 (46)	2.278 (72)	2.904 (52)	2.397 (63)	2.410 (39)	2.394 (99)	2.490 (51)	2.320 (75)	2.365 (52)	2.359 (92)
Fight with someone	1.914 (58)	2.286 (97)	1.896 (48)	1.903 (72)	2.173 (52)	2.222 (63)	3.128 (39)	2.224 (98)	2.216 (51)	2.208 (77)	1.811 (53)	2.293 (92)
Get mad	2.322 (59)	2.629 (70)	2.438 (48)	2.292 (72)	2.692 (52)	2.524 (63)	2.513 (39)	2.414 (99)	2.460 (50)	2.558 (77)	2.377 (53)	2.685 (92)
Hit, throw, break thing	1.424 (59)	1.457 (70)	1.604 (48)	1.292 (72)	1.725 (51)	1.429 (63)	1.794 (39)	1.475 (99)	1.840 (50)	1.676 (74)	1.980 (51)	1.733 (90)
Pick on someone	1.695 (59)	1.786 (70)	1.894 (47)	1.657 (70)	1.961 (51)	1.726 (62)	1.800 (40)	1.796 (98)	1.740 (50)	1.622 (74)	1.882 (51)	1.764 (89)

Play a game	2.776 (98)	2.167 (66)	2.542 (48)	2.181 (72)	2.725 (51)	2.306 (62)	2.436 (39)	2.031 (97)	2.440 (50)	1.795 (73)	2.426 (47)	1.920 (88)
Pray	2.000 (57)	2.594 (69)	2.292 (48)	2.268 (71)	1.885 (52)	2.258 (62)	1.816 (38)	2.283 (99)	1.789 (50)	2.041 (74)	2.000 (51)	2.315 (89)
Run or walk away	2.169 (59)	2.406 (69)	1.917 (48)	2.070 (71)	2.058 (52)	2.371 (62)	1.842 (38)	1.929 (98)	1.720 (50)	1.743 (74)	1.940 (50)	2.056 (90)
Say I'm sorry	2.911 (56)	2.776 (67)	2.617 (47)	2.806 (72)	2.404 (52)	2.857 (63)	2.750 (40)	2.828 (99)	2.360 (50)	2.486 (74)	2.400 (50)	2.478 (90)
Sleep, take a nap	1.828 (58)	2.186 (70)	1.813 (48)	1.958 (71)	2.077 (52)	2.063 (63)	1.950 (40)	2.051 (99)	1.878 (49)	2.162 (74)	2.157 (51)	2.483 (89)
Talk to myself	2.036 (56)	2.118 (68)	1.681 (47)	1.903 (72)	1.846 (52)	2.079 (63)	2.025 (40)	1.948 (97)	1.673 (49)	2.000 (74)	1.760 (50)	1.933 (90)
Talk to someone	2.357 (56)	2.623 (69)	2.543 (46)	2.361 (72)	2.163 (49)	2.516 (62)	2.450 (40)	2.602 (98)	2.245 (49)	2.676 (74)	2.157 (51)	2.897 (88)
Think about it	2.390 (59)	2.696 (69)	2.468 (47)	2.366 (71)	2.519 (52)	2.746 (63)	2.550 (40)	2.608 (97)	2.220 (50)	2.703 (74)	2.725 (51)	2.944 (89)
Try to forget	2.259 (58)	2.643 (70)	2.417 (48)	2.361 (72)	2.412 (51)	2.413 (63)	2.350 (40)	2.162 (99)	2.313 (48)	2.243 (74)	2.039 (51)	2.318 (88)
Try to relax	2.328 (58)	2.652 (69)	2.521 (48)	2.493 (71)	2.615 (52)	2.726 (62)	2.575 (40)	2.525 (99)	2.375 (49)	2.338 (74)	2.720 (50)	2.517 (89)
Walk, run, ride bike	2.915 (59)	2.676 (68)	2.729 (48)	2.577 (71)	2.846 (52)	2.571 (63)	2.525 (40)	2.465 (99)	2.480 (50)	2.319 (72)	2.412 (51)	2.389 (90)
Watch TV, music	3.085 (59)	3.014 (69)	3.021 (48)	2.862 (72)	3.269 (52)	3.095 (63)	3.132 (38)	3.192 (99)	3.100 (50)	3.135 (74)	2.941 (51)	3.278 (90)
Yell or scream	1.776 (58)	2.314 (70)	1.583 (48)	1.708 (72)	2.135 (52)	1.935 (62)	1.775 (40)	1.889 (99)	1.840 (50)	2.068 (74)	1.765 (51)	2.300 (90)

APPENDIX N
SCHOOLAGER'S COPING STRATEGIES INVENTORY,
EFFECTIVENESS SCALE,
MEAN SCORES BY GRADE AND GENDER

Table 1.5

SCSI, Effectiveness Scale, Mean Scores (and sample size) by grade and gender

Item	3 rd Boys	3 rd Girls	4 th Boys	4 th Girls	5 th Boys	5 th Girls	6 th Boys	6 th Girls	7 th Boys	7 th Girls	8 th Boys	8 th Girls
Be by myself	2.407 (59)	2.939 (66)	2.739 (46)	2.875 (72)	2.469 (49)	3.129 (62)	2.625 (40)	2.960 (99)	2.804 (51)	3.053 (76)	2.865 (52)	3.162 (92)
Bite nails	2.127 (55)	2.152 (66)	2.109 (46)	1.803 (71)	2.294 (51)	1.968 (62)	2.211 (38)	2.031 (97)	2.000 (49)	1.987 (77)	2.094 (53)	2.043 (92)
Cuddle pet	2.537 (54)	3.182 (66)	2.705 (44)	2.943 (70)	2.196 (51)	3.032 (62)	2.025 (40)	2.567 (97)	1.860 (50)	2.506 (77)	1.736 (53)	2.500 (90)
Cry or feel sad	2.386 (57)	2.922 (64)	2.196 (46)	2.371 (70)	2.423 (52)	2.639 (61)	2.425 (40)	2.867 (98)	2.216 (51)	2.776 (76)	2.321 (53)	2.815 (92)
Daydream	2.105 (57)	2.176 (68)	2.085 (47)	2.129 (70)	2.725 (51)	2.492 (61)	2.538 (39)	2.505 (99)	2.400 (50)	2.486 (74)	2.442 (52)	2.707 (92)
So something	2.741 (54)	2.694 (62)	2.652 (46)	2.748 (66)	2.765 (51)	2.951 (61)	3.053 (38)	2.883 (94)	2.980 (50)	2.930 (71)	3.113 (53)	3.191 (89)
Do housework	2.436 (55)	2.785 (65)	2.556 (45)	2.634 (71)	2.569 (51)	2.459 (61)	2.692 (39)	2.485 (97)	2.540 (50)	2.257 (74)	2.509 (53)	2.407 (91)
Draw, write or read	3.052 (58)	3.265 (68)	3.156 (45)	3.314 (70)	3.212 (52)	3.306 (62)	2.921 (38)	3.133 (98)	2.700 (50)	2.921 (76)	2.774 (53)	2.967 (92)
Eat or drink	3.018 (57)	2.924 (66)	3.000 (45)	2.414 (70)	3.000 (52)	2.484 (62)	2.667 (39)	2.316 (98)	2.784 (51)	2.253 (75)	2.308 (52)	2.278 (90)
Fight with someone	1.965 (57)	2.156 (64)	2.065 (46)	1.857 (70)	1.980 (51)	2.048 (62)	2.051 (39)	2.163 (98)	2.353 (51)	2.183 (77)	2.096 (52)	2.196 (92)
Get mad	2.190 (58)	2.343 (67)	2.261 (46)	2.141 (71)	2.442 (52)	2.306 (62)	2.282 (39)	2.320 (97)	2.392 (51)	2.416 (77)	2.283 (53)	2.380 (92)
Hit, throw, break thing	1.695 (59)	1.603 (68)	1.761 (46)	1.414 (70)	1.902 (51)	1.516 (62)	2.051 (39)	1.616 (99)	2.120 (50)	1.824 (74)	2.216 (51)	1.933 (90)
Pick on someone	1.729 (59)	1.864 (66)	1.935 (46)	1.853 (68)	2.120 (50)	1.754 (61)	1.897 (39)	1.786 (98)	1.920 (50)	1.778 (72)	2.000 (50)	1.843 (89)
Play a game	3.138 (58)	2.587 (63)	3.021 (47)	2.620 (71)	3.160 (50)	2.852 (61)	2.825 (40)	2.438 (96)	2.760 (50)	2.292 (72)	2.750 (48)	2.330 (88)
Play	2.624 (57)	3.235 (68)	2.889 (45)	3.057 (70)	2.442 (52)	2.820 (61)	2.368 (38)	2.929 (99)	2.5000 (50)	2.514 (74)	3.608 (510)	2.798 (89)

Run or walk away	2.475 (59)	2.735 (68)	2.383 (47)	2.418 (67)	2.490 (51)	2.689 (61)	2.263 (38)	2.388 (98)	2.080 (50)	2.054 (74)	2.400 (50)	2.444 (90)
Say I'm sorry	3.364 (55)	3.136 (66)	3.267 (45)	3.606 (71)	3.096 (52)	3.290 (62)	3.175 (40)	3.404 (99)	3.020 (50)	3.139 (72)	3.100 (50)	3.100 (90)
Sleep, take a nap	2.517 (58)	2.580 (69)	2.565 (46)	2.771 (70)	2.500 (52)	2.726 (62)	2.650 (40)	2.646 (99)	2.429 (49)	2.676 (740)	2.980 (51)	3.090 (89)
Talk to myself	2.273 (55)	2.385 (65)	2.044 (45)	2.116 (69)	2.078 (51)	2.177 (62)	2.450 (40)	2.258 (97)	1.857 (490)	2.338 (74)	2.000 (50)	2.318 (88)
Talk to someone	2.895 (57)	3.191 (68)	3.000 (440)	2.803 (71)	2.714 (49)	3.000 (61)	3.000 (40)	3.204 (98)	2.937 (49)	3.230 (74)	2.745 (51)	3.375 (88)
Think about it	2.847 (59)	2.853 (68)	2.822 (45)	2.812 (69)	2.961 (51)	2.984 (62)	2.975 (400)	3.000 (96)	2.640 (50)	2.797 (740)	2.961 (51)	3.045 (88)
Try to forget	2.644 (59)	2.824 (68)	2.565 (46)	2.451 (71)	2.588 (510)	2.419 (620)	2.525 (40)	2.222 (99)	2.583 (48)	2.288 (73)	2.118 (51)	2.295 (88)
Try to relax	2.732 (56)	3.000 (68)	3.064 (47)	2.884 (69)	2.019 (52)	3.115 (61)	2.025 (40)	2.929 (99)	2.854 (48)	2.730 (74)	3.100 (50)	2.784 (88)
Walk, run, ride bike	3.458 (59)	2.881 (67)	3.255 (47)	3.043 (70)	3.346 (52)	3.081 (62)	3.000 (40)	2.990 (99)	2.898 (49)	2.764 (720)	2.765 (51)	2.888 (89)
Watch TV, music	3.246 (57)	3.044 (68)	3.234 (47)	3.183 (71)	3.596 (52)	3.403 (62)	3.462 (39)	3.444 (99)	3.320 (50)	3.284 (74)	3.260 (50)	3.456 (90)
Yell or scream	1.881 (59)	2.406 (69)	1.851 (47)	1.901 (71)	2.288 (52)	2.016 (61)	1.949 (39)	1.969 (99)	1.920 (50)	2.216 (74)	1.941 (51)	2.411 (90)

APPENDIX O
EFFECT OF GRADE AND GENDER
ON FREQUENCY OF EXPERIENCE
OF COPING STRATEGIES

Table 16

120

Effect of age and gender on "How often" the coping strategy "Get mad" was identified.

Source of variance	DF	SS	MSS	F	P
Between Subjects	773	493.48837			
Grade (G)	5	3.77269	0.75454	1.197	0.3086
Gender (S)	1	0.44924	0.44924	0.713	0.3988
GS	5	7.44956	1.49199	2.368	0.0381
Error 1	762	480.18525	0.63016		
Simple main effects	5				
Grade at S1 (boys)	5	4.42343	0.88469	1.404	0.2206
Grade at S2 (girls)	762	8.29920	1.65984	2.634	0.0226
Error 1		480.18525	0.63016		

Table 17

Effect of age and gender on "How often" the coping strategy "Talk to someone" was identified.

Source of variance	DF	SS	MSS	F	P
Between subjects	753	632.46684			
Grade (G)	5	2.26048	0.45210	0.557	0.7331
Gender (S)	1	13.61900	13.61900	16.776	0.0001
GS	5	11.69600	2.33920	2.881	0.0138
Error 1	742	602.37998	0.81183		
Simple main effects					
Grade at S1 (boys)	5	5.87257	1.17451	1.447	0.2053
Grade at S2 (girls)	5	8.74829	1.74966	2.155	0.0572
Error 1	742	602.37998	0.81183		

Table 18

121

Effect of age and gender on "How often" the coping strategy "Yell or scream" is identified.

Source of variance	DF	SS	MSS	F	P
Between subjects	765	739.21279			
Grade (G)	5	14.75603	2.95121	3.180	0.0075
Gender (S)	1	8.94980	8.94980	9.644	0.0020
GS	5	11.95338	2.39068	2.576	0.0254
Error 1	754	699.72463	0.92802		
Simple main effects					
Grade at S1 (boys)	5	8.20091	1.64018	1.767	0.1172
Grade at S2 (girls)	5	22.26362	4.45272	4.798	0.0003
Error 1	754	699.72463	0.92802		

APPENDIX P
EFFECT OF GRADE AND GENDER
ON EXPERIENCE OF HELPFULNESS
OF THE COPING STRATEGIES

Table 19

Effect of age and gender on the helpfulness of the coping strategy "Talk to someone".

Source of variance	DF	SS	MSS	F	P
Between subjects	749	738.95467			
Grade (G)	5	5.27438	1.05488	1.104	0.3568
Gender (S)	1	12.61593	12.61593	13.204	0.0004
GS	5	10.68786	2.13757	2.237	0.0490
Error 1	738	705.14068	0.95548		
Simple main effects					
Grade at S1 (boys)	5	3.45488	0.69098	0.723	0.6062
Grade at S2 (girls)	5	15.25790	3.05158	3.194	0.0073
Error 1	738	705.14068	0.95548		

Table 20

Effect of age and gender on the helpfulness of the coping strategy "Yell or scream".

Source of variance	DF	SS	MSS	F	P
Between subjects	761	875.79134			
Grade (G)	5	8.65786	1.73157	1.540	0.1750
Gender (S)	1	5.76009	5.76009	5.123	0.0240
GS	5	13.88208	2.77642	2.469	0.0313
Error 1	750	834.29994	1.12440		
Simple main effects					
Grade at S1 (boys)	5	6.58425	1.31685	1.171	0.3216
Grade at S2 (girls)	5	20.03682	4.00736	3.564	0.0034
Error	750	834.29994	1.12440		

APPENDIX Q
EFFECT OF GRADE AND GENDER
ON FREQUENCY AND STRESSFULNESS OF STRESSORS
AND TOTAL STRESS

Table 21

FBS and SCSi Scale ANOVA results

Scale	Source	Sum of Squares	df	Mean Square	F	Sig
FBS-Total Scale	Grade	11.884	5	2.377	9.199	.000
	Gender	5.150	1	5.150	19.932	.000
	Grade*Gender	.821	5	.164	.635	.673
FBS-Frequency Scale	Grade	12.898	5	2.580	10.077	.000
	Gender	1.420	1	1.420	5.548	.019
	Grade*Gender	1.149	5	.230	.898	.482
FBS-Badness Scale	Grade	60.809	5	12.162	21.492	.000
	Gender	11.507	1	11.507	20.335	.000
	Grade*Gender	2.372	5	.474	.838	.523
SCSi-Frequency Scale	Grade	2.164	5	.433	3.471	.004
	Gender	1.682	1	1.682	13.486	.000
	Grade*Gender	1.471	5	.294	2.358	.039
SCSi-Helpfulness Scale	Grade	1.218	5	.244	1.768	.117
	Gender	.330	1	.330	2.392	.122
	Grade*Gender	.892	5	.178	1.295	.264

APPENDIX R
THE MOST FREQUENTLY REPORTED STRESSORS BY GRADE

Table 22

The most frequently reported stressors by grade.

3rd Grade	4th Grade	5th Grade	6th Grade	7th Grade	8th Grade
1. Feeling sick 3.161 (0.974) n=124	1. Feeling sick 2.879 (0.836) n=116	1. Having nothing to do 3.054 (1.114) n=112	1. Feeling sick 2.956 (0.809) n=135	1. Feeling sick 2.762 (0.650) n=126	1. Pressured to get good grades 3.071 (1.442) n=141
2. Having nothing to do 2.803 (1.266) n=127	2. Having nothing to do 2.647 (1.117) n=119	2. Feeling sick 3.018 (0.958) n=112	2. Having nothing to do 2.868 (1.039) n=136	2. Having nothing to do 2.720 (1.067) n=125	2. Fight about house rules 2.945 (1.279) n=145
3. Feeling left out of group 2.645 (1.211) n=124	3. Feeling left out of group 2.471 (1.134) n=119	3. Not enough money to spend 2.752 (1.229) n=113	3. Pressured to get good grades 2.730 (1.427) n=137	3. Feeling like your body is changing 2.659 (1.112) n=123	3. Homework not done on time 2.903 (1.145) n=145
4. Not enough money to spend 2.609 (1.491) n=128	4. Not enough time with Mom and Dad 2.339 (1.141) n=118	4. Not enough time with Mom and Dad 2.743 (1.315) n=113	4. Not enough time with Mom and Dad 2.599 (1.221) n=137	4. Pressured to get good grades 2.595 (1.398) n=126	4. Having nothing to do 2.865 (1.009) n=141
5. Parents argue in front of you 2.520 (1.119) n=125	5. Parents argue in front of you 2.336 (0.895) n=119	5. Feeling left out of group 2.694 (1.227) n=111	5. Fight about house rules 2.569 (1.230) n=137	5. Fight about house rules 2.548 (1.093) n=126	5. Feeling sick 2.854 (0.819) n=144
6. Not enough time with Mom and Dad 2.520 (1.354) n=125	6. Not enough money to spend 2.270 (1.259) n=115	6. Parents argue in front of you 2.684 (1.083) n=128	6. Homework not done on time 2.540 (0.970) n=137	6. Parents argue in front of you 2.543 (0.982) n=127	6. Not enough time with Mom and Dad 2.841 (1.234) n=145
7. Feeling like your body is changing 2.286 (2.270) n=126	7. Fight about house rules 2.203 (1.181) n=118	7. Fight about house rules 2.625 (1.295) n=112	7. Parents argue in front of you 2.529 (1.041) n=128	7. Homework not done on time 2.516 (1.012) n=128	7. Parents argue in front of you 2.655 (1.066) n=142
8. Being smaller than others your age 2.273 (1.483) n=128	8. Feeling like your body is changing 1.983 (1.094) n=118	8. Homework not done on time 2.500 (1.024) n=114	8. Feeling left out of the group 2.459 (1.049) n=135	8. Not enough time with Mom and Dad 2.504 (1.154) n=137	8. Not enough money to spend 2.650 (1.258) n=137
9. Fight about house rules 2.233 (1.367) n=129	9. Not able to dress the way you want to 1.983 (1.098) n=117	9. Pressured to get good grades 2.487 (1.415) n=113	9. Not enough money to spend 2.449 (1.068) n=138	9. Not enough money to spend 2.379 (1.193) n=124	9. Feeling like your body is changing 2.468 (1.046) n=141
10. Not able to dress the way you want 2.230 (1.328) n=126	10. Homework not one on time 1.966 (0.942) n=118	10. Feeling like your body is changing 2.478 (1.350) n=113	10. Feeling like your body is changing 2.424 (0.970) n=139	10. Feeling left out of the group 2.270 (1.105) n=126	10. Feeling left out of the group 2.298 (0.998) n=141
11. Homework not done on time 2.085 (1.083) n=129	10b. Being late for school 1.966 (0.890) n=117	11. Not able to dress the way you want 2.259 (1.243) n=112	11. Moving from one place to another 2.051 (1.038) n=137	11. Not getting along with your teacher 2.148 (1.051) n=128	11. Being late for school 2.214 (1.051) n=140
12. Being late for school 2.000 (0.933) n=125	12. Being smaller than others your age 1.924 (1.250) n=119	12. Moving from one place to another 2.089 (1.135) n=112	12. Not able to dress the way you want 2.015 (1.231) n=137	12. Not good enough at sports 2.112 (1.137) n=125	12. Not good enough at sports 2.203 (1.115) n=138
13. Moving from one place to another 1.992 (1.093) n=124	13. Moving from one place to another 1.871 (0.947) n=116	13a. Not getting along with your teacher 2.088 (1.259) n=114	13. Not good enough at sports 1.993 (1.126) n=139	13. Being late for school 1.952 (0.974) n=125	13. Pressured to try something new 2.186 (1.247) n=145

14. Pressured to get good grades 1.960 (1.298) n=125	14. Pressured to get good grades 1.763 (1.051) n=118	13b. Not good enough at sports 2.088 (1.169) n=113	14. Being smaller than others your age 1.971 (1.388) n=138	14. Being smaller than others your age 1.919 (1.334) n=123	14. Not getting along with your teacher 2.167 (1.010) n=149
15. Changing schools 1.847 (1.127) n=124	15. Not good enough at sports 1.756 (1.017) n=119	15. Being late for school 2.027 ((0.995) n=113	15. Changing schools 1.963 (0.953) n=134	15. Moving from one place to another 1.906 (0.979) n=127	15. Being smaller than others your age 2.086 (1.447) n=140
16. Not good enough at sports 1.783 (1.089) n=129	16. Changing schools 1.624 (0.828) n=117	16. Being overweight or bigger 1.851 (1.264) n=114	16. Not getting along with your teacher 1.912 (1.092) n=136	16. Being overweight or bigger 1.839 (1.328) n=124	16. Moving from one place to another 2.042 (1.071) n=142
17. Having parents separate 1.617 (1.036) n=128	17. Having parents separate 1.597 (1.084) n=110	17. Changing schools 1.754 (0.974) n=114	17. Being overweight or bigger 1.871 (1.244) n=139	17. Not able to dress the way you want 1.750 (0.782) n=124	17. Not able to dress the way you want 2.021 (1.239) n=141
18. Being overweight or bigger 1.512 (1.082) n=125	18. Not getting along with your teacher 1.538(0.846) n=117	18. Having parents separate 1.548 (0.840) n=115	18. Being late for school 1.799 (0.754) n=139	18. Having parents separate 1.730 (1.183) n=126	18. Having parents separate 1.965 (1.271) n=144
19. Not getting along with your teacher 1.472 (0.912) n=125	19. Being overweight or bigger 1.467 (0.995) n=120	19. Pressured to try something new 1.363 (0.780) n=113	19. Having parents separate 1.712 (1.037) n=139	19. Changing schools 1.698 (0.762) n=126	19. Being overweight or bigger 1.950 (1.317) n=141
20. Pressured to try something new 1.414 (0.465) n=128	20. Pressured to try something new 1.068 (0.284) n=118	20. Pressured to try something new 1.363 (0.780) n=113	20.Pressured to try something new 1.554 (0.979) n=139	20. Pressured to try something new 1.688 (0.962) n=128	20. Changing schools 1.886(0.968) n=140

APPENDIX S
THE MOST STRESSFUL ITEMS BY GRADE

Table 23

The most stressful items by grade.

3rd Grade	4th Grade	5th Grade	6th Grade	7th Grade	8th Grade
1. Pressured to try something new 4.484 (1.071) n=124	1. Pressured to try something new 4.034 (1.259) n=117	1. Having parents separate 3.795 (1.502) n=112	1. Having parents separate 3.667 (1.336) n=138	1. Having parents separate 3.608 (1.419) n=125	1. Having parents separate 3.403 (1.391) n=144
2. Having parents separate 4.173 (1.241) n=127	2. Having parents separate 3.812 (1.426) n=117	2. Pressured to try something new 3.702 (1.310) n=114	2. Pressured to try something new 3.496 (1.301) n=137	2. Feeling left out of the group 3.143 (1.300) n=126	2. Parents arguing in front of you 3.035 (1.226) n=3.035
3. Feeling left out of the group 3.992 (1.312) n=127	3. Feeling left out of the group 3.475 (1.331) n=110	3. Feeling left out of the group 3.690 (1.323) n=113	3. Feeling left out of the group 3.420 (1.300) n=138	3. Parents arguing in front of you 3.070 (1.299) n=128	3. Feeling left out of the group 3.029 (1.367) n=140
4. Feeling sick 3.730 (1.341) n=126	4. Feeling sick 3.227 (1.285) n=119	4. Homework not done on time 3.354 (1.439) n=113	4. Feeling sick 3.184 (1.219) n=139	4. Pressured to try something new 2.984 (1.252) n=126	4. Feeling sick 2.938 (1.291) n=144
5. Parents arguing in front of you 3.664 (1.295) n=125	5. Not getting along with your teacher 3.656 (1.627) n=125	5. Parents arguing in front of you 3.272 (1.397) n=114	5. Parents arguing in front of you 3.094 (1.377) n=139	5. Feeling sick 2.875 (1.334) n=128	5. Homework not done on time 2.931 (1.362) n=145
6. Not getting along with hyour teacher 3.656 (1.627) n=125	6. Parents arguing in front of you 3.176 (1.267) n=119	6. Feeling sick 3.132 (1.392) n=114	6. Homework not done on time 3.022 (1.369) n=137	6. Being overweight or bigger 2.825 (1.432) n=126	6. Moving from one place to another 2.887 (1.474) n=142
7. Not spending enough time with parents 3.535 (1.446) n=127	7. Homework not done on time 3.094 (1.339) n=117	7. Not able to dress the way you want to 3.096 (1.550) n=115	7. Moving from one place to another 3.022 (1.442) n=138	7. Homework not done on time 2.727 (1.228) n=128	7. Not having enough money to spend 2.824 (1.403) n=136
8. Changing schools 3.492 (1.547) n=128	8. Not spending enough time with parents 3.051 (1.246) n=118	8. Not spending enough time with parents 3.009 (1.466) n=114	8. Being overweight or bigger than others 2.964 (1.421) n=138	8. Not spending enough time with parents 2.786 (1.395) n=127	8. Being pressured to get good grades 2.786 (1.361) n=140
10. Not having enough money to spend 3.372 (1.649) n=129	10. Changing schools 2.839 (1.513) n=118	10. Having nothing to do 2.957 (1.429) n=115	10. Not spending enough time with parents 2.905 (1.294) n=137	10. Changing schools 2.667 (1.233) n=126	10. Fighting about house rules 2.669 (1.242) n=145
11. Not having eough money to spend 3.372 (1.649) n=129	11. Changing schools 2.839 (1.513) n=118	11. Fighting about house rules 2.929 (1.334) n=113	11. Not able to dress the way you want 2.819 (1.347) n=138	11. Moving from one place to another 2.641 (1.407) n=128	11. Not able to dress the way you want 2.582 (1.369) n=141
12. Pressured to get good grades 3.440 (1.613) n=125	12. Pressured to get good grades 2.810 (1.497) n=116	12. Not getting along with your teacher 2.912 (1.449) n=114	12. Not having enough money to spend 2.790 (1.457) n=138	12. Fighting about house rules 2.567 (1.257) n=127	12. Having nothing to do 2.553 (1.333) n=141
13. Not able to dress the way you want 3.315 (1.602) n=127	13. Fighting about house rules 2.797 (1.265) n=118	13. Not being good enough at sports 2.870 (1.478) n=115	13. Not being good enough at sports 2.669 (1.426) n=139	13. Not being good enough at sports 2.528 (1.280) n=125	13. Changing schools 2.546 (1.381) n=141

14. Homework not done on time 3.328 (1.460) n=128	14. Not enough money to spend 2.784 (1.542) n=116	14. Pressured to get good grades 2.833 (1.499) n=114	14. Not getting along with your teacher 2.633 (1.325) n=139	14. Not enough money to spend 2.484 (1.278) n=124	14. Not spending enough time with parents 2.517 (1.231) n=145
15. Having nothing to do 3.183 (1.504) n=126	15. Moving from one place to another 2.720 (1.579) n=118	15. Being overweight or bigger 2.826 (1.512) n=115	15. Pressured to get good grades 2.580 (1.355) n=138	15. Not getting along with your teacher 2.453 (1.203) n=128	15. Pressured to try something new 2.479 (1.212) n=144
16. Moving from one place to another 3.136 (1.658) n=125	16. Having nothing to do 2.771 (1.392) n=118	16. Changing schools 2.805 (1.469) n=113	16. Fighting about house rules 2.558 (1.208) n=138	16. Having nothing to do 2.429 (1.388) n=126	16. Not being good enough at sports 2.432 (1.357) n=139
17. Being smaller than others 3.109 (2.675) n=128	17. Not being good enough at sports 2.629 (1.460) n=116	17. Moving from one place to another 2.602 (1.497) n=113	17. Having nothing to do 2.423 (1.392) n=137	17. Not able to dress the way you want 2.368 (1.133) n=125	17. Not getting along with your teacher 2.276 (1.193) n=145
18. Fighting about house rules 3.057 (1.484) n=122	18. Being late for school 2.395 (1.379) n=119	18. Being smaller than others 2.342 (1.504) n=114	18. Being late for school 2.275 (1.272) n=138	18. Being late for school 1.888 (1.048) n=126	18. Being late for school 2.007 (1.245) n=141
19. Being late for school 2.969 (1.567) n=128	19. Being smaller than others 2.248 (1.438) n=117	19. Being late for school 2.243 (1.374) n=115	19. Feeling like your body is changing 2.007 (1.130) n=138	19. Being smaller than others 1.797 (1.079) n=123	19. Being smaller than others 1.921 (1.142) n=139
20. Feeling like your body is changing 2.600 (1.571) n=125	20. Feeling like your body is changing 2.120 (1.314) n=120	20. Feeling like your body is changing 2.235 (1.512) n=115	20. Being smaller than others 1.928 (1.230) n=138	20. Feeling like your body is changing 1.784 (1.079) n=123	20. Feeling like your body is changing 1.657 (0.920) n=140

APPENDIX T
THE MOST FREQUENTLY REPORTED COPING STRATEGIES BY GRADE

Table 24

The most frequently reported coping strategies by grade

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3rd Grade	4th Grade	5th Grade	6th Grade	7th Grade	8th Grade
1. Watch TV or listen to music 3.047 (0.946) n=128	1. Watch TV or listen to music 2.925 (0.909) n=120	1. Watch TV or listen to music 3.174 (0.901) n=115	1. Watch TV or listen to music 3.175 (0.766) n=137	1. Watch TV or listen to music 1.121 (0.870) n=124	1. Watch TV or listen to music 3.156 (0.813) n=141
2. Draw, write or read something 2.852 (0.989) n=128	2. Draw, write or read something 2.867 (0.888) n=120	2. Draw, write or read something 2.852 (0.910) n=115	2. Say I'm sorry or tell the truth 2.806 (0.875) n=139	2. Get mad 2.520 (0.775) n=127	2. Think about it 2.864 (0.850) n=140
3. Say I'm sorry or tell the truth 2.837 (0.918) n=123	3. Say I'm sorry or tell the truth 2.731 (0.880) n=119	3. Walk, run or ride my bike 2.696 (0.957) n=138	3. Draw, write or read something 2.645 (0.957) n=138	3. Think about it 2.508 (0.851) n=124	3. Try to relax; stay calm 2.590 (0.875) n=139
4. Walk, run or ride my bike 2.787 (1.021) n=127	4. Walk, run or ride my bike 2.639 (0.972) n=119	4. Try to relax; stay calm 2.675 (0.964) n=114	4. Think about it 2.591 (0.896) n=137	4. Talk to someone 2.504 (0.927) n=123	4. Get mad 2.572 (0.823) n=145
5. Eat or drink 2.646 (0.988) n=127	5. Try to relax; stay calm 2.504 (0.862) n=119	5. Say I'm sorry or tell the truth 2.652 (0.956) n=115	5. Talk to someone 2.558 (0.880) n=138	5. Draw, write or read something 2.461 (0.913) n=128	5. Talk to someone 2.568 (0.909) n=139
6. Think about it 2.555 (0.937) n=128	6. Eat or drink 2.466 (0.967) n=118	6. Think about it 2.643 (0.808) n=115	6. Try to relax; stay calm 2.540 (0.879) n=139	6. Say I'm sorry or tell the truth 2.435 (0.848) n=124	6. Daydream 2.524 (0.992) n=143
7. Cuddle my pet or stuffed animal 2.512 (1.042) n=121	7. Talk to someone 2.432 (0.901) n=118	7. Eat or drink 2.626 (1.038) n=115	7. Walk, run, or ride my bike 2.482 (0.920) n=139	7. Eat or drink 2.389 (0.912) n=122	7. Do something about it 2.517 (0.895) n=143
8. Talk to someone 2.504 (0.876) n=125	8. Think about it 2.407 (0.776) n=118	8. Get mad 2.600 (0.825) n=115	8. Get mad 2.442 (0.694) n=138	8. Walk, run or ride my bike 2.385 (0.913) n=122	8. Say I'm sorry or tell the truth 2.450 (0.892) n=140
9. Try to relax; stay calm 2.504 (1.007) n=127	9. Try to forget about it 2.383 (0.936) n=120	9. Play a game or something 2.496 (0.867) n=113	9. Do work around the house 2.431 (0.998) n=137	9. Do something about it 2.380 (0.906) n=121	9. Draw, write or read something 2.428 (0.941) n=145
10. Get mad 2.488 (0.867) n=129	10. Get mad 2.350 (0.795) n=120	10. Try to forget about it 2.412 (1.003) n=114	10. Eat or drink 2.399 (0.978) n=138	10. Try to relax; stay calm 2.352 (0.871) n=122	10. Walk, run or ride my bike 2.397 (0.925) n=141
11. Try to forget about it 2.469 (0.972) n=128	11. Play a game or something 2.325 (0.909) n=120	11. Try to forget about it 2.412 (1.003) n=114	11. Bite my nails or crack my knuckles 2.341 (1.070) n=138	11. Do work around the house 2.339 (0.927) n=124	11. Be by myself; be alone 2.368 (0.677) n=144
12. Do work around the house 2.465 (0.966) n=127	12. Cuddle my pet or stuffed animal 2.308 (1.035) n=120	12a. Talk to someone 2.360 (1.016) n=111	12. Daydream 2.290 (0.953) n=138	12. Try to forget about it 2.270 (0.813) n=122	12. Bite my nails or crack my knuckles 2.366 (1.109) n=145
13. Play a game or something 2.452 (0.957) n=124	13. Do work around the house 2.303 (0.944) n=119	12b. Do work around the house 2.360 (0.951) n=114	13. Do something about it 2.274 (0.767) n=135	13. Be by myself; be alone 2.252 (0.690) n=127	13. Sleep, take a nap 2.364 (0.867) n=140
14. Cry or feel sad 2.373 (0.855) n=126	14. Pray 2.277 (0.999) n=119	13. Daydream 2.342 (0.967) n=114	14. Cry or feel sad 2.225 (0.673) n=138	14. Daydream 2.240 (0.846) n=125	14. Eat or drink 2.361 (0.921) n=144

15. Pray 2.325 (0.995) n=126	15. Do something about it 2.220 (0.859) n=118	14. Cry or feel sad 2.287 (0.792) n=115	15. Try to forget about it 2.216 (0.976) n=139	Bite my nails or crack my knuckles 2.206 (1.038) n=126	15. Do work around the house 2.324 (0.881) n=145
16. Run or walk away 2.297 (0.991) n=128	16. Be by myself; be alone 2.158 (0.745) n=120	15a. Be by myself; be alone 2.228 (0.842) n=114	16. Fight with someone 2.197 (0.847) n=137	16. Play a game or something 2.057 (0.823) n=123	16. Try to forget about it 2.216 (0.858) n=139
17. Bite my nails or crack my knuckles 2.197 (1.091) n=127	17. Cry or feel sad 2.117 (0.735) n=120	15b. Run or walk away 2.228 (0.950) n=114	17. Be by myself; be alone 2.174 (0.704) n=138	17. Sleep, take a nap 2.049 (0.848) n=123	17. Cry or feel sad 2.207 (0.798) n=145
18. Do something about it 2.169 (0.985) n=124	18. Bite my nails or crack my knuckles 2.017 (0.970) n=120	16. Bite my nails or crack my knuckles 2.226 (1.093) n=115	18. Pray 2.153 (0.962) n=137	18. Cry or feel sad 2.016 (0.690) n=127	18. Pray 2.200 (1.040) n=140
19. Be by myself; be alone 2.147 (0.792) n=129	19. Run or walk away 2.008 (0.828) n=119	17. Cuddle my pet or stuffed animal 2.219 (1.071) n=114	19. Play a game or something 2.147 (0.947) n=136	19. Fight with someone 2.111 (0.820) n=128	19. Fight with someone 2.117 (0.821) n=145
20. Fight with someone 2.117 (0.985) n=128	20. Daydream 1.917 (0.958) n=120	18. Fight with someone 2.200 (0.929) n=115	20. Sleep, take a nap 2.022 (0.838) n=139	20. Yell or scream 1.976 (0.992) n=124	20. Yell or scream 2.106 (1.074) n=141
21. Daydream 2.095 (1.007) n=126	21. Fight with someone 1.900 (0.893) n=120	19. Pray 2.088 (1.069) n=137	21. Cuddle my pet or stuffed animal 1.978 (0.981) n=137	21. Pray 1.935 (0.881) n=124	21. Play a game or something 2.096 (0.800) n=135
23. Yell or scream 2.070 (0.974) n=128	23. Talk to myself 1.815 (0.873) n=119	21. Yell or scream 2.026 (1.034) n=114	23. Run or walk away 1.904 (0.860) n=136	23. Cuddle my pet or stuffed animal 1.865 (0.906) n=126	23. Talk to myself 1.871 (0.896) n=140
24. Sleep, take a nap 2.023 (1.105) n=128	24. Pick on someone 1.752 (0.787) n=117	22. Talk to myself 1.974 (0.968) n=115	24. Yell or scream 1.856 (0.937) n=139	24. Hit, throw or break things 1.742 (0.774) n=124	24. Cuddle my pet or stuffed animal 1.839 (0.877) n=143
25. Pick on someone 1.774 (0.912) n=129	25. Yell or scream 1.658 (0.804) n=120	23. Pick on someone 1.832 (0.833) n=113	25. Pick on someone 1.797 (0.775) n=138	25. Run or walk away 1.734 (0.688) n=124	25. Hit, throw or break things 1.823 (0.881) n=141
26. Hit, throw or break things 1.442 (0.770) n=129	26. Hit, throw or break things 1.417 (0.588) n=120	24. Hit, throw or break things 1.561 (0.765) n=114	26. Hit, throw or break things 1.565 (0.694) n=138	26. Pick on someone 1.669 (0.634) n=124	26. Pick on someone 1.807 (0.776) n=140

APPENDIX U
THE MOST HELPFUL COPING STRATEGIES BY GRADE

Table 25

The most helpful coping strategies by grade

3rd Grade	4th Grade	5th Grade	6th Grade	7th Grade	8th Grade
1. Say I'm sorry or tell the truth 3.240 (0.949) n=121	1. Say I'm sorry or tell the truth 3.474 (0.839) n=116	1. Watch TV or listen to music 3.491 (0.812) n=114	1. Watch TV or listen to music 3.449 (0.651) n=138	1. Watch TV or listen to music 3.298 (0.806) n=124	1. Watch TV or listen to music 3.386 (0.755) n=140
2. Draw, write or read something 3.167 (1.056) n=126	2. Draw, write or read something 3.252 (0.867) n=115	2. Draw, write or read something 3.263 (0.883) n=114	2. Say I'm sorry or tell the truth 3.338 (0.821) n=139	2. Say I'm sorry or tell the truth 3.090 (0.945) n=122	2. Do something about it 3.162 (0.927) n=142
3. Walk, run or ride my bike 3.151 (1.044) n=126	3. Watch TV or listen to music 3.202 (0.822) n=118	3. Walk, run or ride my bike 3.202 (0.961) n=114	3. Talk to someone 3.145 (0.940) n=138	3. Talk to someone 3.070 (0.960) n=123	3. Talk to someone 3.144 (0.982) n=139
4. Watch TV or listen to music 3.136 (0.953) n=125	4. Walk, run or ride my bike 3.128 (0.979) n=117	4. Say I'm sorry or tell the truth 3.202 (0.997) n=114	4. Draw, write or read something 3.074 (0.963) n=136	4. Be by myself; be alone 2.953 (0.754) n=127	4. Say I'm sorry or tell the truth 3.100 (0.939) n=140
5. Talk to someone 3.056 (1.018) n=125	5. Pray 2.991 (1.174) n=115	5. Try to relax; stay calm 3.071 (0.970) n=113	5. Think about it 2.993 (0.848) n=136	5. Do something about it 2.950 (1.056) n=121	5. Be by myself; be alone 3.056 (0.727) n=144
6. Eat or drink 2.967 (1.048) n=123	6. Try to relax; stay calm 2.957 (0.879) n=116	6. Play a game or something 2.991 (0.879) n=111	6. Walk, run or ride my bike 2.993 (0.996) n=139	6. Draw, write or read something 2.883 (0.961) n=126	6. Sleep, take a nap 3.050 (0.999) n=140
7. Pray 2.952 (1.256) n=125	7. Talk to someone 2.878 (0.966) n=115	7. Think about it 2.973 (0.860) n=113	7. Try to relax; stay calm 2.957 (0.931) n=139	7. Walk, run or ride my bike 2.818 (0.957) n=121	7. Think about it 3.014 (0.834) n=139
8. Cuddle my pet or stuffed animal 2.892 (1.158) n=120	8. Cuddle my pet or stuffed animal 2.851 (1.131) n=114	8. Talk to someone 2.873 (1.085) n=110	8. Do something about it 2.932 (0.967) n=132	8. Try to relax; stay calm 2.779 (0.886) n=122	8. Try to relax; stay calm 2.899 (0.848) n=128
9. Try to relax; stay calm 2.879 (1.123) n=124	9. Be by myself; be alone 2.822 (1.019) n=118	9. Do something about it 2.866 (1.086) n=112	9. Be by myself; be alone 2.863 (0.836) n=139	9. Think about it 2.734 (0.827) n=124	9. Draw, write or read something 2.897 (1.032) n=145
10. Play a game or something 2.851 (1.085) n=121	10. Think about it 2.816 (0.847) n=114	10. Be by myself; be alone 2.838 (1.032) n=111	10. Pray 2.774 (1.231) n=137	10. Sleep, take a nap 2.577 (1.131) n=123	10. Walk, run or ride my bike 2.843 (1.020) n=140
11. Think about it 2.850 (0.985) n=127	11. Play a game or something 2.780 (0.980) n=118	11. Eat or drink 2.719 (1.043) n=114	11. Cry or feel sad 2.739 (0.840) n=138	11. Cry or feel sad 2.551 (0.923) n=127	11. Pray 2.729 (1.240) n=140
12. Try to forget about it 2.740 (1.071) n=127	12. Do something about it 2.714 (1.043) n=112	12. Cuddle my pet or stuffed animal 2.655 (1.266) n=113	12. Sleep, take a nap 2.647 (1.148) n=139	12. Pray 2.508 (1.246) n=124	12. Cry or feel sad 2.634 (0.927) n=145
13. Do something about it 2.716 (1.117) n=116	13. Sleep, take a nap 2.690 (1.233) n=116	13. Pray 2.646 (1.336) n=113	13. Play a game or something 2.551 (1.017) n=136	13. Play a game or something 2.484 (0.981) n=122	13. Daydream 2.611 (0.983) n=144
14. Be by myself; be alone 2.688 (1.019) n=125	14. Eat or drink 2.643 (1.019) n=115	14. Sleep, take a nap 2.623 (1.215) n=114	14. Do work around the house 2.544 (1.010) n=136	14. Eat or drink 2.468 (0.935) n=126	14. Play a game or something 2.478 (0.966) n=136

15. Cry or feel sad 2.669 (0.969) n=121	15. Do work around the house 2.603 (1.070) n=116	15a. Daydream 2.598 (1.055) n=112	15. Daydream 2.514 (1.055) n=138	15. Daydream 2.452 (0.966) n=124	15. Do work around the house 2.444 (0.922) n=144
16. Do work around the house 2.625 (1.123) n=120	16. Try to forget about it 2.496 (0.925) n=117	15b. Run or walk away 2.598 (1.000) n=112	16. Eat or drink 2.416 (0.983) n=137	16. Get mad 2.406 (0.704) n=128	16. Run or walk away 2.429 (1.067) n=140
17. Run or walk away 2.614 (1.106) n=127	17. Run or walk away 2.404 (1.019) n=114	16. Cry or feel sad 2.540 (0.897) n=113	17. Cuddle my pet or stuffed animal 2.409 (1.204) n=137	17. Try to forget about it 2.405 (0.802) n=121	17. Get mad 2.345 (0.711) n=145
18. Sleep, take a nap 2.551 (1.220) n=127	18. Cry or feel sad 2.302 (0.826) n=116	17. Do work around the house 2.509 (0.986) n=112	18. Run or walk away 2.353 (1.119) n=136	18. Do work around the house 2.371 (0.967) n=124	18. Eat or drink 2.289 (0.904) n=142
19. Talk to myself 2.333 (1.103) n=120	19. Get mad 2.188 (0.694) n=117	18. Try to forget about it 2.496 (1.109) n=113	19. Talk to myself 2.314 (1.116) n=137	19. Cuddle my pet or stuffed animal 2.252 (1.141) n=127	19. Yell or scream 2.241 (1.121) n=141
20. Get mad 2.272 (0.883) n=125	20. Daydream 2.111 (1.128) n=117	19. Get mad 2.368 (0.801) n=114	20a. Get mad 2.309 (0.661) n=136	20. Fight with someone 2.250 (0.784) n=128	20. Try to forget about it 2.230 (0.879) n=139
21. Daydream 2.144 (1.045) n=125	21. Talk to myself 2.088 (1.085) n=114	20. Yell or scream 2.142 (1.125) n=113	20b. Try to forget about it 2.309 (0.947) n=139	21. Talk to myself 2.146 (1.136) n=123	21. Cuddle my pet or stuffed animal 2.217 (1.145) n=143
22. Bite my nails or crack my knuckles 2.140 (1.059) n=121	22. Bite my nails or crack my knuckles 1.923 (0.911) n=117	21. Talk to myself 2.133 (1.073) n=113	21. Fight with someone 2.131 (0.821) n=137	22. Yell or scream 2.097 (1.047) n=124	22. Talk to myself 2.203 (1.075) n=138
23. Yell or scream 2.164 (1.041) n=128	23. Fight with someone 1.940 (0.963) n=116	22. Bite my nails or crack my knuckles 2.115 (0.050) n=113	22. Bite my nails or crack my knuckles 2.081 (0.873) n=135	23. Run or walk away 2.065 (0.977) n=124	23. Fight with someone 2.160 (0.808) n=144
24. Fight with someone 2.066 (0.989) n=121	24. Pick on someone 1.886 (0.900) n=114	23. Fight with someone 2.018 (0.834) n=113	23. Yell or scream 1.957 (1.038) n=138	24. Bite my nails or crack my knuckles 1.992 (0.834) n=126	24. Bite my nails or crack my knuckles 2.062 (0.860) n=145
25. Pick on someone 1.800 (0.959) n=125	25. Yell or scream 1.881 (1.039) n=118	24. Pick on someone 1.919 (0.926) n=111	24. Pick on someone 1.818 (0.740) n=137	25. Hit, throw or break things 1.944 (0.965) n=124	25. Hit, throw or break things 2.035 (1.065) n=141
26. Hit, throw or break things 1.646 (0.964) n=127	26. Hit, throw or break things 1.552 (0.762) n=116	25. Hit, throw or break things 1.690 (0.974) n=113	25. Hit, throw or break things 1.739 (0.915) n=124	26. Pick on someone 1.836 (0.837) n=122	26. Pick on someone 1.899 (0.837) n=139

APPENDIX V
THE MOST FREQUENT STRESSORS BY GENDER

Table 26

The most frequent stressors "How often" by gender

Boys	Girls
1. Feeling sick 2.881 (0.884) n=294	1. Feeling sick 2.970 (0.829) n=463
2. Having nothing to do 2.669 (1.146) n=296	2. Having nothing to do 2.925 (1.068) n=464
3. Being pressured to get good grades 2.547 (1.423) n=296	3. Not spending enough time with your Mom and Dad 2.675 (1.249) n=467
4. Homework not done on time 2.522 (1.100) n=301	4. Having your parents argue in front of you 2.603 (1.057) n=468
5. Not having enough money to spend 2.508 (1.287) n=297	5. Feeling left out of the group 2.592 (1.112) n=458
6. Not spending enough time with your Mom and Dad 2.477 (1.231) n=298	6. Fighting with your parents about house rules 2.587 (1.296) n=567
7. Having your parents argue in front of you 2.458 (1.000) n=297	7. Not having enough money to spend 2.526 (1.245) n=458
8. Fighting with your parents over house rules 2.447 (1.216) n=300	8. Being pressured to get good grades 2.401 (1.415) n=464
9. Feeling like your body is changing 2.422 (1.216) n=296	9. Not having homework done on time 2.379 (1.062) n=407
10. Feeling left out of the group 2.268 (1.083) n=298	10. Feeling like your body is changing 2.364 (1.117) n=464
11. Not getting along with your teacher 2.088 (1.161) n=296	11. Not being good enough at sports 2.129 (1.114) n=464
12. Being smaller than others your age 2.050 (1.326) n=298	12. Moving from one place to another 2.084 (1.083) n=464
13. Not being able to dress the way you want 1.980 (1.139) n=297	13. Not being able to dress the way you want 2.078 (1.202) n=460
14. Being late for school 1.956 (0.931) n=297	14. Being smaller than others your age 2.032 (1.421) n=464
15. Moving from one place to another 1.854 (0.968) n=294	15. Being late for school 2.017 (0.950) n=462
16. Not good enough at sports 1.779 (1.095) n=299	16. Overweight or bigger 1.843 (1.281) n=466
17. Changing schools 1.741 (0.892) n=293	17. Changing schools 1.840 (0.979) n=462
18. Overweight or bigger 1.616 (1.118) n=297	18. Parents separate 1.802 (1.181) n=470
19. Parents separate 1.551 (0.928) n=301	19. Not getting along with teacher 1.776 (0.990) n=468
20. Try something new 1.468 (0.874) n=301	20. Try something new 1.560 (0.992) n=470

APPENDIX W
THE MOST STRESSFUL ITEMS BY GENDER

Table 27

141

The most stressful items (How bad) by gender

Boys	Girls
1. Parents separate 3.719 (1.354) n=299	1. Parents separate 3.741 (w.432) n=464
2. Pressured to try something new 3.396 (1.444) n=298	2. Feeling left out of the group 3.669 (1.277) n=462
3. Feeling left out of the group 3.013 (1.409) n=300	3. Pressured to try something new 3.556 (1.373) n=464
4. Homework not done on time 3.073 (1.396) n=302	4. Parents argue in front of you 3.301 (1.337) n=469
5. Parents argue in front of you 3.070 (1.290) n=300	5. Feeling sick 3.257 (1.303) n=470
6. Feeling sick 3.047 (1.373) n=300	6. Being overweight or bigger 3.236 (1.483) n=461
7. Not enough money to spend 2.922 (1.606) n=296	7. Homework not done on time 3.062 (1.373) n=466
8. Not enough time with Mom and Dad 2.870 (1.341) n=299	8. Moving places 3.041 (1.520) n=465
9. Not getting along with teacher 2.769 (1.451) n=299	9. Changing schools 3.002 (1.463) n=463
10. Fight about house rules 2.745 (1/309) n=298	10. Not enough time with Mom and Dad 2.991 (1.402) n=469
11. Pressured to get good grades 2.721 (1.461) n=297	11. Not able to dress the way you want 2.638 (1.418) n=298
12. Having nothing to do 2.697 (1.467) n=297	12. Pressured to get good grades 2.933 (1.469) n=462
13. Changing schools 2.676 (1.416) n=299	13. Not getting along with teacher 2.866 (1.482) n=469
14. Not good enough at sports 2.646 (1.495) n=297	14. Not enough money to spend 2.842 (1.450) n=461
15. Not able to dress the way you want 2.638 (1.418) n=298	15. Not good enough at sports 2.807 (1.432) n=462
16. Moving places 2.535 (1.461) n=299	16. Fight about house rules 2.757 (1.306) n=465
17. Being overweight or bigger 2.522 (1.498) n=297	17. Having nothing to do 2.715 (1.406) n=466
18. Being late for school 2.239 (1.362) n=301	18. Being late for school 2.324 (1.362) n=466
19. Smaller than others your age 2.084 (1.382) n=299	19. Smaller than others your age 2.302 (1.441) n=460
20. Feeling like you body is changing 1.780 (1.157) n=296	20. Feeling like your body is changing 2.231 (1.331) n=464

APPENDIX X

THE MOST FREQUENTLY IDENTIFIED COPING STRATEGIES BY GENDER

Most frequently identified coping strategies ("How often") by gender

Boys	Girls
1. Watch TV or listen to music 3.091 (0.830) n=298	1. Watch TV or listen to music 3.109 (0.893) n=467
2. Walk, run or ride bike 2.663 (0.993) n=300	2. Draw, write or read something 2.744 (0.922) n=472
3. Eat or drink 2.617 (0.996) n=298	3. Say I'm sorry or tell the truth 2.699 (0.886) n=465
4. Say I'm sorry or tell the truth 2.573 (0.933) n=295	4. Think about it 2.683 (0.853) n=463
5. Play a game or something 2.570 (0.891) n=293	5. Talk to someone 2.607 (0.933) n=463
6. Draw, write or read something 2.563 (0.985) n=302	6. Try to relax, stay calm 2.534 (0.917) n=464
7. Try to relax, stay calm 2.517 (0.906) n=296	7. Get mad 2.518 (0.781) n=473
8. Think about it 2.475 (0.872) N=299	8. Walk, run or ride bike 2.490 (0.937) n=2.490
9. Get mad 2.462 (0.826) n=301	9. Do work around the house 2.408 (0.949) n=466
10. Do work around the house 2.313 (0.933) n=300	10. Eat or drink 2.385 (0.941) n=470
11. Talk to someone 2.313 (0.860) n=291	11. Do something about it 2.375 (0.932) n=456
12. Try to forget about it 2.294 (0.927) n=296	12. Cry or feel sad 2.372 (0.768) n=468
13. Do something about it 2.272 (0.855) n=298	13. Try to forget about it 2.341 (0.933) n=466
14. Bite nails or crack knuckles 2.247 (1.028) n=300	14. Be by myself, be alone 2.321 (0.759) n=471
15. Daydream 2.145 (0.933) n=296	15. Daydream 2.304 (0.992) n=470
16. Be by myself, be alone 2.073 (0.689) n=301	16. Pray 2.291 (1.020) n=464
17. Fight with someone 2.017 (0.834) n=301	17. Cuddle pet or stuffed animal 2.280 (0.998) n=464
18. Pray 1.966 (0.927) n=296	18. Bite nails or crack knuckles 2.223 (1.066) n=471
19. Run or walk away 1.953 (0.884) n=297	19. Fight with someone 2.195 (0.910) n=472
20. Sleep, take a nap 1.950 (0.845) n=298	20. Sleep, take a nap 2.159 (0.930) n=466
21. Cry or feel sad 1.944 (0.686) n=303	21. Run or walk away 2.075 (0.906) n=464
22. Talk to myself 1.837 (0.905) n=294	22. Play a game or something 2.052 (0.846) n=458
23. Cuddle pet or stuffed animal 1.835 (0.971) n=297	23. Yell or scream 2.039 (1.025) n=467
24. Pick on someone 1.826 (0.823) n=298	24. Talk to myself 1.989 (0.960) n=464
25. Yell or scream 1.816 (0.899) n=299	25. Pick on someone 1.730 (0.766) n=463
26. Hit, throw or break things 1.718 (0.813) n=298	26. Hit, throw or break things 1.519 (0.724) n=468

APPENDIX Y
THE MOST HELPFUL COPING STRATEGIES BY GENDER

Table 29

Most helpful coping strategies "How much does it help" by gender

Boys	Girls
1. Watch TV or listen to music 3.349 (0.767) n=295	1. Watch TV or listen to music 3.317 (0.835) n=464
2. Say I'm sorry or tell the truth 3.171 (0.930) n=292	2. Say I'm sorry or tell the truth 3.280 (0.916) n=460
3. Walk, run or ride my bike 3.134 (1.013) n=298	3. Talk to someone 3.150 (0.973) n=460
4. Draw, write or read something 2.970 (1.056) n=296	4. Draw, write or read something 3.135 (0.921) n=466
5. Try to relax, stay calm 2.959 (0.939) n=293	5. Be by myself, be alone 3.021 (0.831) n=467
6. Play a game or something 2.952 (0.950) n=293	6. Walk, run or ride bike 2.939 (0.989) n=459
7. Do something about it 2.880 (1.020) n=292	7. Think about it 2.923 (0.861) n=457
8. Think about it 2.865 (0.888) n=296	8. Do something about it 2.916 (1.051) n=443
9. Talk to someone 2.859 (1.000) n=290	9. Try to relax, stay calm 2.898 (0.946) n=459
10. Eat or drink 2.801 (1.056) n=296	10. Pray 2.887 (1.209) n=461
11. Be by myself, be alone 2.646 (0.941) n=297	11. Sleep, take a nap 2.756 (1.154) n=463
12. Sleep, take a nap 2.605 (1.177) n=296	12. Cuddle pet or stuffed animal 2.751 (1.143) n=462
13. Pray 2.573 (1.300) n=293	13. Cry or feel sad 2.744 (0.849) n=461
14. Do work around the house 2.543 (1.040) n=293	14. Play a game or something 2.499 (0.999) n=451
15. Try to forget about it 2.505 (1.026) n=295	15. Do work around the house 2.495 (0.990) n=459
16. Daydream 2.375 (1.079) n=296	16. Run or walk away 2.441 (1.053) n=458
17. Run or walk away 2.356 (1.081) n=295	17. Daydream 2.435 (1.035) n=464
18. Cry or feel sad 2.328 (0.934) n=299	18. Eat or drink 2.423 (0.949) n=461
19. Get mad 2.308 (0.798) n=299	19. Try to forget about it 2.397 (0.905) n=461
20. Talk to someone 2.137 (1.016) n=292	20. Get mad 2.322 (0.709) n=466
21. Cuddle pet or stuffed animal 2.171 (1.206) n=292	21. Talk to myself 2.268 (1.098) n=455
22. Talk to myself 2.110 (1.095) n=290	22. Yell or scream 2.153 (1.082) n=464
23. Fight with someone 2.084 (0.919) n=296	23. Fight with someone 2.110 (0.837) n=463
24. Yell or scream 1.973 (1.051) n=298	24. Bite my nails or crack my knuckles 2.000 (0.869) n=465
25. Hit, throw or break things 1.949 (1.035) n=296	25. Pick on someone 1.813 (0.829) n=454
26. Pick on someone 1.929 (0.908) n=294	26. Hit, throw or break things 1.665 (0.894) n=463