

An Abstract Of The Thesis Of


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Abstract
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This study examines variables that may be involved in coping with life change. A volunteer sample of undergraduate psychology students (N = 57) completed a battery of self reports and participated in an individual structured interview covering the areas of life change, coping processes, and social milieu.

A Coping Index was calculated by regressing measures of symptoms: Profile of Mood States, Beck Depression Inventory, and the Somatic Scale of the Hopkins Symptom Checklist; with a measure of stress, the Hassles Scale. The residuals of this regression formed the Coping Index.

Individuals who reported fewer symptoms than predicted by the Hassles Scale received a positive score, while individuals who reported more symptoms than predicted were given a negative score.

Measures hypothesized to have a relationship to coping were then

regressed with the Coping Index. These measures were: The Arizona Social Support Interview Schedule, Utilization of Social Support Scale, The Ways of Coping Checklist, Internal/External Locus of Control Scale, and the Tolerance, Flexibility, Sociability, and Self-acceptance scales of the California Psychological Inventory.

The data showed that there is a significant negative relationship between the Wishful Thinking scale of The Ways of Coping Checklist, a coping process measure, and the Coping Index, and the Social Network scale of the Utilization of Social Support scale and the Coping Index.

Discussion focused on the importance of the coping process and the social interactions available to the individual in their environment. Limitations of the study were also expanded.

Responding to Stress Without Negative Side Effects

by

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TABLE OF CONTENTS

INTRODUCTION	1
Significance of the Problem	3
Statement of the Problem	3
Hypotheses	3
Definition of Terms	5
Limitations of the Study	5
Summary	6
REVIEW OF THE LITERATURE	8
Life Change or Stress and Its Negative Side Effects	8
Intervening Variables	10
Coping Process	12
Social Support	13
Summary	16
METHOD	17
Subjects	17
Instruments	17
Definition of Successful Coping	22
Procedures	24
Summary	24
RESULTS	26
Analysis of the Data	26
Summary	31
DISCUSSION	34
Summary	41
Conclusions	41
Recommendations for Research	42
Recommendations for Counseling	42
REFERENCES	44
APPENDIX A	48
APPENDIX B	88

LIST OF TABLES

<u>Table</u>		<u>Page</u>
1.	Multiple regression of dependent variables with Coping Index	32
2.	Means and standard deviations for USS	88
3.	Means and standard deviations for the ASSIS	89
4.	Means and standard deviations of the Internal/ External Locus of Control	90
5.	Means and standard deviations for the WCC	91
6.	Means and standard deviations of the California Psychological Inventory	92
7.	ANOVA of Coping Index and Negative Interaction scale of the ASSIS	93
8.	ANOVA of the effects of age on coping	94
9.	Inter-scale correlations of the Coping Index and dependent variables	95

Responding to Stress Without Negative Side Effects

Introduction

Books and articles available to both the general public and the professional community reflect the recent interest in the causes of stress, and its effects. Stress management seminars and programs and "wellness" programs are being developed and introduced into the work environment.

A unified definition of stress is not clearly agreed upon in the journals. While Sarason and his colleagues (Sarason, Johnson, & Siegel, 1978) agree with Holmes and Rahe about stress as life change, the method of assessment differs. Holmes and Rahe (1967) define stress as life change units such as death of a spouse, going to jail and assign predetermined weights to each item on their Social Readjustment Scale. Sarason and his colleagues define stress the same way. In contrast, the Life Experiences Survey asks that the subject assign a value to the life events (Sarason, et al. 1978). Lazarus and his group define stress as irritants. They also developed a scale that measures stress and another that looks at coping processes. The stress scale assesses such possible irritants as: misplacing or losing things, financial responsibility for someone who doesn't live you, care for pet (Kanner, A.D., C., Coyne, J. C., Schaefer, C., Lazarus, R. S. 1981).

The outcomes of stress or life change are exhibited in the form of psychological symptoms and physical symptoms. Holmes and Rahe, while developing their Social Readjustment Scale, noted that the probability of experiencing illness was about 80% for a two year period for those individuals who amassed more than 300 life change units during the previous year (Holmes & Rahe, 1967). A study by Kobasa (1979) revealed that after job transfer, some executives exhibited an increase in physical symptoms while others did not exhibit symptoms. This study found that a high measured internal locus of control was associated with low exhibited physical symptoms. Lefcourt, Herbert, Miller, Rickey, and Ware (1981), found that under moderately stressful situations people with an external locus of control exhibited more mood disturbance, psychological symptoms than did people with an internal locus of control. Under high stress situations, this symptom pattern changed. People with an more internal locus of control demonstrated more mood disturbance than did the external group.

The above studies indicate that life change or stress is associated with symptoms. The Lefcourt and Kobasa studies indicate that the locus of control has some value in determining how and under what conditions the symptoms will be exhibited.

Other studies have assessed the function of social support in stress and coping. Nuckolls (1975) found social supports associated with fewer birth complications in pregnant women following life change. A study using a college student population, found the use of social supports moderate the effects of stress (Miller & Cooley 1981).

Significance of the Problem

The evidence in the items of the Life Change Scale (Rahe & Holmes), the Life Experiences Survey (Sarason et al. 1978), and the Hassles Scale which assesses everyday irritants in the environment (Kanner, et al., 1981), indicate the environment in which human beings function is stressful. The effects and outcomes of the stress on the individual results in symptoms such as depression and increased physical illness. These outcomes and effect are less than desirable. Some individuals, however, appear to withstand stress and life change better than others.

Statement of the Problem

This study was designed to answer the following question: Why it is that some people react to life changes with distress and others do not? It examined this question utilizing three themes. The themes are: personality characteristics, the coping process, and the social milieu. More specifically it examined the beliefs that: 1) People who do not experience distress during life change have a greater internal locus of control, are more flexible, tolerant and sociable than those who do experience distress; 2) Individuals who face life change without exhibiting distress symptoms, either psychological or physical, employ a different coping strategy than those who exhibit symptoms; 3) Social support plays a role in the coping process.

Hypotheses

The above stated beliefs were formulated into fourteen alternate hypotheses as follows. All the hypotheses were tested at an alpha level of .05.

1. Subjects adjusting to change with little symptomatology will have

- an internal locus of control. (Internal-External Locus of Control)
2. Subjects adjusting to change with little symptomatology will see their needs as being met by their support system. (Arizona Social Support Interview Schedule)
 3. Subjects adjusting to change with little symptomatology will have a less conflicted support system. (Negative Interaction scale of the Arizona Social Support Interview Schedule)
 4. Subjects adjusting to change with little symptomatology will perceive themselves as being valued by others. (Positive Support scale of the Utilization of Social Support Scale)
 5. Subjects adjusting to change with little symptomatology will have an available support system. (Social Network scale of the Utilization of Social Support Scale)
 6. Subjects adjusting to change with little symptomatology will use their support system. (Self-disclosure scale of the Utilization of Social Support Scale)
 7. Subjects adjusting to change with little symptomatology will exhibit high flexibility. (Flexibility scale of the California Psychological Inventory)
 8. Subjects adjusting to change with little symptomatology will exhibit greater tolerance. (Tolerance scale of the California Psychological Inventory)
 9. Subjects adjusting to change with little symptomatology will be more self accepting. (Self Acceptance scale of the California Psychological Inventory)
 10. Subjects adjusting to change with little symptomatology will be

more socially mature. (Sociability scale of the California Psychological Inventory)

11. Subjects adjusting to change with little symptomatology will _ employ problem solving. (Ways of Coping Checklist)
12. Subjects adjusting to change with little symptomatology will employ minimization of threat. (Ways of Coping Checklist)
13. Subjects adjusting to change with little symptomatology will not use wishful thinking. (Ways of Coping Checklist)
14. Subjects adjusting to change with little symptomatology will not blame self. (Ways of Coping Checklist)

Definition of Terms

1. Coping, Coping Behavior - All acts or thoughts employed to adjust to change or challenge. Operational definition of coping for judging coping success in this study - The absence of symptoms in the presence of stress.
2. Coper - An individual in the process of responding to life change. This response may be successful or not.
3. Social Network - People with whom one is acquainted.
4. Social Support - People on whom one can count for various types of aid and support such as: positive feed back, advice, material aid (etc). The more intimate relationships in one's life.
5. Stress - Any stimulus in the environment, either external or internal that requires an organism to adjust.

Limitations of the Study

1. This is a sample of convenience as opposed to a random or a

stratified random sample.

2. This sample was drawn from a college population; therefore, caution need be exercised when making generalizations to other populations.
3. The number of situations presented in the Ways of Coping Checklist are limited and cannot cover all possible situations or processes. However, a careful review of the literature was undertaken to provide the basis for the selection of the situation presented in this study.
4. Caution need be exercised when interpreting the results of only part of a larger instrument. In this study only four scales of the California Psychological Inventory were used.
5. The Coping Index is biased in favor of individuals who report high stress. It doesn't account for individuals who report little or no stress and many negative side effects.
6. This study compares only the extremes of the sample, high and low coping scores. Therefore, some information that could be gained by comparing the low coping score group to the medium coping score group or the high coping score group to the medium coping score group is missing.
7. The definition of coping used for this study, i.e. the absence of symptoms in the presence of stress, may limit what is determined to be a coping process.

Summary

This chapter focused attention on the importance of stress in both the professional and lay sectors. It also focused on the need for a

study into various strategies for coping with stress. Included in this discussion of stress and coping strategies were the significance of the problem, statement of the problem, research hypotheses, definition of terms, and limitations of the study.

Review of the Literature

In recent years, an increasing amount of research effort has been in the area of life change or stress, and its outcomes. For discussion and conceptualization, this broad topic divides well into several areas: Stress and its negative impact on physical and psychological symptoms, and intervening variables that mediate the impact of stressful situations.

Life Change or Stress and Its Negative Impact

The bulk of research in this area measures the stress in the individual subject's life by measuring the number of changes they have recently experienced. The pioneering work in this area was done by Thomas Holmes and Richard Rahe (Holmes & Rahe, 1957) who devised a research questionnaire, the Social Readjustment Rating Scale (SRRS) that measures life change, which they equate with stress. The instrument lists 43 events which may have recently occurred to the individual. These events vary from major ones such as death of a spouse, to relatively minor ones such as a vacation. The major psychometric advantage that the SRRS provides is based on Holmes and Rahe's extensive research into establishing weights for each of the events. These weights which they called Life Change Units (LCU's) supposedly allowed the researcher to estimate the total amount of stress an individual had experienced over a specified time period by simply adding up the LCU's for the events they had experienced.

The advent of the SRRS provided researchers with a relatively easy method of assessing stress. The majority of studies in this area

utilize this instrument or one similar to it such as the Life Experiences Survey (Sarason, Johnson, & Siegel, 1978). There have been a variety of measurement issues which have arisen around the use of the SRRS methodology such as the importance of distinguishing between positive and negative events and the amount of control individuals have over the events. These issues are not important to the direction of this literature review and will therefore not be summarized (See Rabkin & Struening, 1976: for an excellent review).

Research in the area of life change and physical symptoms is typified by a study by Rahe and his colleagues (Rahe & Holmes) which was carried out using Navy personnel aboard ship. Rahe, using the Social Readjustment Rating Scale found a linear relationship between life stress and physical symptoms ($r=.188$). Because of the large sample size, this correlation was statistically significant. The data was obtained from the sick bay records, and those collecting the data were blind to the aims of the research. For these reasons, the usual problems of individual memory of a self report of illness do not interfere in this data (Rahe & Holmes). Even though the correlation is significant, the study does not account for the subjects who experienced a large amount of life change without reporting physical symptoms. A similarly significant result between the magnitude of life change and physical illness was found in a population of resident physicians. Twenty two per cent of the population, however, experienced more than three hundred LCU's without health change during the next two years (Rahe, Mahan & Arthur, 1970).

Similar findings have been identified by researchers looking at psychological symptoms. For example, Sarason and his colleagues (Sarason, Johnson, & Siegel, 1978) found significant correlations between their life change measure and both anxiety and depression in college students.

In psychiatric patients, it is noted that both depressive and schizophrenic populations experience elevated life change or stress just prior to admission (Rabkin, 1980). In the depressive population, it appears that stress is incremental and causal. In the schizophrenic population, it appears that stress at a somewhat lower level acts as a trigger on an already stressful life (Rabkin, 1980). Another study using first admission psychiatric patients did not find a relationship between life events and severity of various types of symptomatology (Harder, Strauss, Kokes, Ritzler, Gift, 1980). This seems suggestive, that given enough stress, one may respond with an exacerbation of whatever symptom one is prone to exhibit.

Intervening Variables

All of the above studies have found a statistically significant relationship between life change and disorders, but the relationship remains consistently small (Rabkin & Struening, 1976). These studies also do not explain how some people experience a large quantity of stress or life change and display little if any symptomatology, either physical or psychological. Research into this question seems both convergent and divergent.

Kobasa (1979; Kobasa Maddi & Courington 1981), used executives

undergoing transfers, promotions, and the mobile lifestyle that has become an integral part of life in the United States in general, and the executive echelon of business in particular. She investigated possible personality characteristics in these executives which relate to coping success. One difference, Kobasa discovered, between subjects who experienced change and showed few physical symptoms and those who exhibited many physical symptoms appeared in the area of locus of control. Executives who had fewer physical symptoms viewed themselves as being in control of the situation, and were able to work the job change into their over all life plan, internal locus of control. They also had a strong sense of commitment to self and others, and were low in alienation from self and others. The successful copers also had a stronger sense of meaningfulness in their activities than the executives who exhibited higher levels of physical symptoms (Kobasa, 1979). In a follow up study (Kobasa, Maddi, & Courington, 1981) more than two hundred of the original sample returned, and the basic findings of the original study were replicated. Two of the salient features of these studies are their findings that successful coping is related to low levels of alienation, and an internal locus of control. Locus of control has also been a significant moderator variable between life change and illness in a college population (Miller & Cooley, 1981). External students showed a stronger relationship between life experiences and illness than did internal students. These two studies seemingly support internal locus of control as a variable associated with positive health outcomes during stress or life change in samples that cover different age ranges. Other studies using college

populations echo the internal-external theme, and diverge from there eg. (Hammen, Krantz & Cochran, 1981; Lefcourt, Miller, Ware & Shuk, 1981)

The learned helplessness model of depression, in which the person feels that he has no power in influencing the outcome of the situation, was used in another study (Hammen et al., 1981). Accordingly, events that were perceived as being internal, stable, and global were predicted to elicit intense, enduring generalized depression. The results showed that internal, stable, global attributional style was not different between depressed and non-depressed students. The difference was that non-depressed students felt they had some control over the situation. Another study utilizing life events, internal-external locus of control and mood states, demonstrated that external subjects showed a higher level of mood disturbance across all situations. Internal subjects, when experiencing an extreme of negative life events, showed more mood disturbance than externals (Lefcourt et al., 1981). Control over the events, however, was an issue not addressed in this study. It could be, that using internal locus of control as a predictor of coping success is too gross a statement. The one outstanding feature of these studies is that subjects that showed few symptoms either physical or psychological, believed they could control some of the events which occurred. This, may be a difference in the appraisal process of the event. Neither appraisal, nor coping process were well surveyed.

Coping Process

Lazarus and others point out that it is the appraisal of the stressful situation which mediates the impact of a potentially stressful

situation upon the individual. Primary in this process is the balance between the perceived amount of threat to the individual, and the perceived amount of resources the individual has available to deal with the threat (Lazarus, 1977; Roskies & Lazarus, 1980; Caplan, 1981). This theoretical approach has developed into a dynamic view. Coping response may be thought of as an ongoing action, taking in more than one appraisal and response (Lazarus & Launier, 1978; Folkman, 1982). The process would look something like: event, appraisal, response, altered event, altered appraisal, altered response. Since there are a number of appraisal and response points in this model, it allows for individual differences in appraisal and response at multiple points as the individual strives to reduce the threat to a manageable level. One may incorporate palliative, emotional, responses such as wishful thinking, at one point and problem solving at another point in the coping process.. Because cognitions change along the process, one coping response will look different from another, depending on when one enters the sequence (Folkman, 1982). Coping, as seen by Lazarus and his coworkers is a cognitive process that raises emotions and calls upon resources, and must be evaluated as an ongoing process and not a stable characteristic.

Social Support

Among the resources called upon in times of stress is the individual's social network. This group or network provides information, aids in data collection, evaluation, implementing plans, feedback and assessing consequences (Caplan, 1981). Some researchers in the area of stress and social supports, view social supports as a

prophylactic variable, stemming the exacerbation of symptoms. In one study of unemployed men Gore (1978) defined social support as knowledge that one is valued for who one is, not what one does. In this study, Gore found that men with low levels of supports demonstrated an exacerbation of negative health responses, and reported more self blame for the job loss. Eaton, (1981) examined data involving clusters of life events, sometimes known as crisis situations, in a longitudinal study. He found that members of a household provided support during crisis periods which seemingly deterred mental disorder in the person experiencing the crisis. Single parents living with their families fared better than their counter part, the single or divorced person living alone. People living with their families demonstrated fewer mental disorders in relationship to stress.

As positive as this may appear, other studies indicate that ones perception of social support and negative life events may change as a function of depression (Schaefer et al, 1981: Mueller, Edwards & Yarvis, 1978). In the Mueller study, patients at admission were assessed for life events. At the same time, a matched control group of non-patients were assessed. After treatment, the patients were re-assessed. The total number of events at the first assessment did not differ between patients and non-patients. The difference fell in those events being evaluated as negative or ambiguous by the patients. At follow up, there was a reduction in the number of events appraised as negative by the depressed subjects, but no significant reduction in the number of total events. Patients rated comparable events more negatively than nonpatients (Mueller et al., 1978). This negative set seems to carry

over into social supports. In the Schaefer study, Schaefer's depressed subjects saw themselves as being lower in support from others in both emotional and tangible ways. Not only did they see themselves this way at this time, but they did not see that this would change in the future (Schaefer, Coyne & Lazarus, 1981).

A study of pregnant women, asserts that adequate social supports predicts fewer complications during pregnancy and delivery. In this study, women were divided into groups on the dimensions of frequency and severity of change and amount of social support (Nuckolls, 1975). When combined with physical hormonal changes, and the challenge of pregnancy, it is not surprising that among the groups of women who had experienced recent negative life events, and had few social supports, 91% experienced birth complications. This does not account for the remaining 9%. Also, the group of women who had experienced an equal amount of negative stress, but were high in social supports, still had a birth complication rate of 33%. The use of social supports may be at work here, but it is not the total picture.

An issue not addressed in this study is psychological symptomatology such as depression which may elicit support activities from others (Coyne, 1976) or withdrawal of support by others (Coyne, Aldwin & Lazarus, 1981). When this view is added to the findings that depressed people validate essentially an equal amount of events as non-depressed people, only in an ambiguous or negative way (Mueller, et al., 1978), and that this negative set carries over into social supports (Schaefer et al., 1981), it may confound the results of the groups that

had experienced recent negative life change and had few social supports if these individuals showed higher depression levels.

While not the whole picture of coping, social supports, appraisal, and locus of control, all play some role in adjustment to life events. Just what proportion of each factor is involved in determining the more successful adjustment from the less successful adjustment has not been established.

Summary

The review of the literature regarding life change or stress and its negative impact, intervening variables, coping process, and social support strongly suggest that under stress individuals may react in a number of ways. An individual may develop symptoms that are physical or psychological in expression. Conversely, an individual may not express symptoms. The interplay of social supports and various coping processes may be the reason for this lack of symptom expression.

Method

Subjects

The Life Experience Survey was distributed in every lower division psychology class at Western Oregon State College. Approximately 300 surveys were distributed. The last page of the survey explained the nature of the research and the amount of time for which a subject was volunteering. Those interested in volunteering did so by signing their names below the statement, "Yes, I would be willing to participate further" (see Appendix A). Volunteers were also requested to give their current address and phone number for future contact and feedback. Subjects were contacted by phone. Of the 300 questionnaires distributed, 60 students volunteered. Fifty-nine of the 60 agreed to participate when contacted. Of the 59 who began the project, 2 did not complete the project leaving a total number of 57 in the sample. Of the 57 subjects completing the project, 53 answered the question about age on the demographic questionnaire. For $N=53$ the mean age was 22.6 years, the range was 18-58, and the modal age was 19 years. Fifty-six of the 57 answered the marital status question. Forty-eight were single, 8 were married. All subjects completed the gender query. There were 43 females and 14 males in the sample.

Instruments

The following scales and a structured interview were employed to assess coping and stress.

1. Life Experiences Survey (LES): This 60-item scale was specifically designed for college students. Subjects are asked to indicate

events which have occurred to them in the past year. The impact of each event is then rated by the subject on a 7-point scale ranging from -3, extremely negative, to +3, extremely positive. In their original study, Sarason and his colleagues identified the test-retest reliability for a 5-6 week period as: Negative scale, $N=34$, $r=.56$; $N=58$, $r=.88$. Positive scale, $N=34$, $r=.10$; $N=58$, $r=.53$ (Sarason, et al, 1978).

2. Beck Depression Inventory (Beck): This 21-item scale was designed for use with populations from adolescence on up. Each item has four sentences which are on a scale from zero to 3. Subjects are asked to pick one or more statements from each item that best describes the way they have been feeling the past week including the day they are filling out the scale. The split-half reliability using the Spearman-Brown Phorpechy formula is: ($N = 93$) $r=.93$, (Beck, 1967).
3. Adjusted Somatic scale of the Hopkins Symptom Checklist: This 30 item checklist asks subjects to recall if they have experienced any of its items that assess physical disorders or damage during the past two weeks or if they became markedly worse during the past two weeks. The subject reports, in arabic numerals, how many times each item has occurred. Five items were that were similar to other items in the related literature were added to the original form (Wyler, Masudy, Holmes, 1968: Wyler et al. 1971). These items assessed accidents, and several physical disorders such as rash and diarreha. Before items were added, test-retest reliability for a one week period; $N=1435$, $r=.82$, (Derogatis,

- Lipman, Rickels, Uhlemuth, & Covi, 1974). The addition of the five items, all of which were similar to the already existing items may have had a minor influence on the scales reliability.
4. Utilization of Social Support Scale (USS): A paper and pencil instrument designed using a college population. The scales reflect: Positive support, how one knows one is valued by others (P scale); Conflict/Alienation, feeling apart from others (N scale); Having a social network (B scale); and Self-disclosure, (C scale). This scale is comprised of 50 items rated on a 6-point Likert scale, with one being 100% false and six being 100% true. The test-retest reliability for a one week period ($N=43$) was: P scale, $r = .68$; N scale, $r = .72$; B scale, $r = .88$; and C scale, $r = .81$. The split half reliability was ($N=63$): P scale, $r = .80$; N scale, $r = .79$; B scale, $r = .86$; and C scale, $r = .76$ (Cooley & Rickard, 1983).
 5. Hassles Scale: This 118-item scale was designed to assess irritants that range from minor annoyances to major pressures, problems or difficulties. Subjects are asked to indicate which events or situations have occurred to them in the last month. The impact of each is rated by the subject on a scale of one to three that assesses the severity of the situation. Test-retest reliability for a one month period ($N=100$): $r = .79$ (Kanner, Coyne, Schaefer, & Lazarus, 1981).
 6. Ways of Coping Checklist (WCC): This 68-item checklist assesses coping processes in seven areas: Problem Focused, Wishful Thinking, Mixed, Growth, Minimize Threat, Seek Social Support,

Blamed Self. These seven areas were arrived at through factor analysis with varimax rotation. The subject is asked to think about an event or situation that has been the most stressful for them during the last month. Then they are asked to endorse the items that describe what they did. To control for variance in the situation used in this study, subjects were asked to report on an event over which they felt they either had some control of the outcome or in which they had to hold back. According to the literature, coping processes are more strongly determined by the situation than by the individual, therefore as situations are not constant over time the coping processes will vary over time. For this reason, reliability across time is not an appropriate statistic (Folkman & Lazarus, 1980).

7. Tolerance scale of the California Psychological Inventory (To): This 32-item scale was designed to identify persons with permissive, accepting, and non-judgmental social beliefs and attitudes. It is a true false scale. Test-retest reliability on a population of high school students over twelve months: Female $N=125$, $r=.61$; Male $N=101$, $r=.71$ (Gough, 1975).
8. Flexibility scale of the California Psychological Inventory (Fx): This 22-item true-false scale was designed to indicate the degree of flexibility and adaptability of a person's thinking and social behavior. Test-retest reliability on a population of high school students over a twelve month time lapse: Female $N=125$, $r=.67$; Male $N=101$, $r=.60$ (Gough, 1975).
9. Sociability scale of the California Psychological Inventory (Sy):

This 25-item true-false scale identifies persons of outgoing, sociable, participative temperament. Test-retest reliability on a population of high school students over a twelve month time lapse: Female $N=125$, $r=.71$; Males $N=101$, $r=.68$ (Gough, 1975).

10. Self-acceptance scale of the California Psychological Inventory (Sa) This 34-item true, false scale assesses factors such as sense of personal worth, self-acceptance, and capacity for independent thinking and action. Test-retest reliability on a population of high school students over a twelve month time lapse: Females $N=125$, $r=.71$; Males $N=101$, $r=.67$ (Gough, 1975).
11. Internal/External Locus of Control (I/E): This is a 29 item forced choice questionnaire assesses the degree to which one believes one is responsible for one's rewards. Test-retest reliability after two months with college students: Males, $N = 63$, $r= .49$; females, $N = 54$, $r=.61$ (Robinson & Shaver, 1969).
12. Arizona Social Support Interview Schedule (ASSIS): This structured interview covers the areas of: Personal Advice, Positive Feedback, Physical and Material Aid, Social Participation, and Negative Interactions. The subjects are asked to report who usually does these things for them and then, who in the past 30 days actually did these things. They are also asked if they felt they needed more of the first five categories than they received. The interviewer records the responses on a tally sheet. The test-retest reliability over two days ($N = 43$): Total Network size, $r=.88$; Conflicted Network Size, $r=.54$; Support satisfaction,

$\underline{r}=.69$; Support Need, $\underline{r}=.80$ (Barrera, 1981).

13. Profile of Mood States (POMS): This 65-item 5-point adjective rating scale asks subjects to fill in one space under the answer which best describes how they have been feeling during the past week including the day they are making the report. The scale is factored into six mood scores: Tension-anxiety, Depression-dejection, Anger-hostility, Vigor-activity, Fatigue-inertia, and Confusion-bewilderment. A total mood disturbance score is arrived at by summing all the factors except Vigor-activity and subtracting the vigor activity score from the total. The test-retest reliability: "...correlations range from .65 to .74 with median .69" (Eichman, 1016-1018, 1978). This is a survey of many reliability studies, therefore no time interval was given.

Definition of Successful Coping

Successful coping was defined as low mood disturbance scores, (Profile of Mood States) low depression scores (Beck Depression Inventory) and few physical symptoms (the adjusted Somatic subscale of the Hopkins Symptom Check List) in relation to the amount of stress experienced (Life Experiences Survey and Hassles Scales). It was measured by a second order measure, the Coping Index (Cooley & Keeseey, 1983).

The Coping Index was formed by regressing the dependent variables: the POMS, Beck and Adjusted Somatic Scale of the Hopkins Symptoms Checklist against the measures of stress, the LES and the Hassles Scale and collecting the residuals. During the initial correlation, analysis

of the data revealed a strong relationship between the Hassles Scale at time A and the LES, $r=.40$, $p<.01$; and the LES and Hassles Scale at time B, $r=.51$, $p<.01$. Also, Hassles at time A was related to Hassles at time B at $r=.64$, $p<.01$, which suggested some reliability. Using face validity, items from the LES that were represented in the Hassles scale were removed. Also, at this time, the LES scores and the Hassles scores were converted to z-scores. The correlation matrix generated showed no significant difference in the relationship between the LES and the Hassle Scale and the POMS, Beck, and Adjusted Somatic Scale of the Hopkins Symptom Checklist. Furthermore, the first computation demonstrated that Hassles had a stronger relationship to more of the measures of negative side effects than did the LES and adding the LES did not strengthen the relationship. For this reason, the LES was omitted from the regression equation, leaving the sum of the Hassles scores taken at both time A and B. The measures of negative side effects, Beck Inventory, Adjusted Somatic Scale of the Hopkins Symptom Checklist, and the POMS were entered into the equation and the residuals collected. It is the residuals which form the Coping Index. The residuals reflect the difference between the expected levels of disturbance and physical disorders based upon the stress level (Hassles) and the actual levels of these factors. A successful coper was an individual who reported less depression, mood disturbance and physical disorder than was expected from the level of stressful experiences they reported. While an unsuccessful coper showed the opposite pattern of more depression, mood disturbance, and more physical disorders than would be expected from the level of reported stress. A shortcoming of

this method of assessing coping success is that the Coping Index is biased in favor of individuals who report high stress. Also, it does not adequately account for those individuals who report almost no stress and many negative side effects.

Procedures

At the first appointment, the following scales were administered to each subject in the order listed: Hassles and Uplifts Scales, Profile of Mood States, Utilization of Social Supports, Beck Depression Inventory, Adjusted Somatic subscale of the Hopkins Symptom Checklist, Rotter Internal-External Locus of Control, form II, and the Arizona Social Support Interview.

Four weeks after the initial appointment, the subjects were asked to return. At this time the following scales were administered: The Flexibility, Tolerance, Self Acceptance and the Socialization scales of the California Psychological Inventory, Profile of Mood States, Beck Depression Inventory, Adjusted Somatic Subscale of the Hopkins Symptom Checklist, Hassles and Uplifts scales and the Ways of Coping Check list. Also, at this time, a demographic fact sheet was completed by those subjects who participated.

After initial scoring of the instruments, feedback letters were mailed out to all subjects who completed the project (see Appendix A for sample letter).

Summary

This chapter described four basic elements of the research method:

the sample, the instruments, a definition of coping in terms of the instruments, and procedures, both statistical and logistical.

A sample of convenience was collected from the lower division psychology classes taught at Western Oregon State College. This sample was administered two batteries of self-reports and a structured interview at two times separated by a months lapse. The purpose of the two batteries was to assess the subjects level of coping, their coping process, and dependent variables pertaining to personality characteristics, and social support which were part of the investigation.

An operational definition of coping was developed in terms of the instruments used to assess the subjects. Additionally, the computation of the Coping Index, a second order measure is described in this chapter.

Results

The purpose of this study was to assess whether or not personality characteristics, social support, and coping process effected the success of coping with life change or stress.

Analysis of the Data

Preliminary analysis were conducted to : test for sex differences in the Coping Index; test for age differences in the Coping Index; test for overlap of scales. The t statistic was employed to test for sex differences. No sex differences were found: $t(55) = .54$, $p = .61$. Because the age distribution centered in the early twenties with a few subjects fifty years of age or more, the sample was broken into three groups: "teens," "twenties," "thirty and up," for an one-way ANOVA. No age differences were found; $F(2,51) = 1.05$, $p < .25$ (see Table 8, Appendix B). These results justified grouping subjects across age and sex. Next, a correlation matrix was calculated out of the intervening variables and the Coping Index. This matrix demonstrated an extensive overlap between dependent variables (see Table 7, Appendix B). For this reason, a stepwise regression was chosen as a procedure which would control for the variance common to the dependent measures.

As shown in Table 1, of the 23 dependent variables regressed with the Coping Index, only two were powerfully related to it: Wishful Thinking from the WCC was the first. $\text{partial-}F(1, 55) = 5.77$, $p < .025$. The second variable, Social Network of the USS was then added, $\text{partial-}F(1, 55) = 7.19$. $p < .01$. Beyond this only two variables

approached significance: The ASSIS Negative Interaction variable, partial- $F(1, 55) = 3.10$, $p < .10$; and the ASSIS Liked Personal Advice and Positive Feedback variable partial- $F(1, 55) = 2.44$, $p < .10$. The addition of the other variables did not add significantly to the equation (see Table 1 at the end of this section).

For the purpose of looking at individual groups of high, medium and low coping scores across variables, a standard deviation of the Coping Index was calculated. Using a full standard deviation, 52.17, as a cut score divided the group sample into six high scores, 46 medium scores, and five low scores thereby yielding samples too small to be useful. Therefore, the total sample was divided into three groups using one-half of the standard deviation, 26. This divided the group into 18 high scores, 25 medium scores, and 14 low scores. Group means were then calculated across dependent variables. There were no significant differences in the group means across variables. The group mean values are presented in tables 2 through 6 in Appendix B.

The two most strongly predictive variables in the regression analysis point to the themes of coping process and social milieu. The personality characteristics measured in this study failed to produce any significant predictive ability. An examination of the mean scores of the high, medium, and low coping score groups showed no clear differences across variables.

There were fourteen hypothesis involved in this study. Only two met the prescribed alpha level of .05. Because of the direction of the prediction, one of these two failed. The hypotheses are presented as

they appear in the regression table.

The hypothesis, subjects adjusting to change with little symptomatology will not use wishful thinking is supported by the data. The Wishful Thinking scale of the WCC is negatively related to the Coping Index. $r = -.31$, $p < .05$. $\text{Partial-}F(1, 55) = 5.77$, $p < .025$. Group means between high and low coping scores showed no significant differences $t(32) = -.46$, $p < .5$.

The hypothesis, subjects adjusting to change with little symptomatology will have an available support system was measured by the Social Network scale of the USS. The Social Network scale of the USS is negatively related to the Coping Index, $r = -.29$, $p < .05$. Although the scale met the prescribed alpha level, $\text{partial-}F(1, 55) = 7.19$, $p < .01$, because of the direction of the relationship, the hypothesis is not supported by the data. There are no significant differences in the group means (see Table 2).

The hypothesis, subjects adjusting to change with little symptomatology will have a less conflicted support system was measured by the Negative Interaction scale of the ASSIS. The data fails to support the hypothesis at the alpha level of .05; however, $\text{partial-}F(1, 55) = 3.10$, $p < .10$. The differences approach significance in the group means (see Tables 3 and 7 in Appendix B).

They hypothesis, subjects adjusting to change with little symptomatology will see their needs as being met by their support system was measured by: the Liked Personal Advise and Positive Feedback, the

Total Personal Advice and Positive Feedback, the Liked Physical and Material Aid, the Total Physical and Material Aid, the Liked Social Participation, and the Total Social Participation scales of the ASSIS. None of these scales met the alpha level of .05. The partial F values and probability levels are: $\underline{F}(1, 55) = 2.44, p < .10$; $\underline{F}(1, 55) = 1.03, p < .50$; $\underline{F}(1, 55) = .005, p < .100$; $\underline{F}(1, 55) = .37, p < .75$; $\underline{F}(1, 55) = .36, p < .75$; $\underline{F}(1, 55) = .09, p < .100$ respectively. There are no significant differences between group means (see Table 3, Appendix B).

The hypothesis, subjects adjusting to change with little symptomatology will perceive themselves as being valued by others was measured by the Positive Support scale of the USS. The data fails to support this hypothesis: $\text{partial-}\underline{F}(1, 55) = 1.02, p < .50$. There are no significant differences between group means (see Table 2, Appendix B).

The hypothesis, subjects adjusting to change with little symptomatology will use their support system was not supported by the data. The Self-disclosure scale of the USS had a $\text{partial-}\underline{F}(1, 55) = .07, p < .100$. There are no significant differences between group means (see Table 2, Appendix B).

The hypothesis, subjects adjusting to change with little symptomatology will have an internal locus of control was not supported by the data. The Internal/External Locus of Control Scale yielded a $\text{partial-}\underline{F}(1, 55) = .004, p < .100$. There are no significant differences between group means (see Table 4, Appendix B).

The hypothesis, subjects adjusting to change with little

symptomatology will employ problem solving was not supported by the data. The Problem Focus scale of the WCC yielded a partial- $F(1, 55) = .20$, $p < .75$. There are no significant differences between group means (see Table 5, Appendix B).

The hypothesis, subjects adjusting to change with little symptomatology will employ minimization of threat was not supported by the data; partial- $F(1, 55) = .45$, $p < .75$. There are no significant differences between group means (see Table 5, Appendix B).

The hypothesis, subjects adjusting to change with little symptomatology will not blame self was not supported by the data; partial- $F(1, 55) = 1.3$, $p < .50$. There are no significant differences between group means (see Table 5, Appendix B).

The hypotheses; Subjects adjusting to change with little symptomatology will exhibit high flexibility; Subjects adjusting to change with little symptomatology will exhibit greater tolerance; Subjects adjusting to change with little symptomatology will be more self accepting; subjects adjusting to change with little symptomatology will be more socially mature; were measured by the Flexibility, Tolerance, Self Acceptance, and Sociability scales of the California Psychological Inventory. The data failed to support these hypotheses; partial- $F(1, 55) = .005$, $p < .100$; partial- $F(1, 55) = .18$, $p < .75$; partial- $F(1, 55) = .07$, $p < .100$; partial- $F(1, 55) = .09$, $p < .100$. There are no significant differences between group means (see Table 6, Appendix B).

One last observation about the regression model in this study. Even with all 23 variables added to the equation, only 39% of the variance of the Coping Index could be explained. Obviously there are other factor or variables which play an important role in the coping process which were not touched upon by this study.

Summary

The data collected for this research project were reported and analyzed. The rationale for the statistical treatment of the data was presented. Of the fourteen hypotheses involved in this project, only two met the prescribed alpha level of .05. The two variables that met the prescribed alpha level were: Wishful Thinking and Social Network. Because of the direction of the relationship between the variable Social Network and the Coping Index, this variable was not supported by the data.

Table 1

Multiple Regression of Dependent Variables with Coping Index

	Parital F	After Stepwise Addition to Regression		
		² R	F	(df)
WCC Wishful Thinking	5.77**	.09	5.77**	(1, 55)
USS - Social Network	7.19**	.20	6.80*	(2, 54)
ASSIS Neg. Interactions	3.10	.24	5.75*	(3, 53)
ASSIS Liked Personal Advice & Positive Feedback	2.44	.28	5.04*	(4, 52)
WCC Social Support	1.08	.29	4.25*	(5, 51)
USS - Positive Support	1.02	.31	3.71*	(6, 50)
ASSIS Total Personal Advice & Positive Feedback	1.03	.32	3.33*	(7, 49)
WCC Blamed Self	1.33	.34	3.10*	(8, 48)
WCC Growth	.67	.35	2.81*	(9, 47)
WCC Minimize Threat	.45	.36	2.55*	(10,46)
ASSIS Liked Social Participation	.36	.36	2.32*	(11,45)
ASSIS Total Physical & Material Aid	.37	.37	2.12	(12,44)

*p< .05

**p< .01

Table 1 Continued

Multiple Regression of Dependent Variables with Coping Index

	Partial F	After Stepwise Addition to Regression		
		R ²	F	(df)
USS - Conflict/Alienation	.27	.37	1.95	(13,43)
WCC Mixed Coping	.22	.37	1.79	(14,42)
WCC Problem Focus	.20	.38	1.66	(15,41)
California Psychological Inventory, To	.18	.38	1.53	(16,40)
ASSIS Total Social Participation	.09	.38	1.42	(17,39)
USS - Self-disclosure	.07	.38	1.31	(18,38)
California Psychological Inventory, Sa	.07	.38	1.21	(19,37)
California Psychological Inventory, Sy	.09	.38	1.13	(20,37)
ASSIS Liked Physical & Material Aid	.005	.39	1.04	(21,35)
Internal/External Locus of Control	.004	.39	.97	(22,34)
California Psychological Inventory, Fx	.005	.39	.90	(23,33)

*p < .05

**p < .01

Discussion

This study examined the relationship between the success of college students in coping with life changes and three types of variables: coping process, personality characteristics, and social milieu. Because the examination of coping processes is a relatively new area of investigation there are few instruments presently available for measuring these processes. Therefore, only one measure was used in assessing this domain (Ways of Coping Checklist). Several measures were used to assess the two remaining areas, personality characteristics and social milieu.

The results of this study identified a coping process variable and several social milieu variables as important in relationship to coping success. It failed to support any of the personality characteristic variables. Less successful coping in this study was associated with more wishful thinking. Less successful coping was also associated with: a larger social network, experiencing more negative interactions with that network, and reporting that the network failed to provide enough positive feedback and personal advice.

In the area of coping process, the elevation in the Wishful Thinking scale was strongly associated with coping success. The theory behind the "Ways of Coping Checklist" suggests that coping is an interactive dynamic between the person and the environment. The point at which one assesses the dynamic may well determine which feature appears most salient. Individual style of response also will influence the salient feature.

It is possible that successful copers pass through a time of a preponderance of wishful thinking and emerge at a later point with a different salient strategy. It is also possible that the situation changes and elicits a different response. For the purpose of this study, the subjects were asked to respond to a situation in which they could either influence the outcome or had to hold back. In either case, it was a situation in which some involvement could have had an impact upon the outcome. Wishful thinking, or avoidance, in this instance, is not adaptive; however, with a different situation wishful thinking may well be appropriate.

Individuals manifest higher levels of wishful thinking during times of unsuccessful coping. The transient nature of this process is also supported by the association between wishful thinking and depression. Some forms of depression are seen as self limiting entities. Wishful thinking may well be a behavior associated with depression. It also could be that wishful thinking by itself is a self limited entity and only a step in the larger coping process. Its association in this study with both measures of depression could be fortuitous.

In the initial correlation matrix, the Wishful Thinking scale of the Ways of Coping Checklist was related to the Beck Depression Inventory $r = .29$, $p < .05$, $N = 57$. It was associated even more strongly with the Depression scale of the Profile of Mood States $r = .57$, $p < .001$, $N = 57$. The items on the Wishful Thinking scale are passive or avoidant in nature and do not actually involve doing anything about the specific situation in question. The subjects were asked to identify a situation

in which they had some control of the outcome or felt they had to hold back. For this type of situation, avoidance is maladaptive. The items in the Wishful Thinking scale were also strongly associated with the depression factor in the Coping Index. These two conditions seem to contribute to the success of this scale in this study. It may be that a lack of these two conditions with the other process variables contributed to their failure to meet significance. The failure, however, could also rest in the definition of coping used in this study, i. e. less symptoms reported by subjects than were predicted by their reported level of irritants in their environment. The Coping Index fails to provide for problem solving coping. It only provides for emotional coping.

The depressive interaction model, (Schaefer, et al., 1982) also seems to hold true for the findings relating to social supports. Coping success is inversely related to the size of social network but positively related to negative interactions with the social network. Less successful coping is associated with having lots of people on one's social network with whom one has regular contact. Apparently the unsuccessful copier is not getting any more actual support from the enlarged network. Schaefer and her colleagues have distinguished between a social network and a support network (Schaefer, et al., 1981). A social network is one's acquaintances. A support network, in contrast, is comprised of people on whom one can rely; the more intimate relationships in one's life. Not all people in the first category fit in the second category.

The elevation of negative interactions may be partially construed as a function of the interaction between the mental set of wishful thinking and the supportive network function. Caplan (1981), suggests that a supportive network functions in a reality testing mode: helps gather data, problem solves, and evaluates the outcomes. The unsuccessful coper seems to get less satisfaction from social contacts than the successful coper. The mean score for the low coping group on the Total Advice and Positive Feedback scale of the ASSIS was higher, but not at a statistically significant level than that of the high coping group ($t(30) = .49$). The low coping score group also received more total physical and material aid than did the high coping score group ($t(30) = -.73$). They also were more socially active than the high coping group ($t(30) = .53$). When asked if they would like more advice, positive feedback, physical and material aid, and social participation, the mean scores for these two groups were nearly the same even though the low coping score group was consistently higher across categories on what they were already receiving. In the area of personal advice and positive feedback the low coping group stood out in their wanting more (Partial- $F(1,55) = 2.44, p < .20$).

The quest for satisfaction could be what enlarges the social network. A larger social network could also increase the probability of negative interactions. The negative interactions might be more possible if the individual chose the network as a means of denial of problems or without adequately testing reality. The unsuccessful coper's demanding nature on this network that fails to live up to his expectation could also explain the negative interaction. Another way of viewing this

phenomenon is that on another level the expanded network is a cry for help. The unsuccessful copier is not able at this time to meet his needs in the area of self-esteem and feels unable to meet his challenges. He is looking for resources outside himself to aid in bolstering his self-esteem and aid in problem solving.

In this study, personality measures showed no association with either successful or unsuccessful coping. In other studies the Internal/External Locus of Control scale has been a significant factor. In Kobasa's research (Kobasa, 1979; Kobasa et al. 1981), no measures of psychological symptoms were employed: rather a measure of physical symptoms was used to define coping success. Therefore, while people who were strongly internal did not show physical symptoms, their psychological symptoms were not measured. In Lefcourt, Miller, Ware, and Shuk's study (Lefcourt et al. 1981), only when stress reached high levels did strongly internal individuals report significant mood disturbance. External people in this study reported about the same level of mood disturbance across moderate and high levels of stress. The Lefcourt study did not employ a measure of physical symptoms. The inferences from these two studies are that people who are strongly internal under high stress will exhibit psychological and not physical symptoms and people who are external will show an exacerbation of physical symptoms under stress. The Coping Index includes both physical and psychological symptoms and for this reason it may have failed to make distinction between the two groups.

Other Studies also indicate that using the measures of physical

symptoms and psychological symptoms reduces the significance of the dependent variables (Norbeck & Tilden, 1983). The internal/external distinction could also be situation specific, and not a trait as is sometimes thought. One could be strongly internal about one's grades and quite external about dating or dealing with authority figures. To be useful in this study, the scale measuring the internal/external distinction needs to be more finely tuned. Other plausible reasons for the Internal/External Locus of Control not being a significant variable in this study are: The sample does not contain a large enough group at either extreme to demonstrate a difference; The group toward the more internal end of the continuum did not experience enough stress to demonstrate symptoms; or as Kleinman suggests, that the internal/external distinction is more a matter of culture and socioeconomic class (Kleinman, 1980).

Other trait variables that were not significantly related to coping success were the Flexibility, Tolerance, Self-acceptance and Sociability scales of the California Personality Inventory. These variables may well be constants, and since coping is not a constant, rather a process that varies over time and changes with the situation, constants would not be likely to show up.

As mentioned earlier, the Coping Index and the definition of coping employed in this study may well be limits of the study. Another limit of this study is the sample. The results of this study may be typical only of individuals who volunteer for this type of activity. There is no information in this study about individuals who are in college

psychology classes, completed the Life Experience Survey, and did not volunteer for further measures. There is no information about college students who did not have an opportunity to volunteer. Maturity and intelligence of the sample group may also be influencing the results of the present study. The sample --by virtue of being a college sample-- is among the higher functioning individuals. They tend to be young, verbal, intelligent, and have hopes of being affluent. The environment they are now in fosters social skills; however, the present environment, in many ways is insulated from the everyday stresses of the general population. For this reason, many individuals in this sample lack some kinds of experience in some areas. The stressors in student lives and the students' reactions to the stressors may well be highly specific to this particular population. The sample group in this study does not represent a full range of the general population.

All the above need consideration when viewing the model presented in this study. The model seems to hold that people adjusting to change with few symptoms perceive their environment as being supportive. They are neither caught up in a large network nor are they in particular conflict with the people in their lives. Few differences in group means across variables on the Ways of Coping Checklist suggest that the successful copers have a variety of strategies for responding to a situation and do not rely on one strategy for too long a period.

A caveat emptor needs to be added at this point. Coping as defined by this study may itself be a limit. As stated earlier, withdrawal could be adaptive in some situations: it is possible that a cold which

requires a person to withdraw may also be adaptive behavior giving the individual time to develop new ways of doing things or giving this person needed rest. Depression following a breakup could prevent an individual from becoming too quickly involved, thereby providing healing time. Depression could cut down on a production rate that in the long run could do serious physical damage. In these three examples the symptom is the coping process. It is this study and perhaps industrialized society that has assigned the negative value to them.

This study identified wishful thinking as the predominate process of less successful copers. Expanding the network as a cry for help could also be a coping process. At the same time, an expanded network could be a source of stress. Conversely, the quest for satisfaction could be what enlarges the network. This suggests an individual optimum network size and function.

Summary

This chapter focused on the findings of the data. It also expanded on the limitations of this study. Inferences not clearly supported by the data were also presented.

Conclusions

Within the parameters of the limitations of this study stated in the first section and expanded upon in this section, the following conclusions are supported by the data.

1. Age has no significant influence on coping success.
2. Gender has no significant influence on coping success.
3. Wishful Thinking is predictive of less successful coping.

4. An overly large social network is predictive of less successful coping.

Recommendations for Research

1. Further research effort be expended in the effects of socioeconomic class, culture, upward mobility, and learning, on the internal/external distinction as it relates to coping and stress.
2. All or part of this project be replicated using a random sample from the general population.
3. Future studies in this area compare not just the extreme groups to each other, but compare the middle groups to the extremes.
4. Future studies in this area compare low stress, high coping groups with high stress, high coping groups.
5. Better operational definitions of social support and social network need to be made and coupled with better instruments for assessing this phenomenon.

Recommendations for Counseling

1. Allow the client to express symptoms without guilt.
2. Look for the protective aspects of the symptom.
3. Look at possible stressors in the clients experience and design interventions that reduce the stressful condition.
4. Clearly define needs as opposed to wants with the client. The rationale for this is, that needs can be satiated where as a want, if not clearly defined, cannot. If wants and needs are confused,

the result can be frustration.

References

- Barrera, Manuel Jr. (1981). Social support in the adjustment of pregnant adolescents. In B. Gottlieb (Ed.) Social network and social supports in a mental health community. (pp. 69-95). Beverly Hills, Calif.: Sage.
- Beck, A. T. (1967). Depression: Clinical experience and theoretical aspects. (p. 193). Philadelphia: University of Pennsylvania Press.
- Caplan, Gerald. (1981). Mastery of stress: Psychosocial aspects. American Journal of Psychiatry, 4, 413-419.
- Cooley, Eric J. & Keeseey, James. (1983, April). Success in coping with life change: Some Personality and coping style factors. Paper presented at Western Psychological Association, San Francisco. Western Oregon State College, Monmouth, Oregon.
- Cooley, Eric J. & Rickard, Mollie. (1983, April). Measurement of social supports: A self-report scale. Paper presented at Western Psychological Association, San Francisco. Western Oregon State College, Monmouth, Oregon.
- Coyne, James C. (1976). Depression and the response of others. Journal of Abnormal Psychology, 85, 186-193.
- Coyne, James C., Aldwin, Carolyn, Lazarus, Richard S. (1981). Depression and coping in stressful episodes. Journal of Abnormal Psychology, 90, 439-447.
- Derogatis, Leonard R., Lipman, Ronald S., Rickels, Karl, Uhlemhuth, E. H. & Covi Lino. (1974). Psychological measurements in psychopharmacology. In P. Pichot (Ed.) Modern problems pharmacopsychiatrics. 7, Paris: Karger, Basel.
- Eaton, William W. (1978). Life events, social supports and psychiatric symptoms: A re-analysis of the New Haven data. Journal of Health and Social Behavior, 19, 230-234.
- Eichman, William J. (1978). Review of Profile of Mood States. In O. K. Buros (Ed.) The eighth mental measurements yearbook, (pp. 1016-1018). Highland Park, N.J.: Gryphon Press.
- Folkman, Susan. (1982). An approach to the measurement of coping. Journal of Occupational Behavior, 3, 95-107.
- Gore, Susan. (1978). The effect of social support in moderating the health consequences of unemployment. Journal of Health and Social Behavior, 19, 157-165.

- Gough, Harrison G. (1975). California Psychological Inventory Manual. Palo Alto, Calif.: Consulting Psychologists Press.
- Hammen, Constance, Krantz, Susan E. & Cochran, Susan D. (1981). Relationship between depression and casual attribution about stressful life events. Cognitive Therapy and Research, 5, 351-358.
- Harder, David W., Strauss, John S., Kokes, Ronald F., Ritzler, Barry A., Gift, Thomas E. (1980). Life events and psychopathology, severity among first admission psychiatric admissions. Journal of Abnormal Psychology, 89, 165-180.
- Holmes, T. H., & Rahe, R. H. (1967). The social readjustment rating scale. Journal of Psychosomatic Research, 11, 213-218.
- Kanner, Allen D., Coyne, James C., Schaefer, Catherine, & Lazarus, Richard S. (1981). Comparison of two modes of stress measurement: Daily hassles and uplifts versus major life events. Journal of Behavioral Medicine. 4, 1-17.
- Kleinman, Arthur. (1980). Patients and healers in the context of Culture. (pp. 119-178). Berkeley and Los Angeles: University of California Press.
- Kobasa, Suzanne C. (1979). Life events, personality, and health: An inquiry into hardiness. Journal of Personality and Social Psychology, 37, 1-10.
- Kobasa, Suzanne C., Maddi, Salvador R., Courington, Shiela. (1981). Personality and constitution as mediators in the stress-illness relationship. Journal of Personality and Social Psychology, 22, 168-177.
- Lazarus, Richard S. (1977). Coping process in emotion. In Alan Monat & Richard S. Lazarus (Eds.) Stress and coping an anthology, (pp. 145-158) New York: Columbia University Press.
- Lazarus, R. S., & Launier, R. (1978). Stress-related transactions between person and environment. In L. A. Previn & M. Lewis (Eds.) Perspectives in interactional psychology (pp. 287-321) New York: Plenum.
- Lefcourt, Herbert M., Miller, Rickey S., Ward, Edward E., Shuk, Debbie. (1981). Locus of control as a modifier of the relationship between stressors and moods. Journal of Personality and Social Psychology, 41, 357-369.
- Miller, Adam, & Cooley, Eric. (1981). Moderator variables for the relationship between life change and disorders. The Journal

of General Psychology, 104, 223-233.

- Mueller, Danial P., Edwards, Danial W. & Yarvis, Richard M. (1978). Stressful life events and community mental health center patients. Journal of Nervous and Mental Disease, 116, 16-24.
- Norbeck, Jane S. & Tilden, Virginia Peterson. (1983). Life stress, social support, and emotional disequilibrium in complications of pregnancy: A prospective, multivariate study. Journal of Health and Social Behavior, 24, 30-46.
- Nuckolls, Katherine. (1975). Family and health: An epidemiological approach. In B. H. Kaplan & J. C. Cassel (Eds.) Institute for research in social science, (pp. 39-62) Chapel Hill North Carolina: University of North Carolina.
- Rabkin, Judith Godwin. (1980). Stressful life events and schizophrenia: a review of the research literature. Psychological Bulletin, 87, 408-425.
- Rabkin, Judith & Struening E. L. (1976). Life events, stress and illness. Science, 194, 1013-1020.
- Rahe, Richard H., Holmes, Thomas H. Life crisis and disease onset: Qualitative and quantitative definition of the life crisis and its association with health change. Pre-print, Department of Psychiatry and Behavioral Science. University of Washington School of Medicine, Seattle Washington 98195.
- Rahe, Richard H., Mahan, Jack L. Jr., Arthur, Ransom J. (1970). Prediction of near-future health changes from subjects preceding life changes. Journal of Psychosomatic Research, 14, 401-406.
- Robinson, John P. & Shaver, Phillip R. (1969). Measures of social psychological attitudes. (Appendix B to Measures of political attitudes), (p.143) Ann Arbor Mich: Survey Research Center, Institute for Social Research.
- Roskies, Ethel & Lazarus, Richard S. (1980). Coping theory and the teaching of coping skills. In Park O. Davidson and Schena M. Davidson (Eds.) Behavioral medicine: Changing health life styles, (pp. 38-69) New York: Burnner/Mazel.
- Sarason, Irwin G., Johnson, James H., & Siegel, Judith M. (1978). Assessing the impact of life changes: Development of the life experiences survey. Journal of Consulting and Clinical Psychology, 46, 932-946.
- Schaefer, C., Coyne, J. C. & Lazarus, R. S. (1981). The health related functions of social support. Journal of Behavioral Medicine, 4, 381-406.

- Wyler, Allen R., Masuda, Minoru, & Holmes, T. (1968). Seriousness of illness rating scale. Journal of Psychosomatic Research. 11, 363-374.
- Wyler, Allen R., Masuda, Minoru, & Holmes, T. (1971). Magnitude of life events and seriousness of illness. Psychosomatic Medicine. 33, 115-122.

Appendices

Appendix A

Beck Depression Inventory

Name _____ Date _____

On this questionnaire are groups of statements. Please read each group of statements carefully. Then pick out the one statement in each group which best describes the way you have been feeling the PAST WEEK, INCLUDING TODAY! Circle the number beside the statement you picked. If several statements in the group seem to apply equally well, circle each one. Be sure to read all the statements in each group before making your choice.

1. 0 I do not feel sad.
1 I feel sad.
2 I am sad all the time and I can't snap out of it.
3 I am so sad or unhappy that I can't stand it.
2. 0 I am not particularly discouraged about the future.
1 I feel discouraged about the future.
2 I feel I have nothing to look forward to.
3 I feel that the future is hopeless and that things cannot improve.
3. 0 I do not feel like a failure.
1 I feel I have failed more than the average person.
2 As I look back on my life, all I can see is a lot of failure.
3 I feel I am a complete failure as a person.
4. 0 I get as much satisfaction out of things as I used to.
1 I don't enjoy things the way I used to.
2 I don't get real satisfaction out of anything anymore.
3 I am dissatisfied or bored with everything.
5. 0 I don't feel particularly guilty.
1 I feel guilty a good part of the time.
2 I feel quite guilty most of the time.
3 I feel guilty all of the time.
6. 0 I don't feel I am being punished.
1 I feel I may be punished.
2 I expect to be punished.
3 I feel I am being punished.
7. 0 I don't feel disappointed in myself.
1 I am disappointed in myself.
2 I am disgusted with myself.
3 I hate myself.

8. 0 I don't feel I am any worse than anybody else.
1 I am critical of myself for my weaknesses or mistakes.
2 I blame myself all the time for my faults.
3 I blame myself for every thing bad that happens.
9. 0 I don't have any thoughts of killing myself.
1 I have thoughts of killing myself, but I would not carry them out.
2 I would like to kill myself.
3 I would kill myself if I had the chance.
10. 0 I don't cry anymore than usual.
1 I cry more now than I used to.
2 I cry all the time now.
3 I used to be able to cry, but now I can't cry even though I want to.
11. 0 I am no more irritated now than I ever was.
1 I get annoyed or irritated more easily than I used to.
2 I feel irritated all the time now.
3 I don't get irritated at all by the things that used to irritate me.
12. 0 I have not lost interest in other people.
1 I am less interested in other people than I used to be.
2 I have lost most of my interest in other people.
3 I have lost all of my interest in other people.
13. 0 I make decisions about as well as I ever could.
1 I put off making decisions more than I used to.
2 I have greater difficulty in making decisions than before.
3 I can't make decisions at all anymore.
14. 0 I don't feel I look any worse than I used to.
1 I am worried that I am looking old or unattractive.
2 I feel that there are permanent changes in my appearance that make me look unattractive.
3 I believe that I look ugly.
15. 0 I can work about as well as before.
1 It takes an extra effort to get started at doing something.
2 I have to push myself very hard to do anything.
3 I can't do any work at all.
16. 0 I can sleep as well as usual.
1 I don't sleep as well as I used to.
2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
3 I wake up several hours earlier than i used to and cannot go back to sleep.

17. 0 I don't get more tired than usual.
1 I get tired more easily than I used to.
2 I get tired from doing almost anything.
3 I am too tired to do anything.
18. 0 My appetite is no worse than usual.
1 My appetite is not as good as it used to be.
2 My appetite is much worse now.
3 I have no appetite at all anymore.
19. 0 I haven't lost much weight, if any lately.
1 I have lost more than 5 pounds I am purposely trying to
2 I have lost more than 10pounds. lose weight by eating
3 I have lost more than 15 pounds. less.
Yes _____ No _____
20. 0 I am no more worried about my health than usual.
1 I am worried about physical problems such as aches and pains;
or upset stomach; or constipation.
2 I am very worried about physical problems and it's hard to
think of much else.
3 I am so worried about my physical problems, that I cannot
think about anything else.
21. 0 I have not noticed any recent change in my interest in sex.
1 I am less interested in sex than I used to be.
2 I am much less interested in sex now.
3 I have lost interest in sex completely.

Ways of Coping

Thinking about the situation you have just described, put a check in the "Yes" or "No" column for each item, depending on whether that item applied to you.

(To help keep the situation in mind): I am talking about the situation in which

	Yes	No
1. Just concentrated on what you had to do next -- the next step.	___	___
2. You went over the problem again and again in in your mind to try to understand it.	___	___
3. Turned to work or substitute activity to take your mind off things.	___	___
4. You felt that time would make a difference, the thing to do was to wait.	___	___
5. Bargained or compromised to get something positive from the situation.	___	___
6. Did something which you thought wouldn't work, but at least you were doing something.	___	___
7. Got the person responsible to change his or her mind.	___	___
8. Talked to someone to find out more about the situation.	___	___
9. Blamed yourself.	___	___
10. Concentrated on something good that could come out of the whole thing.	___	___
11. Criticized or lectured yourself.	___	___
12. Tried not to burn you bridges behind you, but leave things open somewhat.	___	___
13. Hoped a miracle would happen.	___	___

14. Went along with fate; sometimes you just have bad luck. _____
15. Went on as if nothing had happened. _____
16. Felt bad that you couldn't avoid the problem. _____
17. Kept your feelings to yourself. _____
18. Looked for the "silver lining," so to speak; tried to look on the bright side of things. _____
19. Slept more than usual. _____
20. Got mad at the people or things that caused the problem. _____
21. Accepted sympathy and understanding from someone. _____
22. Told yourself things that helped you to feel better. _____
23. You were inspired to do something creative. _____
24. Tried to forget the whole thing. _____
25. Got professional help and did what they recommended. _____
26. Changed or grew as a person in a good way. _____
27. Waited to see what would happen. _____
28. Did something totally new that you never would have done if this hadn't happened. _____
29. Tried to make up to someone for the bad thing that happened. _____
30. Made a plan of action and followed it. _____
31. Accepted the next best thing to what you wanted. _____
32. Let your feelings out somehow. _____
33. Realized you brought the problem on yourself. _____
34. You came out of the experience better than you went in. _____
35. Talked to someone who could do something concrete about the problem. _____

36. Got away from it for awhile; tried to rest or take a vacation. _____
37. Tried to make yourself feel better by eating drinking, smoking, taking medication, etc. _____
38. Took a big chance or did something very risky. _____
39. Found new faith or some important truth about life. _____
40. Tried not to act too hastily or follow your first hunch. _____
41. Joked about it. _____
42. Maintained your pride and kept a stiff upper lip. _____
43. Rediscovered what is important in life. _____
44. Changed something so things would turn out all right. _____
45. Avoided being with people in general. _____
46. Didn't let it get to you; refused to think too much about it. _____
47. Asked someone you respected for advice and followed it. _____
48. Kept others from knowing how bad things were. _____
49. Made light of the situation; refused to get too serious about it. _____
50. Talked to someone about how you were feeling. _____
51. Stood your ground and fought for what you wanted. _____
52. Took it out on other people. _____
53. Drew on your past experiences; you were in a similar situation before. _____
54. Just took things one step at a time. _____
55. You knew what had to be done, so you doubled your efforts and tried harder to make things work. _____
56. Refused to believe that it had happened. _____

57. Made a promise to yourself that things would be different next time. _____
58. Came up with a couple of different solutions to the problem. _____
59. Accepted it, since nothing could be done. _____
60. Wished you were a stronger person -- more optimistic and forceful. _____
61. Accepted your strong feelings, but didn't let them interfere with other things too much. _____
62. Wished that you could change what had happened. _____
63. Wished that you could change the way you felt. _____
64. Changed something about yourself so that you could deal with the situation better. _____
65. Daydreamed or imagined a better time or place than the one you were in. _____
66. Had fantasies or wishes about how things might turn out. _____
67. Thought about fantastic or unreal things (like the perfect revenge or finding a million dollars) that made you feel better. _____
68. Wished that the situation would go away or somehow be over with. _____
69. Did something different from any of the above. _____

In general, is this situation one

- a. that you could change or do something about? _____
- b. that must be accepted or gotten used to? _____
- c. that you needed to know more about before you could act? _____
- d. in which you had to hold yourself back from doing what you wanted to do? _____

If you checked "yes" more than once, underline the statement which best describes the situation.

The Hassles Scale

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

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

.....

SEVERITY

Hassles

1. Somewhat severe
2. Moderately severe
3. Extremely severe

1) Misplacing or losing things.....	1	2	3
2) Troublesome neighbors.....	1	2	3
3) Social obligations.....	1	2	3
4) Inconsiderate smokers.....	1	2	3
5) Troubling thoughts about your future.....	1	2	3
6) Thoughts about death.....	1	2	3
7) Health of a family member.....	1	2	3
8) Not enough money for clothing.....	1	2	3
9) Not enough money for housing.....	1	2	3
10) Concerns about owing money.....	1	2	3
11) Concerns about getting credit.....	1	2	3
12) Concerns about money for emergencies.....	1	2	3
13) Someone owes you money.....	1	2	3
14) Financial responsibility for someone who doesn't live with you.....	1	2	3
15) Cutting down on electricity, water, etc.....	1	2	3
16) Smoking too much.....	1	2	3
17) Use of alcohol.....	1	2	3
18) Personal use of drugs.....	1	2	3
19) Too many responsibilities.....	1	2	3
20) Decisions about having children.....	1	2	3
21) Non-family members living in your home.....	1	2	3
22) Care for pet.....	1	2	3
23) Planning meals.....	1	2	3

24)	Concerned about the meaning of life.....	1	2	3
25)	Trouble relaxing.....	1	2	3
26)	Trouble making decisions.....	1	2	3
27)	Problems getting along with fellow workers.....	1	2	3
28)	Customers or clients give you a hard time.....	1	2	3
29)	Home maintenance (inside).....	1	2	3
30)	Concerns about job security.....	1	2	3
31)	Concerns about retirement.....	1	2	3
32)	Laid-off or out of work.....	1	2	3
33)	Don't like current work duties.....	1	2	3
34)	Don't like fellow workers.....	1	2	3
35)	Not enough money for basic necessities.....	1	2	3
36)	Not enough money for food.....	1	2	3
37)	Too many interruptions.....	1	2	3
38)	Unexpected company.....	1	2	3
39)	Too much time on hands.....	1	2	3
40)	Having to wait.....	1	2	3
41)	Concerns about accidents.....	1	2	3
42)	Being lonely.....	1	2	3
43)	Not enough money for health care.....	1	2	3
44)	Fear of confrontation.....	1	2	3
45)	Financial security.....	1	2	3
46)	Silly practical mistakes.....	1	2	3
47)	Inability to express yourself.....	1	2	3
48)	Physical illness.....	1	2	3
49)	Side effects of medication.....	1	2	3
50)	Concerns about medical treatment.....	1	2	3
51)	Physical appearance.....	1	2	3
52)	Fear of rejection.....	1	2	3
53)	Difficulties with getting pregnant.....	1	2	3
54)	Sexual problems that result from physical problems.....	1	2	3
55)	Sexual problems other than those resulting from physical problems.....	1	2	3
56)	Concerns about health in general.....	1	2	3
57)	Not seeing enough people.....	1	2	3
58)	Friends or relatives too far away.....	1	2	3
59)	Preparing meals.....	1	2	3
60)	Wasting time.....	1	2	3
61)	Auto maintenance.....	1	2	3
62)	Filling out forms.....	1	2	3
63)	Neighborhood deterioration.....	1	2	3
64)	Financing children's education.....	1	2	3
65)	Problems with employees.....	1	2	3
66)	Problems on job due to being a woman or man.....	1	2	3
67)	Declining physical abilities.....	1	2	3
68)	Being exploited.....	1	2	3
69)	Concerns about bodily functions.....	1	2	3
70)	Rising prices of common goods.....	1	2	3
71)	Not getting enough rest.....	1	2	3
72)	Not getting enough sleep.....	1	2	3
73)	Problems with aging parents.....	1	2	3
74)	Problems with your children.....	1	2	3

75)	Problems with persons younger than yourself.....	1	2	3
76)	Problems with your lover.....	1	2	3
77)	Difficulties seeing or hearing.....	1	2	3
78)	Overloaded with family responsibilities.....	1	2	3
79)	Too many things to do.....	1	2	3
80)	Unchallenging work.....	1	2	3
81)	Concerns about meeting high standards.....	1	2	3
82)	Financial dealings with friends or acquaintances.	1	2	3
83)	Job dissatisfaction.....	1	2	3
84)	Worries about decisions to change jobs.....	1	2	3
85)	Trouble with reading, writing, or spelling abilities.....	1	2	3
86)	Too many meetings.....	1	2	3
87)	Problems with divorce or separation.....	1	2	3
88)	Trouble with arithmetic skills.....	1	2	3
89)	Gossip.....	1	2	3
90)	Legal problems.....	1	2	3
91)	Concerns about weight.....	1	2	3
92)	Not enough time to do the things you need to do..	1	2	3
93)	Television.....	1	2	3
94)	Not enough personal energy.....	1	2	3
95)	Concerns about inner conflicts.....	1	2	3
96)	Feel conflicted over what to do.....	1	2	3
97)	Regrets over past decisions.....	1	2	3
98)	Menstrual (period) problems.....	1	2	3
99)	The weather.....	1	2	3
100)	Nightmares.....	1	2	3
101)	Concerns about getting ahead.....	1	2	3
102)	Hassles from boss or supervisor.....	1	2	3
103)	Difficulties with friends.....	1	2	3
104)	Not enough time for family.....	1	2	3
105)	Transportation problems.....	1	2	3
106)	Not enough money for transportation.....	1	2	3
107)	Not enough money for entertainment and recreation.....	1	2	3
108)	Shopping.....	1	2	3
109)	Prejudice and discrimination from others.....	1	2	3
110)	Property, investments or taxes.....	1	2	3
111)	Not enough time for entertainment and recreation.....	1	2	3
112)	Yardwork or outside home maintenance.....	1	2	3
113)	Concerns about news events.....	1	2	3
114)	Noise.....	1	2	3
115)	Crime.....	1	2	3
116)	Traffic.....	1	2	3
117)	Pollution.....	1	2	3

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

118)	_____	1	2	3
------	-------	---	---	---

ONE MORE THING: HAS THERE BEEN A CHANGE IN YOUR

LIFE THAT AFFECTED HOW YOU ANSWERED THIS SCALE?
IF SO, TELL US WHAT IT WAS:

The Life Experiences Survey

Listed below are a number of events which sometimes bring about change in the lives of those who experience them and which necessitate social readjustment. Please check those events which you have experienced in the recent past (the last year). Be sure that all check marks are directly across from the items with which they correspond. Check only events which have occurred to you in the last year.

Also, for each time checked below, please indicate the extent to which you viewed the event as having either a positive or negative impact on your life at the time the event occurred. That is, indicate the type and extent of impact that the event had. A rating of -3 would indicate an extremely negative impact. A rating of 0 suggests no impact either positive or negative. A rating of +3 would indicate an extremely positive impact. Remember, check only events which have occurred to you in the last year.

	extremely negative	moderately negative	somewhat negative	no impact	slightly positive	moderately positive	extremely positive
1. Marriage	-3	-2	-1	0	+1	+2	+3
2. Detention in jail or comparable institution	-3	-2	-1	0	+1	+2	+3
3. Death of spouse	-3	-2	-1	0	+1	+2	+3
4. Major change in sleeping habits (much more or much less sleep)	-3	-2	-1	0	+1	+2	+3
5. Death of a close family member:							
a. mother	-3	-2	-1	0	+1	+2	+3
b. father	-3	-2	-1	0	+1	+2	+3
c. brother	-3	-2	-1	0	+1	+2	+3
d. sister	-3	-2	-1	0	+1	+2	+3
e. grandmother	-3	-2	-1	0	+1	+2	+3
f. grandfather	-3	-2	-1	0	+1	+2	+3
g. other (specify)	-3	-2	-1	0	+1	+2	+3
6. Major change in eating habits (much more or much less food intake)	-3	-2	-1	0	+1	+2	+3
7. Foreclosure on mortgage or loan	-3	-2	-1	0	+1	+2	+3
8. Death of a close friend	-3	-2	-1	0	+1	+2	+3
9. Outstanding personal achievement	-3	-2	-1	0	+1	+2	+3

10.	Minor law violations (traffic tickets, disturbing the peace etc.)	-3	-2	-1	0	+1	+2	+3
11.	Male: Wife/girlfriend's pregnancy	-3	-2	-1	0	+1	+2	+3
12.	Female: Pregnancy	-3	-2	-1	0	+1	+2	+3
13.	Change work situations (different work responsibility, major change in working conditions, working hours, etc.)	-3	-2	-1	0	+1	+2	+3
14.	New job	-3	-2	-1	0	+1	+2	+3
15.	Serious illness or injury of close family member:							
	a. father	-3	-2	-1	0	+1	+2	+3
	b. mother	-3	-2	-1	0	+1	+2	+3
	c. sister	-3	-2	-1	0	+1	+2	+3
	d. brother	-3	-2	-1	0	+1	+2	+3
	e. grandfather	-3	-2	-1	0	+1	+2	+3
	f. grandmother	-3	-2	-1	0	+1	+2	+3
	g. spouse	-3	-2	-1	0	+1	+2	+3
	h. other (specify)	-3	-2	-1	0	+1	+2	+3
16.	Sexual difficulties	-3	-2	-1	0	+1	+2	+3
17.	Trouble with employer (in danger of losing job, being suspended, demoted, etc.)	-3	-2	-1	0	+1	+2	+3
18.	Trouble with in-laws	-3	-2	-1	0	+1	+2	+3
19.	Major change in financial status (a lot better off or a lot worse off)	-3	-2	-1	0	+1	+2	+3
20.	Major change in closeness of family members (increased or decreased closeness)	-3	-2	-1	0	+1	+2	+3
21.	Gaining a new family member (through birth, adoption, family member moving in etc.)	-3	-2	-1	0	+1	+2	+3
22.	Change of residence	-3	-2	-1	0	+1	+2	+3
23.	Marital separation from mate (due to conflict)	-3	-2	-1	0	+1	+2	+3
24.	Major change in church activities (increased or decreased attendance)	-3	-2	-1	0	+1	+2	+3
25.	Marital reconciliation with mate	-3	-2	-1	0	+1	+2	+3
26.	Major change in number or arguments with spouse (a lot more or a lot less arguments)	-3	-2	-1	0	+1	+2	+3
27.	Married male: Change in wife's work outside the home (beginning work, ceasing work, changing to a new job, retirement, etc.)	-3	-2	-1	0	+1	+2	+3
28.	Married female: Change in husband's work (loss of job, begin-							

	ning new job, retirement etc.)	-3	-2	-1	0	+1	+2	+3
29.	Major change in usual type and/or amount of recreation	-3	-2	-1	0	+1	+2	+3
30.	Borrowing more than \$10,000 (buying home, business, etc.)	-3	-2	-1	0	+1	+2	+3
31.	Borrowing less than \$10,000 (buying car, TV, getting school loan, etc.)	-3	-2	-1	0	+1	+2	+3
32.	Being fired from job	-3	-2	-1	0	+1	+2	+3
33.	Male: Wife/girlfriend having abortion	-3	-2	-1	0	+1	+2	+3
34.	Female: Having abortion	-3	-2	-1	0	+1	+2	+3
35.	Major personal illness or injury	-3	-2	-1	0	+1	+2	+3
36.	Major change in social activities, e.g., parties, movies, visiting (increased or decreased participation)	-3	-2	-1	0	+1	+2	+3
37.	Major change in living conditions of family (building new home, remodeling, deterioration of home, neighborhood, etc.)	-3	-2	-1	0	+1	+2	+3
38.	Divorce	-3	-2	-1	0	+1	+2	+3
39.	Serious injury or illness of close friend	-3	-2	-1	0	+1	+2	+3
40.	Retirement from work	-3	-2	-1	0	+1	+2	+3
41.	Son or daughter leaving home (due to marriage, college, etc)	-3	-2	-1	0	+1	+2	+3
42.	Ending of formal schooling	-3	-2	-1	0	+1	+2	+3
43.	Separation from spouse (due to work, travel, etc.)	-3	-2	-1	0	+1	+2	+3
44.	Engagement	-3	-2	-1	0	+1	+2	+3
45.	Breaking up with boyfriend/girlfriend	-3	-2	-1	0	+1	+2	+3
46.	Leaving home for the first time	-3	-2	-1	0	+1	+2	+3
47.	Reconciliation with boyfriend/girlfriend	-3	-2	-1	0	+1	+2	+3
48.	Beginning a new school experience at a higher academic level (college, graduate school, professional school, etc.)	-3	-2	-1	0	+1	+2	+3
49.	Changing to a new school at same academic level (undergraduate, graduate, etc.)	-3	-2	-1	0	+1	+2	+3
50.	Academic probation	-3	-2	-1	0	+1	+2	+3
51.	Being dismissed from dormitory or other residence	-3	-2	-1	0	+1	+2	+3
52.	Failing an important exam	-3	-2	-1	0	+1	+2	+3
53.	Changing a major	-3	-2	-1	0	+1	+2	+3
54.	Failing a course	-3	-2	-1	0	+1	+2	+3
55.	Dropping a course	-3	-2	-1	0	+1	+2	+3
56.	Joining a fraternity/sorority	-3	-2	-1	0	+1	+2	+3
57.	Financial problems concerning school (in danger of not having							

	-3	-2	-1	0	+1	+2	+3
sufficient money to continue)							
Other recent experiences which have had an impact on your life. List and rate.							
58. _____	-3	-2	-1	0	+1	+2	+3
59. _____	-3	-2	-1	0	+1	+2	+3
60. _____	-3	-2	-1	0	+1	+2	+3

Back of Last Page of Life Experience Survey

We are doing research on the effect that personality variables have on the relationship between life stress and illness. Based on the scores on the previous questionnaire, we will be asking some people to participate further in this research. Further involvement would entail being contacted by one of our research assistants and arranging two appointments. During the appointments, you will be asked to complete several personality measures and a short interview. We will be happy to provide you with feedback from these measures.

If you qualify and are willing to participate further in this investigation, please print your name, address and phone number below. Thank you for your cooperation!

Sincerely,

Eric Cooley, Ph.D.

Yes I would be willing to participate further:

Name _____

Current Address _____

Phone number _____

Adjusted Somatic Scale of the Hopkins Symptom Checklist

Name _____

For each disorder listed below, recall if you have experienced it during the past 2 weeks. Only consider those disorders which began during this period or became markedly worse. For example, I have a rash most of the time, this could not count. If the rash became worse during the last two weeks, it would count once. If the rash became worse for two days in the last two weeks then became better then worse, it would be counted twice.

- | | |
|--|---|
| <input type="checkbox"/> 1. Headache | <input type="checkbox"/> 18. Constipation |
| <input type="checkbox"/> 2. Noticeable weight gain or loss | <input type="checkbox"/> 19. Excessive perspiration |
| <input type="checkbox"/> 3. Faintness or dizziness | <input type="checkbox"/> 20. Common cold |
| <input type="checkbox"/> 4. Nosebleeds | <input type="checkbox"/> 21. Skin rash |
| <input type="checkbox"/> 5. Pains in the heart or chest | <input type="checkbox"/> 22. Lump in your throat |
| <input type="checkbox"/> 6. Appearance of warts | <input type="checkbox"/> 23. Sore throat |
| <input type="checkbox"/> 7. Feeling low in energy, slowed down | <input type="checkbox"/> 24. Swollen glands |
| <input type="checkbox"/> 8. Psoriasis which gets worse | <input type="checkbox"/> 25. Weakness in parts of your body |
| <input type="checkbox"/> 9. Pains in lower back | <input type="checkbox"/> 26. Burns |
| <input type="checkbox"/> 10. Acne which gets worse | <input type="checkbox"/> 27. Minor injuries (sprains) |
| <input type="checkbox"/> 11. Soreness of muscles | <input type="checkbox"/> 28. Accidents in which you were hurt |
| <input type="checkbox"/> 12. Ear aches | <input type="checkbox"/> 29. Heavy feeling in your limbs |
| <input type="checkbox"/> 13. Trouble getting your breath | <input type="checkbox"/> 30. Accidents in which you broke an object |
| <input type="checkbox"/> 14. Upset Stomach | |
| <input type="checkbox"/> 15. Hot or cold spells | |
| <input type="checkbox"/> 16. Diarrhea | |
| <input type="checkbox"/> 17. Numbness or tingling in part of your body | |

Internal/External Locus of Control

For the following questions, choose the alternative which most clearly represents your beliefs. For some questions this will be difficult but in each case select the statement which most closely represents your beliefs.

Please answer these questions on the IBM answer sheets that are provided. Use a soft-lead pencil to do this.

1. (a) Children get into trouble because their parents punish them too much.
(b) The trouble with most children nowadays is that their parents are too easy with them.
2. (a) Many of the unhappy things in people's lives are partly due to bad luck.
(b) People's misfortunes result from the mistakes they make.
3. (a) One of the major reasons why we have wars is because people don't take enough interest in politics.
(b) There will always be wars, no matter how hard people try to prevent them.
4. (a) In the long run people get the respect they deserve in this world.
(b) Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.
5. (a) The idea that teachers are unfair to students is nonsense.
(b) Most students don't realize the extent to which their grades are influenced by accidental happenings.
6. (a) Without the right breaks one cannot be an effective leader.
(b) Capable people who fail to become leaders have not taken advantage of their opportunities.
7. (a) No matter how hard you try, some people just don't like you.
(b) People who can't get others to like them don't understand how to get along with others.
8. (a) Heredity plays the major role in determining one's personality.
(b) It is one's experiences in life which determine what they're like.
9. (a) I have often found that what is going to happen will happen.
(b) Trusting in fate has never turned out as well for me as making a decision to take a definite course of action.

10. (a) In the case of the well prepared student there is rarely if ever such a thing as an unfair test.
(b) Many times exam questions tend to be so unrelated to course work that studying is really useless.
11. (a) Becoming a success is a matter of hard work, luck has little or nothing to do with it.
(b) Getting a good job depends mainly on being in the right place at the right time.
12. (a) The average citizen can have an influence in government decisions.
(b) This world is run by the few people in power, and there is not much that the little guy can do about it.
13. (a) When I make plans, I am almost certain that I can make them work.
(b) It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.
14. (a) There are certain people who are just no good.
(b) There is some good in everybody.
15. (a) In my case getting what I want has little or nothing to do with luck.
(b) Many times we might just as well decide what to do by flipping a coin.
16. (a) Who gets to be the boss often depends on who was lucky enough to be in the right place first.
(b) Getting people to do the right thing depends upon ability, luck has little or nothing to do with it.
17. (a) As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.
(b) By taking an active part in political and social affairs the people can control world events.
18. (a) Most people don't realize the extent to which their lives are controlled by accidental happenings.
(b) There is really no such thing as "luck."
19. (a) One should always be willing to admit mistakes.
(b) It is usually best to cover up one's mistakes.
20. (a) It is hard to know whether or not a person really likes you.
(b) How many friends you have depends upon how nice a person you are.
21. (a) In the long run the bad things that happen to us are balanced by the good ones.

- (b) Most misfortunes are the result of lack of ability, ignorance, laziness or all three.
22. (a) With enough effort we can wipe out political corruption.
(b) It is difficult for people to have much control over the things politicians do in office.
23. (a) Sometimes I can't understand how teachers arrive at the grade they give me.
(b) There is a direct connection between how hard I study and the grades I get.
24. (a) A good leader expects people to decide for themselves what they should do.
(b) A good leader makes it clear to everybody what their jobs are.
25. (a) Many times I feel that I have little influence over the things that happen to me.
(b) It is impossible to me to believe that chance or luck plays an important role in my life.
26. (a) People are lonely because they don't try to be friendly.
(b) There's not much use in trying too hard to please people, if they like you, they like you.
27. (a) There is too much emphasis on athletics in high school.
(b) Team sports are an excellent way to build character.
28. (a) What happens to me is my own doing.
(b) Sometimes I feel that I don't have enough control over the direction my life is taking.

Flexibility, Tolerance, Sociability, and Self-acceptance Scales
of the California Psychological Inventory

1. I often wish people would be more definite about things.
2. I enjoy social gatherings just to be with people.
3. Several times a week I feel as if something dreadful is about to happen.
4. I looked up to my father as an ideal man.
5. It is annoying to listen to a lecturer who cannot seem to make up his mind as to what he really believes.
6. A person needs to "show off" a little now and then.
7. I have had very peculiar and strange experiences.
8. My daily life is full of things that keep me interested.
9. I find that a well ordered mode of life with regular hours is congenial to my temperament.
10. When in a group of people I usually do what the others want rather than make suggestions.
11. It makes me feel like a failure when I hear of the success of someone I know well.
12. I doubt whether I would make a good leader.
13. I often start things I never finish.
14. As a child I used to be able to go to my parents with my problems.
15. Usually I would prefer to work with women.
16. It is hard for me to start a conversation with strangers.
17. Our thinking would be a lot better off if we would just forget about words like "probably," "approximately," and "perhaps."
18. I seem to be about as capable and smart as most others around me.
19. I have often met people who were supposed to be experts who were no better than I.

20. I sometimes pretend to know more than I really do.
21. I never make judgments about people until I am sure of the facts.
22. I liked school.
23. I think I would like the work of a clerk in a large department store.
24. Women should not be allowed to drink in cocktail bars.
25. A strong person will be able to make up his mind even on the most difficult questions.
26. A windstorm terrifies me.
27. Once a week or oftener I feel suddenly hot all over, without apparent cause.
28. I would disapprove of anyone's drinking to the point of intoxication at a party.
29. For most questions there is just one right answer, once a person is able to get all the facts.
30. It is very hard for me to tell anyone about myself.
31. With things going as they are, it's pretty hard to keep up hope of amounting to something.
32. Most of the arguments or quarrels I get into are over matters of principle.
33. I like to have a place for everything and everything in its place.
34. I usually feel nervous and ill at ease at a formal dance or party.
35. I don't blame anyone for trying to grab all he can get in this world.
36. I must admit that I often do as little work as I can get by with.
37. I don't like to work on a problem unless there is the possibility of coming out with a clear-cut and unambiguous answer.
38. I have at one time or another in my life tried my hand at writing poetry.

39. I like poetry.
40. I would like to see a bullfight in Spain.
41. It bothers me when something unexpected interrupts my daily routine.
42. I like to be the center of attention.
43. It makes me uncomfortable to put on a stunt at a party even when others are doing the same sort of thing.
44. I set a high standard for myself and I feel others should should do the same.
45. Most of the argument or quarrels I get into are over matters of principle.
46. I can be friendly with people who do things which I consider wrong.
47. Most people make friends because friends are likely to be useful to them.
48. I seldom or never have dizzy spells.
49. I am know as a hard and steady worker.
50. I have no dread of going into a room by myself where other people have already gathered and are talking.
51. It is all right to get around the law if you don't actually break it.
52. I never make judgments about people until I am sure of the facts.
53. I don't like things to be uncertain and unpredictable.
54. When in a group of people I have trouble thinking of the right things to talk about.
55. Most people will use somewhat unfair means to gain profit or an advantage rather than to lose it.
56. I am certainly lacking in self-confidence.
57. Once I have my mind made up I seldom change it.
58. I was a slow learner in school.
59. I have strange and peculiar thoughts.

60. When I work on a committee I like to take charge of things.
61. I think I am stricter about right and wrong than most people.
62. I am likely not to speak to people until they speak to me.
63. I frequently notice my hand shakes when I try to do something.
64. I would rather go without something than ask for a favor.
65. I am in favor of a very strict enforcement of all laws, no matter what the consequences.
66. I do not dread seeing a doctor about a sickness or injury.
67. I do not have a great fear of snakes.
68. Before I do something I try to consider how my friends will react to it.
69. I always see to it that my work is carefully planned and organized.
70. I have a tendency to give up easily when I meet difficult problems.
71. I commonly wonder what hidden reason another person may have for doing something nice for me.
72. I have frequently found myself, when alone, pondering such abstract problems as freewill, evil, etc.
73. The trouble with many people is that they don't take things seriously enough.
74. I would like to wear expensive clothes.
75. Sometimes I feel as if I must injure either myself or someone else.
76. It is hard for me to find anything to talk about when I meet a new person.
77. I set a high standard for myself and I feel others should do the same.
78. I like parties and socials.
79. I have had more than my share of things to worry about.
80. A person does not need to worry about other people if only he looks after himself.

81. People who seem unsure and uncertain about things make me feel uncomfortable.
82. I should like to belong to several clubs or lodges.
83. I have often found people jealous of my good ideas, just because they had not thought of them first.
84. When a man is with a woman he is usually thinking about things related to her sex.
85. Most people are honest chiefly through fear of being caught.
86. Sometimes I rather enjoy going against the rules and doing things I'm not supposed to.
87. I am quite often not in on the gossip and talk of the group I belong to.
88. Most people inwardly dislike putting themselves out to help other people.
89. I think I would like to belong to a motorcycle club.
90. Once in a while I laugh at a dirty joke.
91. Much of the time my head seems to hurt all over.
92. I would like to be an actor on the stage or in the movies.
93. If given the chance I would make a good leader of people.
94. The man who provides temptation by leaving valuable property unprotected is about as much to blame for its theft as the one who steals it.
95. Police cars should be especially marked so that you can always see them coming.
96. At times I have worn myself out by undertaking too much.
97. I much prefer symmetry to asymmetry.
98. I love to go to dances.
99. People pretend to care more about one another than they really do.
100. I often feel as though I have done something wrong or wicked.
101. I usually expect to succeed in things I do.

102. In school I found it very hard to talk before the class.
103. I like to read about history.
104. I think most people would lie to get ahead.
105. I am bothered by people outside, on streetcars, in stores, etc.
106. I like science.
107. I have no fear of water.
108. I refuse to play some games because I am not good at them.
109. I like to read about science.
110. I feel that I have often been punished without cause.
111. It is hard for me to act natural when I am with new people.
112. I often do whatever makes me feel cheerful here and now, even at the cost of some distant goal.

Utilization of Social Supports

Answer the following questions using the scale printed below.
Place the number which corresponds to your answer on the answer sheet.

1	2	3	4	5	6
100% False	Mostly False	More False than True	More True than False	Mostly True	100% True

1. When I have accomplished something others seem to recognize my efforts and give me credit.
2. I have some friends who are "expert" in my field that I can call on now and then for assistance.
3. When I experience emotional set backs I keep it to myself.
4. Nobody seems to care much what happens to me.
5. When I have a problem with something I'm doing, I have people around who will help me.
6. I belong to a religious organization that I attend regularly.
7. There is generally someone around that agrees with me.
8. There are many people who don't seem to like me.
9. My hobbies and interests include mostly activities that I do alone.
10. When I something important to say, my friends listen closely and usually value what I have to say.
11. I fit well in many diverse groups.
12. My viewpoint seems different from those around me.
13. Nobody seems to think I'll ever amount to anything.
14. Sometimes I sit in a group and wonder who is odd, them or me.

15. I belong to a club or interest group with which I'm regularly involved.
16. I have a group of friends with whom I can discuss my major field off interests.
17. There are times when people do not understand my accomplishments.
18. No one invites me to do anything with them.
19. Others listen to what I have to say.
20. I have many friends who share my interests.
21. When I'm feeling down I tend to cover it up and act cheerful.
22. People seem to think I'm a loner.
23. I have a group of people who share my sense of humor.
24. I am often involved in spontaneous get togethers.
25. If I run into an emotional road block I have a friend who will sit down and carefully go through the situation with me.
26. It seems that most of the time, no one really listens to me.
27. I am treated with respect by others.
28. I have several friends that I do things with on a regular basis.
29. I am not very talkative about my personal life.
30. Often it feel as if nobody is close to me.
31. When I'm feeling down I usually like to talk about it to friends.
32. I am often involved in planned activities (parties, picnics, etc.) with people other than my family.
33. I'm good at sharing my feelings.
34. The trouble with my friends is that they are too self-centered.
35. People say I'm easy to get along with.
36. My family and myself do planned activities on a regular basis.

37. Nobody really know me very well.
38. It seems as if other people avoid me.
39. When something important happens to me I tell all my friends about it.
40. I have several friends I can drop in on.
41. I'm very open about sharing my feelings with my close friends.
42. It seems as if I can't get along with anyone.
43. People seldom let me down.
44. My classmates/co-workers and I do things other than class or work related activities.
45. When something is bothering me it helps to talk it out with someone.
46. I have several friends I can phone for no real reason other than just visit.
47. I think I am an important person in other peoples' lives.
48. When I am in a bind, I can count on my classmates/co-workers for support.
49. Others generally include me in social/recreational activities.
50. Other folks see me as successful in my endeavors.

Arizona Social Support Interview Schedule

A. Private Feelings

1. If you wanted to talk to someone about things that are very personal and private, who would you talk to? Give me the first names, initials or nicknames of the people that you would talk to about things that are very personal and private.

PROBE: Is there anyone else that you can think of?

2. During the last month, which of these people did you actually talk to about things that were personal and private?

PROBE: Ask specifically about people who were listed in response to #1 but not listed in response to #2.

B. Material Aid

1. Who are the people you know that would lend or give you \$25 or more if you needed it, or would lend or give you something (a physical object) that was valuable? You can name some of the same people that you named before if they fit this description, too, or you can name some other people

PROBE: Is there anyone else that you can think of?

2. During the past month, which of these people actually loaned or gave you some money over \$25 or gave or loaned you some valuable object that you needed?

PROBE: Ask about people named in response to #1 that were not named in response to #2.

C. Advice

1. Who would you go to if a situation came up when you needed some advice? Remember, you can name some of the same people that you mentioned before, or you can name some new people.

PROBE: Anyone else?

2. During the past month, which of these people actually gave you some important advice?

PROBE: Inquire about people who were listed for #1 but not for #2.

D. Positive Feedback

1. Who are the people that you could expect to let you know when they like your ideas or the things that you do? These might be people you mentioned before or new people.

PROBE: Anyone else?

2. During the past month, which of these people actually let you know that they liked your ideas or liked the things that you did?

PROBE: Ask about individuals who were listed for #1 but not for #2.

E. Physical Assistance

1. Who are the people that you could call on to give up some of their time and energy to help you take care of something that you needed to do - things like driving you someplace you needed to go, helping you do some work around the house, going to the store for you, and things like that? Remember, you might have listed these people before or they could be new names.

PROBE: Anyone else you can think of?

2. During the past month, which of these people actually pitched in to help you do things that you needed some help with?

PROBE: Ask about people who were named in the response to #1 but who were not named in response to #2.

F. Social Participation

1. Who are the people that you get together with to have fun or to relax? These could be new names or ones you listed before.

PROBE: Anyone else?

2. During the past month, which of these people did you actually get together with to have fun or to relax?

PROBE: Ask about people who were named in #1 but not in #2.

G. Negative Interactions

1. Who are the people that you can expect to have some unpleasant disagreements with or people that you can expect to make you angry and upset? These could be new names or names you listed before.

PROBE: Anyone else?

2. During the past month, which of these people have you actually had some unpleasant disagreements with or have actually made you angry and upset?

PROBE: Ask about people listed for #1, but not for #2.

Scoring Sheet for the Arizona Social Support Interview Schedule

Name _____ Interviewer _____

For question 1 and the fit probe of each set, list names, initials, etc in the space provided. Circle the names, initials, etc. of people who actually provided the service. Do whatever is appropriate with the second probe such as circle or list. Use the following key for the questions on:

- | | |
|---|--|
| <p>3. During the past month how much of this support would you have liked?</p> <p>1) A lot more
2) A little more
3) About right</p> | <p>4. During the past month how much of this type of support did you think you needed?</p> <p>1) Not at all
2) A little bit
3) Quite a bit</p> |
|---|--|

A. Personal and Private Feelings

Circle the number of the response to questions 3 and 4.

3) 1 2 3

4) 1 2 3

Continue the pattern of recording for each set.

B. Material Aid:

3) 1 2 3

4) 1 2 3

C. Advice:

3) 1 2 3

4) 1 2 3

D. Positive Feedback:

3) 1 2 3

4) 1 2 3

E. Physical Assistance:

3) 1 2 3

4) 1 2 3

F. Social Participation:

3) 1 2 3

4) 1 2 3

G. Negative Interactions:

Demographic Sheet

Name _____ Age _____ Sex _____

Marital Status _____

Where do you fall in your family (oldest, youngest, etc.)?

Do you have any pets, at home, at school? What kind?

What kind of activities do you do for fun or relaxation. Please list the type of activity and average number of hours a week you spend at this activity.

Cover Sheet for Feedback

May 30, 1983

Dear Research Participant:

Thank you for participating in our research project during Winter term. Our study was designed to identify characteristics and coping approaches of individuals who were successful in coping with stress. Our past studies have found that successful copers are more likely to be people who believe they have control over themselves and their lives, deal with stressful situations directly (take a "head on" approach), and are able to rely on friends and family for support.

In the study in which you were involved, we were investigating hypotheses similar to the past findings mentioned above. We have not completed our analysis of the data yet so we cannot tell you about our final conclusions, but we are able to give you feedback about many of the individual scales that you completed. To facilitate the feedback process, we are using a computer printout. We have programmed the computer so that we can enter your scores on each scale and then it will give interpretive statements about these scores. This produces a unique pattern of results for each participant.

We hope the accompanying feedback will be clear and understandable but if you have any questions about it, feel free to contact Dr. Cooley for further explanation.

Thank you again for your cooperation.

Mollie Rickard
Oregon State University

Eric Cooley
WOSC
Todd 320, ext. 331

Sample Feedback Letter

[Name of participant], What follows is an analysis of the tests you took when participating in the research project this year. The research project was designed to help identify personal characteristics and coping processes utilized by individuals who are able to successfully cope with stressors. Our data analysis has not been completed yet, so we are not certain of our overall conclusions at this time. We can, however, give you feedback about the individual instruments that you completed.

We must stress that such tests are generalizations based upon group differences and, as such, do not necessarily reflect every individual's personality. Thanks again!

The Hassles Scale measures the amount of stress an individual experiences in facing day to day living situations. These everyday stressors have been found to be powerful determinants of an individual's overall level of stress. People with high scores on the Hassles Scale face a great many daily hassles that make life more difficult and stressful. Conversely, low scores are reporting lower levels of everyday stressors.

On the Hassles Scale, your score of 11 tends to indicate you are moderately low.

The Locus of Control Scale measures the degree to which individuals believe their rewards come from or are determined by their own behaviors or attitudes. Individuals scoring high on internal control feel that they have control over their behavior and rewards; things that happen to them are under their own control. Individuals scoring high on external control feel that rewards come through luck, chance, fate or unpredictable causes; things that happen to them are out of their control.

On the Locus of Control Scale, your score of 4 tends to indicate you are very internal.

Two subscales of the Utilization of Social Supports Scale (USS) are particularly interesting. Research has indicated that having access to social supports helps moderate the negative effects of stressful environments.

The P U S S scale measures the extent the individual feels valued by others. High scores on the P scale of the USS are individuals who sense being positively supported and esteemed by their social network. Low scorers on the P scale of the USS are individuals who function independently of a social network or don't perceive their network as being particularly supportive.

On the P USS scale, your score of 65

tends to indicate you are in mid range.

The C U S S scale measures the degree that an individual shares his/her emotional and psychological states with others. High scorers tend to be capable of sharing their feelings with others and typically share problems or upsets with others. Low scorers are individuals who do not tend to do much sharing, but in most cases would rather work things out within themselves.

On the C USS scale, your score of 38 tends to indicate you are in the mid range.

The Beck scale measures your current level of depression. Depression is an emotional experience that most people experience from time to time. Of all the measures that you completed, the depression measure is most likely to significantly vary from week to week. This means that your score reported below, was accurate at the time you took the test several months ago, and may not be an accurate measure of your current level of depression.

On the Beck scale, your score of 0 tends to indicate you show very low depression.

The poms V scale assessed your usual level of energy and vitality. High Scorers on Vigorousness are people who have great vitality and force; they are energetic, lively, and spirited. Low scorers are more prone to be 'laid back' and are more likely to wait for things to happen than to try to produce them with their own efforts. Low scorers may not get much done unless there is a strong motivating force pushing them forward.

On the POMS V scale, your score of 18 tends to indicate you show average vigorousness.

You completed four scales of the California Psychological Inventory ((Fx, To, Sy and Sa).

The Fx scale measures flexibility. On the Fx scale, high scorers are generally people who are insightful, informal, confident and assertive. They adapt easily to new situations. Low scorers are generally people who tend toward being cautious, industrious, respectful of custom and tradition, mannerly, and who go about tasks in a systematic way.

On the Fx scale, your score of 14 tends to indicate you are moderately high.

The To scale measures tolerance. On the To scale, high scorers generally reflect a person who has broad and varied interests, is intellectually and verbally fluent, clear thinking and resourceful. Low scorers tend to be not overly involved with their environment and a bit distant. They tend toward self reliance rather than reliance on others.

On the To scale, your score of 27
tends to indicate you are in mid range.

The Sy scale measures sociability. On the Sy scale, high scorers generally reflect people that are outgoing, competitive, original and fluent in thought. These individuals are comfortable and usually skilled in social situations. Low scorers tend toward being reserved and quiet. They are sensitive to other's attitudes when forming their own. They tend toward a moderate lifestyle.

On the Sy scale, your score of 27
tends to indicate you are in the mid range

The Sa scale measures self-acceptance. On the Sa scale, high scorers typically are people who are self confident, self assured and outspoken. Generally speaking a high scorer is verbally fluent and persuasive. Low scorers tend being systematic in approach and conservative. They are dependable, easy going and quiet. They tend toward being focussed in a few areas of interest.

On the Sa scale, your score of 33
tends to indicate you are very high.

Appendix B

Table 2

Means and Standard Deviations for USS

	High Coping Scores <u>N</u> =18		Medium Coping Scores <u>N</u> =25		Low Coping Scores <u>N</u> =14	
	Mean	S. D.	Mean	S. D.	Mean	S. D.
Positive Support	58.39	10.64	59.83	8.30	59.71	5.95
Conflict/ Alienation	63.94	9.84	58.95	12.19	65.21	6.45
Social Network	47.50	14.03	53.79	8.76	55.71	8.21
Self- disclosure	41.50	10.51	39.13	9.92	41.36	7.0

Table 3
Means and Standard Deviations for the ASSIS

	High Coping Scores <u>N</u> =18		Medium Coping Scores <u>N</u> =25		Low Coping Scores <u>N</u> =14	
	Means	S. D.	Means	S. D.	Means	S. D.
Total Personal Advice & Positive Feedback	15.83	8.05	17.86	11.75	20.29	12.17
Liked Personal Advice & Positive	7.0	1.24	7.74	1.32	7.21	1.31
Total Physical & Material Aid	12.06	6.54	16.67	8.83	17.43	9.25
Liked Physical & Material Aid	5.72	.57	5.63	.77	5.71	.47
Total Social Participation	7.89	6.35	8.79	6.49	9.43	4.33
Liked Social Participation	2.11	.83	2.13	.80	2.21	.89
Negative Interactions	2.61	1.82	2.86	1.57	4.07	2.62

Table 4

Means and Standard Deviations of Internal/External Locus of Control

High Coping Scores <u>N</u> =18	Medium Coping Scores <u>N</u> =25	Low Coping Scores <u>N</u> =14
Mean and S. D.	Mean and S. D.	Mean and S. D.
8.72 4.31	7.58 2.98	8.21 3.62

Table 5

Means and Standard Deviations for WCC

	High Coping Scores <u>N</u> =18		Medium Coping Scores <u>N</u> =25		Low Coping Scores <u>N</u> =14	
	Mean	S. D.	Mean	S. D.	Mean	S. D.
Problem Focus	6.61	2.93	7.67	2.75	8.21	2.99
Wishful Thinking	10.11	3.46	10.33	3.53	11.0	4.24
Mixed	3.50	2.04	3.21	1.74	4.29	1.65
Growth	2.83	2.60	3.36	2.14	3.43	1.95
Minimize Threat	3.44	2.04	2.88	1.66	3.14	1.88
Social Support	2.28	.96	2.38	1.17	3.14	1.46
Blamed Self	1.50	1.38	2.08	2.52	1.36	1.28

Table 6

Means and Standard Deviations of the California Psychological Inventory

	High Coping Scores <u>N</u> = 18		Medium Coping Scores <u>N</u> =25		Low Coping Scores <u>N</u> =14	
	Mean	S. D.	Mean	S. D.	Mean	S. D.
Flexibility	10.67	4.35	11.17	4.44	10.86	3.37
Tolerance	22.17	5.28	22.21	4.13	22.07	4.21
Self- acceptance	21.39	3.94	20.25	2.23	23.29	2.84
Sociability	26.17	5.47	24.42	2.95	27.29	4.63

Table 7

ANOVA of Coping Index and Negative Interaction Scale of the ASSIS

	Sum of Squares	Degrees Freedom	Mean Square
Treatment	18.722	2	9.36099
Error	220.553	53	3.80814
Total	220.553		

F-Test Ratio: 2.45815
 $p < .10$

Table 8

ANOVA of the Effects of Age on Coping

	Sum of Squares	Degrees Freedom	Mean Square
Treatment	5899.9	2	2949.95
Error	143794	51	2819.48
Total	149694		

F-Test Ratio 1.04627
 $p < .50$

Table 9
Inter-scale Correlations of the Coping Index and Dependent Variables

	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1 Coping Index	-.06	.09	0	-.12	-.06	-.04	-.10	-.29*	-.14	-.09	-.31*	-.15	-.13	-.06	-.20	.0	-.12	-.18	-.13	-.01	-.04	.01	-.14	
2 Internal/external		.05	-.47**	-.11	-.24	-.22	-.13	-.16	.0	-.23	.22	.39**	-.19	.01	.18	.08	-.19	-.06	-.18	-.18	-.15	-.26*	.11	
3 CPI Flexibility			.30*	.12	.19	.26*	0	.14	.17	-.03	-.31*	-.20	-.03	-.12	.05	.13	.04	.03	.11	.02	.10	-.18	.10	
4 CPI Tolerance				.10	.48**	.55**	.22	.45**	.42**	-.07	-.39**	-.49**	-.03	.03	.18	-.05	.40**	.28*	.31*	.16	.23	.01	-.09	
5 CPI Self Acceptance					.58**	.26*	.18	.17	.05	.12	.10	.16	.10	-.29*	.11	-.12	.17	.07	.14	.02	.11	.03	.05	
6 CPI Sociability						.39**	.35**	.37**	.40**	.20	-.09	-.08	.19	-.26*	.10	.02	.26*	.06	.17	-.07	.05	.17	-.09	
7 USS P							.45**	.67**	.50**	-.10	-.30*	-.11	.08	-.13	.18	-.15	.35**	.23	.39**	.19	.23	.23	-.11	
8 USS N								.36**	.30*	.10	-.11	.06	.08	-.18	.18	-.01	.20	.10	.19	.0	.22	.22	.02	
9 USS B									.46**	.13	-.10	-.07	.04	-.03	.11	-.04	.53**	.16	.49**	.20	.35**	.18	-.02	
10 USS C										-.07	-.10	-.01	-.04	-.06	.25	-.04	.18	.03	.14	-.05	.07	-.21	-.14	
11 WCC Problem Focus											.15	.18	.39**	-.37*	-.03	.23	.16	-.15	.13	-.05	-.03	.07	-.04	
12 WCC Wishful Thinking												.35**	.26*	-.05	-.10	.29*	-.17	-.18	-.29*	.04	-.14	-.03	-.17	
13 WCC Mixed													.10	-.21	.31*	.17	-.07	-.30*	-.02	-.17	.0	.0	.18	
14 WCC Growth														-.22	-.04	.02	.24	.01	.19	-.02	.0	.14	-.05	
15 WCC Min. of Threat															-.03	.09	-.19	.0	-.22	.09	-.17	.09	-.13	
16 WCC Social Support																-.10	.20	.09	.24	-.09	.01	-.06	.39**	
17 WCC Blamed Self																		-.13	-.15	-.19	-.08	-.13	-.18	
18 ASSIS - Total Personal Advice & Positive Feedback																			.35**	.71**	.78*	.09**	.03	-.19
19 ASSIS - Liked Personal Advice & Positive Feedback																				.29*	0	.25	.19	.08
20 ASSIS - Total Physical & Material Aid																					.18	.53**	.11	.18
21 ASSIS - Liked Physical & Material Aid																						.31*	.03	-.04
22 ASSIS - Total Social Participation																							.02	-.04
23 ASSIS - Liked Social Participation																								.04
24 ASSIS - Negative Interaction																								

N = 57
*p < .05
**p < .01