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Constructive thinking, life events, daily hassles and nightmares among university women

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among university women**

Tan, Vickie L., M.A.

San Jose State University, 1994

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CONSTRUCTIVE THINKING, LIFE EVENTS, DAILY HASSLES
AND NIGHTMARES AMONG UNIVERSITY WOMEN

A Thesis

Presented to

the Faculty of the Department of Psychology
San Jose State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

by

Vickie L. Tan

August, 1994

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ABSTRACT

CONSTRUCTIVE THINKING, LIFE EVENTS, DAILY HASSLES AND NIGHTMARES AMONG UNIVERSITY WOMEN

by Vickie L. Tan

This study examined the relationships between life events, daily hassles, constructive thinking (CT) and nightmares. Subjects ($N = 113$) were given the CTI, the SRRQ, the hassles scale, and a questionnaire that measured dream/nightmare frequency. Zero-order correlations were calculated. As predicted, there was a positive relationship between stress and nightmare frequency but only when hassles is the measure of stress. Good constructive thinkers also experience fewer nightmares as predicted. A hierarchical multiple regression analysis found that the SRRQ was not related to total nightmare frequency. The addition of hassles resulted in a significant increase in the amount of explained variance over and above that of life events. The addition of CT also led to an increase in the R^2 value. By entering CT last, the increase is consistent with the hypothesis that both variables together account for more variance than one variable alone.

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Dedicated to Esther A. Goddard

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Constructive Thinking, Life Events, Daily Hassles
and Nightmares among University Women

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Running head: CONSTRUCTIVE THINKING AND NIGHTMARES

Footnotes

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Abstract

This study examined the relationships between life events, daily hassles, constructive thinking (CT) and nightmares. Subjects ($N = 113$) were given the CTI, the SRRQ, the hassles scale, and a questionnaire that measured dream/nightmare frequency. Zero-order correlations were calculated. As predicted, there was a positive relationship between stress and nightmare frequency but only when hassles is the measure of stress utilized. Good constructive thinkers also experience fewer nightmares as predicted. A hierarchical multiple regression analysis found that the SRRQ was not related to total nightmare frequency. The addition of hassles resulted in a significant increase in the amount of explained variance over and above that of life events. The addition of CT also led to an increase in the R^2 value. By entering CT last, the increase is consistent with the hypothesis that both variables together account for more variance than one variable alone.

Constructive Thinking, Life Events, Daily Hassles

And Nightmares Among University Women

Over a person's lifetime, events will occur that will be considered stressful in one way or another. The interpretation of such events as minor or major stressors depends upon who is experiencing that particular event. It also depends upon when the event occurs in one's lifetime. Even though there are many factors involved in the lifetime stress one experiences, most research on stress and its effects, until rather recently, has only looked at one segment of the population, the male segment, in regards to "who" experiences stress (Belle, 1982; Hobfall, 1986; Linn, 1982; Witkin-Lanoil, 1984). This raises the question "What is the experience of stress like for women?" Women and men are both placed into stressful situations on a daily basis, but one must remember that the sexes are different in many ways besides the obvious differences in biology. For example, women are socialized differently than men. Women, when compared to men, tend to be more nurturant, more caring and also tend to be more conscious of their physical, psychological, or emotional problems (Hobfall, 1986). Thus, these and other differences, which can substantially change the equation of how one interprets or experiences stress,

should be taken into account when examining the relationships between stress and gender.

In the few studies that have examined gender differences in regard to stress, some interesting results have been found. For example, studies have shown that single women have much higher scores than their male counterparts on indicators of psychological stress (Fiske, 1982; Hobfall, 1986; Kanner, Feldman, Weinberger & Ford, 1991; Ostrow, Paul, Dark & Behrman, 1986). Working women are also more likely than working males to experience symptoms of stress (Laurent, 1993). Further, when the amount of one's stress becomes so severe as to be considered a psychological disorder, it is women who tend to suffer the most. For example, according to Solomon (1986), the rates of a mental disorder, such as depression, whether they are mild or severe, tend to be higher for women than for men over the entire life cycle. Witkin-Lanoil (1984) extended this finding with regards to anxiety, which in its extreme form can be a precursor to more serious psychological disorders. She found that from early on in development, females do experience more anxiety than males. For example, 470 girls, both black and white, age nine to eleven years old, had higher anxiety scores when compared to a comparison group of boys. Other studies, with samples ranging from

high school aged women to adult college-aged women, reported similar findings (Witkin-Lanoil, 1984). In terms of an increased susceptibility to psychological disorders, women who attend college are more vulnerable than women at any other educational level.

Attending college is a time of great stress for both men and women in that for most college students this is a new period for them, full of hope at times and despair at other times. For most, college is the time to grow up and to become responsible for one's life. One's childhood is a thing of the past and one's adulthood is a thing of the present and the future. There are relationships to deal with, academic challenges and financial pressures to deal with, and career decisions to be made. In studies on psychological disturbances that have been conducted using the "convenient" population of college students, almost all have found higher rates of disturbance among female than among male college students (Ostrow, Paul, Dark & Behrman, 1986).

If one examines the relationship closely then it can be seen that a relationship between stress and gender does exist. However, previous research shows that the relationship may even be more pronounced for females as compared to males (Fiske, 1982; Hobfall, 1986; Kanner,

Feldman, Weinberger & Ford, 1991; Ostrow, Paul, Dark & Behrman, 1986).

Nightmares and Stress. People cope with stressful events in their lives in many different ways. As mentioned above, how one decides to cope depends upon who that person is and when the event happens. For example, some feel the need to discuss their problems with friends or family members. Others seek out some type of professional help to cope with their problems. And then there are those people who are most likely to cope with their daily stresses at night while they sleep and dream.

Fortunately, for the majority of us, our dreams do not become vivid and frightening enough to be called nightmares. Wood and Bootzin (1990) have found that about 5 to 8% of the general population report having nightmares, either in the present or in the past. But for those who do suffer from nightmares, the experience itself can be quite disturbing and stressful. Any dream that is negative in content can be considered a nightmare. However, studies have found that differences do exist in the classification of nightmares (Hartmann, 1984), meaning that all bad dreams should not simply be classified as the typical nightmare. For example, a study done by Spadafora and Hunt (1990) looked at dreams from the point of view that "there are multiple forms of

dreams" (p. 627). In their study, they described seven different types of dreams, three of which were considered to be nightmare-like in their orientation (i.e. fantastic nightmares; posttraumatic nightmares; and night terrors). Regarding who has nightmares, studies have shown that women tend to report having more nightmares than men (Belicki & Belicki, 1986; Levin, 1989; Mistry, Tan & Hicks, 1993; Murray, 1991; Tan & Hicks, 1993). These differences are usually explained by differences in how men and women are socialized. For example, Hartmann (1984) makes the case that men are less likely to admit to having nightmares than females because to admit to such a thing would be tantamount to admitting to having fears, which in our society is embarrassing to most men.

What causes a person to have nightmares as opposed to just dreams? Many theories have been put forward concerning the causes of nightmares, and they range from physical illness to events in one's waking experiences that are stressful or anxiety-producing in one way or another (Celluci & Lawrence, 1978; Cook, Caplan & Wolowitz, 1990). Anxiety and stressful events in a person's life can have a great influence on whether or not that person has nightmares as opposed to just dreams (Hartmann, 1984; Levin, 1989). For example, Cook et al. (1990) in their study of stressors,

nightmares and dreams, found that those who reported having nightmares as opposed to just dreams tended to have higher levels of anxiety and depression than their counterparts who reported not having nightmares. They also found that the number of unpleasant life events, as measured by the Holmes and Rahe Social Readjustment Rating Scale (1967), was significantly associated with the prevalence of nightmares. Finally, Hartmann, Russ, Oldfield and Siven (1987) reported that people who have nightmares report more frequent and worse nightmares during stressful times, especially during times of familial or interpersonal stress.

In the typical college population there are new events, such as moving away from home for the first time, examination periods, or relationships (cf. Hartmann, 1984) that can be very stressful and can cause a great deal of anxiety in a person. This fact seems to manifest itself in the increase of nightmares seen in the typical college population when compared to the 5 to 8% seen in the general population (Wood & Bootzin, 1990). They found that 10 to 25% of college students have at least one nightmare per month and that the mean number of nightmares experienced annually is between five and ten. This finding falls in line with Cook et al.'s (1990) hypothesis that "to the degree that stressors induce negative affect, negative

affect, should, in turn, lead to [nightmares] rather than [dreams]" (p. 201). If an increase in negative affect can lead to an increase in the frequency of nightmares, then it follows that an increase in one's positive affect can decrease the frequency of nightmares. Therefore, the level of one's constructive thinking, which is related to one's emotional adjustment and well-being (Feist, Bodner, Jacobs, Miles & Tan, 1994), could have an effect on nightmare frequency.

Constructive Thinking and Nightmares. Constructive thinking, a relatively new construct first operationalized by Seymour Epstein at the University of Massachusetts at Amherst, is the ability to solve practical problems in living at a minimal cost in stress (Epstein, 1990; Epstein & Meier, 1989). According to Epstein, those who have high scores on constructive thinking are "happier, more energetic, less anxious, and experience less stress" compared to poor constructive thinkers (Epstein, 1993, p. 13). These high scorers are well-adjusted individuals who have a positive sense of well-being. Now, one may ask, why does someone with high constructive thinking skills experience less stress than those with low constructive thinking skills? Epstein (1993) gives three reasons that answer this question:

1. They behave in ways that produce fewer distressing events in their lives, and thereby create a better environment for themselves.
2. They interpret potentially stressful events in less stressful ways.
3. They cope more effectively with situations once they have interpreted them as stressful (p. 135).

Coping with situations in an effective manner is the key for good constructive thinkers in terms of having less stress in their lives.

As of yet, there is no research available that examines the relationship between one's constructive thinking and nightmare frequency. However, knowing that poor constructive thinkers have more stressful lives than good constructive thinkers, the hypothesis that they should have more nightmares has some merit to it and therefore warrants further study. The purpose of this study is to examine the variables of life events, which measures extremely stressful life occurrences, daily hassles, which measures those events that are mildly stressful, and constructive thinking and then determine whether they account for a significant amount of the variance in certain types of nightmares.

Hypotheses

Hypothesis 1: Those who have fewer life events and fewer daily hassles occurring in their lives should have fewer nightmares. This is based on the finding that an increase in stress during one's waking hours may have an

effect on one's nightmare frequency. The relationship between stress and nightmares has been previously investigated but not in conjunction with the level of one's constructive thinking.

Hypothesis 2: Those who score high on constructive thinking will have significantly fewer nightmares than those individuals who score lower on constructive thinking. This is based on the finding that higher scores on constructive thinking are associated with less anxiety and less stress.

Hypothesis 3: Those who have both high scores on constructive thinking and who experience few life events and few daily hassles should have even fewer nightmares than those who just have high constructive thinking scores or those who just experience a fewer number of major or minor stressors alone.

Method

Subjects

Because previous research has established that women tend to have more nightmares than men, or at least have a higher tendency to admit to having nightmares, and that women tend to have more stress and strain in their lives, the subjects in this study were exclusively female. Subjects for this study were recruited from the San Jose State University subject pool. In order to determine how

many subjects were needed for this study, a power analysis was conducted to determine a suitable sample size. By estimating a conservative correlation between nightmare frequency and constructive thinking ($r = .30$), and by having power at the standard level of .80, and alpha at the .05 level, the analysis found that a sample size with a minimum of 84 subjects will be needed. However, to be conservative, data were collected from approximately 100 subjects during the course of this study.

During an open research session at San Jose State University, 113 women were recruited for participation in this study. Each subject was granted one hour of research credit which was to be used for the fulfillment of a research requirement in an Introduction to Psychology class at San Jose State University.

Demographics. The mean age of this sample was 20.47 ($SD = 5.82$) with a median age of 19.00. All of the subjects were undergraduates at San Jose State University, with the majority (62.8%) of them being freshman (71). There were also 21 sophomores (18.6%), 14 juniors (12.4%) and 7 seniors (6.2%) in this sample. Academically, each subject was placed into a specific major category, such as undeclared or social sciences. Most subjects (38.9%) fell into two

majors, that of undeclared (22 subjects) and health professions (22 subjects).

Forty-one subjects (36.3%) indicated Asian-American as their ethnicity while 27 subjects (23.9%) were Caucasian. After these two categories, Mexican-American was indicated as one's ethnicity by 10.6% of the remaining subjects. The lowest frequencies were those of Indian/Pakistani and Pacific Islander with one subject in each category (1.8% total). In terms of marital status, the majority (92.9%) of these subjects were single (105 subjects). Forty subjects were Catholics (35.4%) while 29 subjects indicated that they were Atheists (25.7%) and 22 subjects indicated Buddhism (19.5%) as their religious background.

Materials

Daily Hassles. The hassles scale contains 117 items that can be considered "mildly stressful events." These items address areas in one's life such as one's work and play environment; one's relationships, whether interpersonal or familial; and occurrences in life that are controllable or uncontrollable. Examples include having too many responsibilities, monetary concerns, or having unexpected company. Each subject checked those items that she personally considered to be a hassle for her in the last month and then rated each of those items on a 1 to 3 scale

of severity (1 = somewhat severe; 2 = moderately severe; 3 = extremely severe). Each subject had three scores derived from her answers: a frequency score, which was a sum of the number of items out of 117 checked as being hassles; a cumulative severity score, which was the sum of the three-point severity ratings; and finally, an intensity score, which gave an indication of how intense the average hassle was experienced for each subject. The test-retest reliabilities on a month-to-month basis for two of these scores were: .79 for frequency and .48 for intensity (Kanner, Coyne, Shaefer, & Lazarus, 1981).

Social Readjustment Rating Scale (SRRQ). The SRRQ consists of 43 stressful life events that are divided into two unique categories: those events that are a unique part of the lifestyle of the individual and those events that are occurrences outside the lifestyle of the individual but that still involve the individual. Each event is indicative of certain areas in one's life such as marriage, work, and family and is associated with some form of coping behavior on the part of the individual (Holmes & Rahe, 1967). The calculated arithmetic mean for each individual item identifies the "magnitude of change in adjustment required by the life event" (Masuda & Holmes, 1989, p. 129). The Social Readjustment Rating Scale (Holmes & Rahe, 1967) is

derived when the mean score of each individual item using all valid cases is divided by 10 and then arranged in rank order.

Subjects were asked to rate each life event on its degree of personal readjustment according to the following instructions:

1. Subjects were asked to use all of their personal experience in arriving at their personal rating of each event and to give their opinion of the average degree of readjustment necessary for each event as opposed to the extreme degree of readjustment needed.
2. Event 1, Marriage, was given an arbitrary value of 500. Each subject was to use this event as their basis for rating the remaining events. The questions asked for rating the remaining events were "Does this event need more or less readjustment than marriage? Would readjustment take more or less effort to accomplish?"
3. If the event took more readjustment and more time than marriage to adjust, then that event was to be rated at a proportionally higher value over 500. If it took less readjustment and less time to adjust, then that event was to be rated at a proportionately lower value than 500. If the event took the same amount of time and readjustment as marriage, then that event was to be rated at 500 also (Holmes & Rahe, 1967, p. 213).

The rationale for using both daily hassles and major life events as compared to just one or the other lies in the fact that the hassles scale measures those events that are mildly stressful events (see Appendix E) while the Social Readjustment Rating Questionnaire of Holmes and Rahe measures events that are extremely stressful events (see Appendix F). In Holmes and Rahe's study (1967), this differentiation becomes clear in that each item on this

inventory was either "indicative of or requires a *significant* [italics added] change in the ongoing life pattern of the individual and that the emphasis is on change from the existing steady state" (p. 217), whereas the items found on the hassles scale, according to Kanner et al. (1981) are examples of the everyday *irritating* and *frustrating* demands in life. Both can be considered measures of stress; however, the items on the Social Readjustment Rating Questionnaire tend to be more intense in terms of how stressful these events are for an individual. Therefore, using both inventories allowed for comparisons to be made between mildly stressful events and extremely stressful events in terms of nightmare frequency.

Constructive Thinking. Each subject completed the Constructive Thinking Inventory (CTI, Epstein, 1989), which consists of seven subscales: Behavioral Coping, Categorical Thinking, Global Constructive Thinking, Emotional Coping, Naive Optimism, Negative Overgeneralization and Personal Superstitious Thinking. This study focused on the three primary subscales of global constructive thinking, emotional coping and behavioral coping, since they are the most stable. The use of the three subscales, as opposed to just one individual scale, stems from the fact that each subscale of the CTI measures, according to Epstein (1993), a basic

pattern of thinking and its corresponding component of constructive thinking that is either constructive or destructive in its nature. However, only the three primary Subscales contribute directly to "constructive thinking" (Epstein, 1993, p. 28). The emotional and behavioral coping Subscales together encompass the ability to deal with the inner world of feelings and the outer world of events (Epstein, 1993, p. 27). The subscale of global constructive thinking measures the construct of constructive thinking as it globally encompasses both the constructive (i.e. emotional and behavioral coping) and destructive thought patterns.

People who score high on the Global Constructive Thinking subscale ($\alpha = .87$) are "accepting of self and others and are biased towards interpreting events positively . . . [They are] the reasonable, not naive optimists" (Epstein & Meier, 1989, p. 338). Constructive thinkers tend to see reality as it is and have fewer defensive enhancements. For these people, reality does not need to be distorted in order to explain or control it. Because of this control over reality, they are able to feel good about themselves and others and are able to cope effectively with negative emotions. Those who score high on the Emotional Coping ($\alpha = .85$) subscale tend to see themselves in a

positive light and not to blame themselves for, or worry about, negative experiences, whether these experiences are in the past, the present, or the future. People who score high on the Behavioral Coping ($\alpha = .84$) scale are those who are oriented towards their futures and have the ability to plan effectively and take the steps needed to fulfill any goals that they may have. Each respondent rated the CTI items according to a 5-point Likert-like scale ranging from "definitely false" to "definitely true".

Nightmare Frequency. Each subject completed a questionnaire adapted from Spadafora and Hunt's (1990) study on the multiplicity of dreams. The questionnaire included the definitions of seven different types of dreams and nightmares (see Appendix C) with the fantastic nightmares, the posttraumatic nightmares and the night terrors being used to measure nightmare frequency. According to Spadafora and Hunt, fantastic nightmares are defined as "very vivid, upsetting dreams that you remember in detail upon awakening and can involve a wide range of negative emotions" (p. 631). Posttraumatic nightmares are those dreams that "repeat an actual past trauma" (p. 631). Night terrors are "terrifying awakenings without any recall of dream content" (p. 631). Subjects rated how frequently they experienced each type of dream according to a 5-point Likert-like scale ranging from

"never, or almost never" to "always, or almost always". The precise time period for frequency was not provided in the instructions, which read:

Please read the definitions for each dream type and identify the frequency with which you experience each type (Circle ONE answer only for each type).

Sleeping and Dreaming Patterns. In addition to the questions from the Spadafora and Hunt study regarding nightmare frequency, each subject was asked to answer a few additional questions regarding her sleep patterns. These questions were concerned with issues such as how long each person sleeps on the average night and overall sleep satisfaction. Each subject was also to estimate her total number of dreams per night and the general mood of these dreams, i.e. were they positive, negative or neutral in orientation.

Design and Procedure

Subjects were each given a packet that included all of the above mentioned questionnaires, a letter of informed consent and a short questionnaire that assessed demographics, such as ethnicity, year in school, marital status, religious background and academic major. Subjects who participated in this study were granted research credit in line with subject pool protocol as compensation for her time. All subjects were treated in accordance with the

"Ethical Principles of Psychologists" (American Psychological Association, 1990).

Analyses

Descriptive statistics were calculated on all variables. Zero-order correlations were calculated to examine the relationships between the following variables: demographics, stressful events in one's life, constructive thinking and dream/nightmare frequencies. This was done in order to explore the relations among the variables in terms of direction and strength. Of particular interest for this study were the relationships between the primary subscales of the CTI and the dream/nightmare types.

In order to examine the three primary hypotheses, a hierarchical multiple regression analysis was conducted. The first variable that was entered into the analysis was life events, as measured by the Holmes and Rahe inventory. As predicted by Hypothesis 1, life events should account for a significant amount of the variance seen in nightmare frequency. The second variable entered into the analysis was daily hassles, as measured by the Kanner et al. inventory. By holding life events constant and entering daily hassles after life events, it can be determined whether one's hassles account for a significant increase in

the variance in nightmare frequency over and above life events.

Lastly, the three primary subscales of the constructive thinking variable, with global constructive thinking being first, were entered into the equation. In accordance with the second hypothesis, the addition of these variables should account for a significant increase of the variance in nightmares while holding both life events and daily hassles constant. The third hypothesis, that those who score high on constructive thinking, as measured by the three primary subscales, and those who experience few stressful events (i.e., major life events and daily hassles) should have the fewest nightmares, was tested by entering all variables into the equation and seeing whether constructive thinking accounts for a significant increase in variance over all preceding variables.

Results

Descriptives

Sleeping and Dreaming Patterns. Subjects answered questions regarding their sleeping habits and dream patterns. When asked "How long do you sleep on the average night?", the mean number of hours was 6.92 (SD = 1.03). Sixty-one subjects (54%) were generally satisfied with the amount of sleep they had each night. However, when asked

about whether or not they needed to get more sleep, 72 subjects (63.7%) indicated that they would like to get more sleep during the night.

When asked about the number of dreams per night, the average number of dreams was 1.62 ($SD = .88$) with most subjects (76 subjects, 67.3%) indicating the general mood of their dreams to be neutral while a minority (22 subjects, 19.5%) reported the general mood of their dreams to be pleasant.

Nightmare Frequency. Descriptive statistics for all seven dream/nightmare types are given in Table 1. Prelucid dreams were experienced most often ($M = 2.28$, $SD = .97$) while night terrors were experienced least often ($M = 1.54$, $SD = .74$). Because the three nightmare Subscales were moderately (fantastic nightmares and posttraumatic nightmares, $r = .31$, $N = 113$, $p < .001$; fantastic nightmares and night terrors, $r = .49$, $N = 113$, $p < .001$; posttraumatic nightmares and night terrors, $r = .43$, $N = 113$; $p < .001$) and significantly related to each another, empirical justification exists for summing them and creating a total nightmare score. Conceptually, Spadafora and Hunt (1990) address this same issue by pointing out that "intensified dreaming adds the various subtypes of nightmare" (p. 627) and that in their study, the significant relation that

Table 1

Descriptive Statistics for Dream/Nightmare Types

<u>Dream Types</u>	<u>N</u>	<u>M</u>	<u>SD</u>
Archetypal Dreams	113	1.78	.84
Control Dreams	112	2.11	.99
Fantastic Nightmares	113	2.27	.96
Lucid Dreams	113	2.23	.84
Night Terrors	113	1.54	.74
Prelucid Dreams	113	2.28	.97
Posttraumatic Nightmares	113	1.90	1.00
Total Nightmares	113	1.91	.70

existed between night terrors and the fantastic nightmares "suggest the continuum between night terrors and nightmares that has emerged in recent studies" (p. 632). By using both empirical and the conceptual evidence, the idea can be justified that night terrors are a part of the nightmare continuum along with the posttraumatic and fantastic subtypes. This allows for the three types to be logically summed together to indicate a total nightmare frequency score. This score was calculated by summing the scores given for each of the three nightmare types and then dividing this number by 3 for each subject. This score indicated that all nightmares were experienced on a relatively infrequent basis (see Table 1).

Daily Hassles. The mean number of hassles occurring in the month before testing (i.e. the frequency score) was 42.22 (SD = 28.88). The mean value for the cumulative severity score was 81.36 (SD = 58.17). The average intensity score was 1.82 (SD = .48).

Social Readjustment Rating Questionnaire. This inventory shows, using the calculated arithmetic mean value for each individual item, the "magnitude of change in adjustment required by the life event" (Masuda & Holmes, 1989, p. 129). However, instead of examining each individual event for each subject, a sum score was computed

across all events that indicated total adjustment needed in terms of major stressful events in each subject's life. In general, the higher the sum score, the more time and effort needed for an individual to adjust to major life events. The mean sum score was 17,060.76 ($SD = 12,471.03$) which was within the range of norms established for this inventory by Holmes and Rahe in 1967 ($M = 14,660.00$).

Constructive Thinking Inventory. Descriptive statistics for all seven Subscales of the CTI are given in Table 2. The mean values of the three primary scales approximated those found in a recent study that examined constructive thinking, subjective well-being, physical health, and daily hassles (Feist, Bodner, Jacobs, Miles & Tan, 1994).

Hypotheses

Hypothesis 1: Stressful Life Events and Nightmare Frequency. The strongest positive correlation was between the hassles frequency variable and the total nightmare frequency variable ($r = .49$, $N = 113$, $p < .001$). However, a nonsignificant negative correlation existed between the social readjustment intensity score and total nightmare frequency ($r = -.11$, $p = ns$). As predicted in hypothesis 1, the data indicated that there is a relationship between stress and nightmare frequency but only when stress is

Table 2

Descriptive Statistics for Constructive Thinking Subscales

<u>Subscale</u>	<u>N</u>	<u>M</u>	<u>SD</u>
Constructive Thinking	112	75.63	14.23
Behavioral Coping	111	51.14	7.80
Emotional Coping	113	40.68	8.38
Negative Overgeneralization	113	28.27	7.00
Naive Optimism	113	18.87	3.80
Categorical Thinking	112	12.27	3.71
Superstitious Thinking	112	11.67	3.34

measured in terms of the frequency of daily hassles and not in terms of the intensity of major life events.

Hypothesis 2: Constructive Thinking and Nightmare Frequency. The relationships between constructive thinking and nightmare frequency tended to support the prediction that those who have higher constructive thinking should also experience fewer nightmares. For example, the strongest correlations were found between the CTI subscale of global constructive thinking and the variables of total nightmare frequency ($r = -.31$, $N = 112$, $p = .001$) and the frequency of fantastic nightmares ($r = -.31$, $N = 112$, $p = .001$) indicating that those subjects who scored high on global constructive thinking tended to have fewer nightmares in general, and, in particular, fewer fantastic nightmares. The weakest relationship was between the CTI subscale of emotional coping and the frequency of night terrors ($r = -.04$, $N = 113$, $p = ns$) which negates the possibility that those who have high emotional coping skills should experience fewer night terrors. However, the data provided more support for the possibility that those who score high on the emotional coping tend to report fewer fantastic nightmares ($r = -.19$, $N = 113$, $p = .042$). The remaining CTI subscale of behavioral coping also showed a strong and significant relationship with the frequency of fantastic

nightmares ($r = -.19$, $N = 111$, $p = .046$). These data showed a pattern that suggests that those who score high on any of the primary subscales of the CTI should experience fewer fantastic nightmares than those who score lower on these subscales.

Hypothesis 3: Stress, Constructive Thinking and Nightmare Frequency. The social readjustment intensity variable was entered at step one of the multiple regression analysis (see Table 3). This variable was not predictive of nightmare frequency ($R^2 = .01$). Consistent with this finding, at step 1, major life events alone accounted for only 1.21% of the unique variance seen in the total nightmare frequency ($sr^2 = .012$).

Next, the hassles score was entered into the equation which resulted in a significant increase in the amount of explained variance over and above that of life events ($R^2\Delta = .24$). The hassles score accounted for 24% of the unique variance seen in total nightmare frequency ($sr^2 = .24$).

At the third step, the global constructive thinking variable was entered as a predictor of nightmare frequency. The R^2 change was .04 ($p < .05$), indicating that even by

Table 3

Predictors of nightmare frequency: Hierarchical multiple regression

Source	Inventory	partial		t	R ²	F
		r	sr ²			
SOCTOT	SRRQ	-.11	.01	-1.01		
HASSL	HASSLES	.49	.24	5.33**		
CONTH	CTI	-.19	.04	-2.05*		

All Variables .29 11.69**

Note: * $p \leq .05$ ** $p \leq .001$. $N = 113$. SOCTOT = Total Sum score on SRRQ; HASSL = Total Hassles Frequency; CONTH = Global Constructive Thinking.

holding both the life events and daily hassles constant, global constructive thinking still accounts for a significant increase in variance in nightmare frequency. Taken together, these three predictor variables accounted for 29% of the total percentage of unique variance in nightmare frequency, with hassles accounting for the majority of the variance. Constructive thinking accounted for a small, yet significant, amount of unique variance (4%) in nightmare frequency, while the social readjustment variable accounted for almost no variance (1%) in nightmare frequency.

The remaining primary subscales of emotional coping and behavioral coping were each entered into the analysis; however, since both are positively interrelated at the .001 level with the global constructive thinking subscale, they did not significantly add to the amount of unique variance seen in nightmare frequency.

Post-Hoc Analyses

Zero-order correlations between variables. Although not primary to this study, the zero-order correlations between demographics, stressful life events, constructive thinking, and nightmare frequency address interesting questions by themselves (see Table 4).

Table 4

Zero Order Correlation Matrix for Constructive Thinking,
Nightmare Frequencies and Stressful Life Events

Variable	1	2	3	4	5	6	7	8	9	10
(1) BEHCO										
(2) CONTH	.76									
(3) EMOTC	.61	.80								
(4) HASSL	-.22	-.29	-.12							
(5) SEVR	-.25	-.37	-.21	.94						
(6) INTS	-.28	-.45	-.42	.41	.64					
(7) SOCT	-.13	-.10	-.13	.01	.01	.02				
(8) NTMR	-.17	-.31	-.15	.49	.53	.37	-.11			
(9) FTSC	-.19	-.31	-.19	.36	.40	.31	-.02	.58		
(10) PSTR	-.13	-.24	-.09	.35	.38	.23	-.14	.77	.31	
(11) NTTR	-.07	-.15	-.04	.44	.48	.32	-.07	.78	.49	.43

Note: BEHCO = Behavioral Coping; CONTH = Constructive Thinking; EMOTC = Emotional Coping; HASSL = Number of Hassles; SEVR = Cumulative Severity Score on Hassles Scale; INTS = Intensity Score on Hassles Scale; SOCT = Total Sum Score on SRRQ; FTSC = Fantastic Nightmares; PSTR = Posttraumatic Nightmares; NTTR = Night Terrors; NTMR = Total Nightmare Frequency.

For example, age and behavioral coping were positively correlated, ($r = .41$, $N = 111$, $p < .001$). Age and global constructive thinking were also positively correlated ($r = .34$, $N = 112$, $p < .001$) as were age and emotional coping ($r = .33$, $N = 113$, $p < .001$). This indicates that the older subjects tended to score higher on all of the CT subscales which falls in line with Epstein's (1993) theory that "the experience that one gains from the passage of years gives one an opportunity to improve one's constructive thinking" (p. 161). Furthermore, all CT subscales were negatively correlated with both measures of stress. For instance, the number of hassles was negatively correlated with the CTI subscale of global constructive thinking ($r = -.29$, $N = 112$, $p = .002$). Since the SRRQ was also negatively correlated with CT, the data indicated that those who experience fewer hassles and less stress in general tend to have better constructive thinking skills.

Discussion

The primary purpose of this study was to examine in college women the variables of life events, daily hassles, and constructive thinking and to determine whether these variables accounted for a significant amount of the variance in certain types of nightmares. The principal conclusions that were derived from the data were the following:

1. There is a positive relationship between stress and nightmare frequency but only when the frequency of mild daily hassles is the measure of stress being utilized. The correlation between nightmare frequency and the intensity of major life events, as measured by the Holmes and Rahe inventory, was negative but not significant. Thus, the use of major life events as a measure of stress does not support hypothesis 1.

2. The hypothesis that those who have high constructive thinking abilities, especially in terms of the three primary components, should have significantly fewer nightmares than those who have lesser constructive thinking abilities was supported. This was especially true in regards to the CTI subscale of global constructive thinking, which measures CT from a global perspective, and the relationships the CTI subscale has to both total nightmare frequency and the frequency of fantastic nightmares.

3. The hypothesis that those who have both high constructive thinking abilities and who also experience few stressful events, as measured by both the hassles inventory and the SRRQ, should have even fewer nightmares than those who just have high constructive thinking or just experience a fewer number of stressful events alone was tested by a multiple hierarchical analysis. The social readjustment

score, which measured the intensity of major life events, was entered first and was not related to total nightmare frequency. At step two, the hassles score, which measured the frequency of mild daily stressors was entered which resulted in a significant increase in the amount of explained variance over and above that of life events. At the final step, the constructive thinking variable was entered which again led to an increase in the R^2 value. This suggests that constructive thinking, entered at the final step, adds variance over and above the frequency of daily hassles, which is consistent with the hypothesis that both variables together account for more variance than one variable alone.

Since only one measure of stress (i.e., hassles) was significantly related to nightmare frequency, the question arises as to why the intensity of major life events, which was also a measure of stress, was not significantly related to nightmare frequency. One possible explanation may be derived from Kanner et al.'s study (1981) of the comparison of these two variables in terms of stress measurement. The main finding of their study was that of the two variables which measure stress, hassles tend to "provide a more direct and broader estimate of stress in life than major life events . . . and are more strongly associated with

adaptational outcomes than are life events" (p. 20). Past research has shown that people who have nightmares report more frequent and worse nightmares during stressful times. Consequently, the possibility exists that the number of hassles experienced by an individual could be the more direct predictor of nightmare frequency, which previous research has shown to be an outcome of higher stress levels. Preliminary analyses show that the severity and intensity of hassles may also predict nightmare frequency.

A second possible explanation of this finding can be derived from the "adaptive" theory of dreaming, which hypothesizes that dreams can be a form of stress management in that they help individuals struggle with their daily stress in the relatively safe environment of the dream (Hicks, Chancellor, & Clark, 1987). Greenberg, Katz, Schwartz and Pearlman (1992) wanted to demonstrate that "important mental activity is going on in the dream and that this activity is an attempt to adapt to the demands of living" (p. 532). Concerning the adaptivity of dreams, their main finding was that dreams were "an obvious continuation of the struggles of waking life" (p. 539) and that there was reason to believe that individuals used their dreams as a way to cope with their daily problems. In terms of the results of these studies, and of the two variables

used to measure stress in this study, the frequency of hassles variable, with its significant relationship with nightmare frequency, is the one most likely to reflect both the "daily stress" of Hicks et al. (1987) study and the "struggles of waking life" discussed in Greenberg et al.'s (1992) study.

This leads to a related, possible explanation for these findings: Freud's theory of dreams and their relationships to the "day's residues". According to Freud (1952, 1965), the "most indifferent and insignificant" (1965, p. 52) events and not the "major and stirring events" (1965, p. 52) of the preceding day are connected to dreams in that the interests of the "dream day" tend to cross-over into either the dream's manifest or latent content. Because major life events tend to occur less frequently on a daily basis when compared to the frequency of *daily* [italics added] hassles, the possibility exists that they are therefore less related to dreams and nightmares whose content, according to Freud, is indicative of the events of the previous day. However, there is a need for further empirical research in order to either validate or disprove this as an explanation as to why the intensity of major life events in this particular study was not significantly related to nightmare frequency.

Another possible explanation is methodological in that of the two measures of stress, hassles was a measure of frequency while the SRRQ measured the intensity of major life events. Regarding the SRRQ, however, the possibility exists that by using a frequency measure, a strong relationship could exist with either the total nightmare frequency score or with the individual nightmares types themselves. Although the preliminary analysis has shown a significantly positive relationship between the severity and intensity scores of the hassles scale and total nightmare frequency (See Table 4), one still must be cautious when making the case that one indication of stress, in this study the frequency of hassles, has a stronger relationship with nightmare frequency especially when the second index of stress, the SRRQ, is a measure of intensity and not a frequency measure. Any follow-up to this study that utilizes these measures of stress must compare intensity to intensity or frequency to frequency scores because this study, indicated that frequency and intensity are not equally predictive of nightmare frequency.

Although the Social Readjustment Rating Questionnaire did not significantly predict nightmare frequency as it did in Cook et al.'s (1990) study that utilized a frequency count of the items instead of the intensity of these items,

there is still the possibility that individual items, or groups of items, on the scale could significantly predict nightmare frequency. For example, if this questionnaire were factor analyzed, one possible factor that could exist may deal with the death of a close family member or friend. The hypothesis, then, would be that this factor, if it exists, may be related either to total nightmare frequency or to the frequency of posttraumatic nightmares. As a possible follow-up to this study, future research or a re-analysis of these data could examine this particular hypothesis and the possibility that individual items or specific factors derived from the Social Readjustment Rating Questionnaire could significantly predict any of these three different nightmare types.

Notwithstanding the fact that global constructive thinking explained added variance over and above hassles in nightmare frequency, the question now becomes why such a small increase when previous research indicates that individuals with high scores on constructive thinking tend to be "happier, more energetic, less anxious, and experience less stress" (Epstein, 1993, p. 13) and tend to have a more positive sense of well-being (Feist, Bodner, Jacobs, Miles & Tan, 1994) than those who have low scores on constructive thinking. Previous research shows that those who experience

more stress in their lives tend to have more nightmares (Cook, Caplan, & Wolowitz, 1990; Hartmann, Russ, Oldfield & Siven, 1987), and the results of this study indicate that those with low scores on constructive thinking tend to have more stress in their lives and should also experience more nightmares. Therefore, the logical assumption would be that the amount of variance in nightmare frequency that comes from global constructive thinking should be a large percentage of the total variance. Instead, the change in the R^2 value for global CT only increased by four percent.

One possible explanation for this finding could involve the multicollinearity of hassles and global CT. In other words, most of the variance in nightmare frequency contributed by global CT may have been shared with the hassles variable. As one example, the question "When I am faced with a new situation, I tend to think the worst possible outcome will happen" from the CTI may overlap with the "fear of confrontation" item found on the hassles scale which would account for the multicollinearity of the two scales. Therefore, the amount of variance that could have been contributed by global CT as a predictor of nightmare frequency was smaller than the amount of variance that could have existed had it been entered into the regression analysis either by itself or before the hassles variable was

entered. A preliminary analysis indicated that by entering CT into the regression analysis before the hassles variable, the percentage of unique explained variance in nightmare frequency contributed by global constructive thinking was larger than the 4 percent first derived when global CT was entered into the analysis at the final step behind daily hassles. The analysis also showed that the percentage of unique variance contributed by the hassles variable decreased from the twenty-four percent found in the initial analysis when it was entered before the global CT variable. Again, these preliminary findings were still consistent with the hypothesis that both variables together (i.e. global CT and hassles) account for more variance in nightmare frequency than one variable alone.

A second question arises as to why fantastic nightmares was the only nightmare scale to be significantly related to all three primary subscales of the CTI. One possibility may be that of the three types, the fantastic nightmare is the one which most people would consider to be the typical type of nightmare, i.e. the "garden-variety nightmare." From the definition of "fantastic nightmares," again, most individuals would consider this type to be the most general in terms of negative emotionality. According to the definition, these nightmares are remembered in detail upon

waking and can involve a wide range of negative emotions. Stress, like these nightmares, can also involve a wide range of negative emotions. Therefore, since those who score high on any of the three primary subscales of the CT tend to have less stress in their lives, it is logical to assume that they would experience fewer of the fantastic nightmares which encompass many of the same negative emotions that are found in everyday, stressful situations. However, this is speculative and therefore needs further empirical investigation.

One issue that warrants further study concerns the possible relationship between a subject's ethnicity and the frequency of certain nightmare types. For example, preliminary analyses indicated that Asians did experience a higher frequency of posttraumatic nightmares and night terrors when compared to the Caucasian subjects. However, factors such as citizenship status, immigrant status, cultural differences, and individual differences in the background of these subjects could have influenced the frequency of certain nightmare types. Therefore, further research, especially in terms of the individual backgrounds of the Asian subjects, is needed in order to clarify this preliminary finding.

Although the results of this study supported some aspects of the primary hypotheses, the study itself still has some weaknesses that can be strengthened in follow-up research. For example, the dream frequency questionnaire, as it was put forth in this study, did not ask for an exact number of each dream type over an exact time period. Instead, it asked for a subjective indication of dream frequency with no indication of a specific time period given. Both of these facts could influence the answers given by an individual. First, the answers given could be influenced in a positive or negative direction because of the differences in how one defines the meanings of the terms (i.e., always or never) used to measure dream frequency. Secondly, because there was no indication of time given, the answers given as to the frequency of each dream type most probably were not all from the same time frame. Again, individual differences play a role in the influencing of any answers given. A follow-up study could strengthen both of these weaknesses by asking for dream frequency in terms of both a specific time frame (e.g., the last month) and the specific number of dreams experienced during that time frame or by the use of daily dream logs in conjunction with daily responses to the scales being utilized.

A second weakness of this study concerns the measure of stressful major life events, as measured by the Social Readjustment Rating Questionnaire. Unlike the hassles variable, which had a measure of frequency, the SRRQ did not give any indication as to a frequency measurement for each particular item. Although some of the items can hypothetically only happen once in a certain time frame (i.e., death of a spouse), others, such as the item "troubles with the boss," can occur more frequently. As previously indicated, this could be another possible explanation as to why major life events did not predict nightmare frequency. Therefore, a methodological improvement would be to not only ask for a readjustment score for each event but to also ask how many times a particular event had occurred during an indicated time frame.

A final limitation involves the time frame of the study itself. This study only drew upon data collected at one time period. Because the study looked at stress and nightmare frequency, both of which can change over time, by looking at only one time period, any responses by subjects are only indicative of that particular time. Again, this can be remedied in future research. Instead of collecting data at only one time period, data could be collected

longitudinally during three or more time periods in order to take into account the changes that can occur both in terms of stressful life events and dream/nightmare frequency. In addition, by collecting data longitudinally, there would be the benefit of being able to make stronger inferences of causality.

Any follow-up to this study that utilizes these suggestions can only improve upon the findings presented while at the same time, it may also serve to validate these current findings. As is the case with all research, further empirical studies are needed, especially concerning the specific details of the relationship that were found to exist between constructive thinking and nightmare frequency.

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Appendices: Questionnaires utilized in study

- Appendix A: Biographical Questionnaire
- Appendix B: Sleeping and Dreaming Patterns
- Appendix C: Dream Questionnaire
- Appendix D: Constructive Thinking Inventory
- Appendix E: Hassles Scale
- Appendix F: Social Readjustment Rating Questionnaire

Appendix A

Biographical Questionnaire

Identification Number _____

Age _____

Major _____

Year in School (Circle ONE)

Freshman Sophomore Junior Senior Graduate

Marital Status (Circle ONE)

Single Married Divorced

Ethnic Descent (Circle ONE)

African-American Asian-American Caucasian

Indian/Pakistani Latino-American

Mexican-American Middle Eastern

Native American Pacific Islander

Pilipino/Filipino Other

Religious Background (Circle ONE)

Catholic Protestant Jewish Buddhist Muslim Atheist

Other _____

Appendix B

Sleeping and Dreaming Patterns Questionnaire

These questions are designed to measure certain relationships between how people sleep and dream. Please answer each question as best you can.

1. How long do you sleep on an average night? _____ hours.
2. You have been averaging this number of hours of sleep per night for _____ years and/or _____ months.
3. Are you generally satisfied with your sleep each night?
(Circle ONE) Yes No
4. Do you generally get all of the sleep that you need each night?
(Circle ONE) Yes No
5. Do you take naps during the day? (Circle ONE) Yes No
If you answered "YES", how often and how long? _____
number per month _____ average minutes per nap.
6. On average, how many dreams do you have each night?
(Circle ONE) 0 1 2 3
More than 3 (give the number _____)
7. If you dream, are you dreams usually: (Circle ONE)
Pleasant Neutral Unpleasant

Appendix C

Dream Type Questionnaire

Please read the definitions for each dream type and identify the frequency with which you experience each type (Circle ONE answer only for each type).

Lucid Dreams--vivid dreams in which you realize you are dreaming while you are still in the dream.

Never Sometimes Often Frequently Always

Archetypal Dreams--dreams that carry a sense of awe and fascination and/or include encounters with strange and unusual beings, perhaps reminiscent of mythology and fairy tales.

Never Sometimes Often Frequently Always

Fantastic Nightmares--very vivid, upsetting dreams that you remember in detail upon awakening and can involve a wide range of negative emotions.

Never Sometimes Often Frequently Always

Prelucid Dreams--dreams where you question whether or not you are dreaming, but you cannot decide.

Never Sometimes Often Frequently Always

Control Dreams--dreams where control not possible in waking life is deliberately exercised, with or without lucid awareness of dreaming.

Never Sometimes Often Frequently Always

Posttraumatic Nightmares--dreams repeating an actual past trauma.

Never Sometimes Often Frequently Always

Night Terrors--terrifying awakenings without any recall of dream content.

Never Sometimes Often Frequently Always

Appendix D

Constructive Thinking Inventory

The following are some statements on feelings, beliefs, and behavior. Score "1" if the statement is definitely false; "5" if it is definitely true. A rating of "2" will indicate that the statement is mainly false; a rating of "4" is mainly true. Use "3" only if you cannot decide if the item is mainly true or false.

Be honest, but do not spend too much time over any one statement. First impressions are as accurate as any. Please write all of your numerical responses on the line in front of each question.

- ____ 1. I worry a great deal about what other people think of me.
- ____ 2. I am the kind of person who takes action rather than just thinks or complains about a situation.
- ____ 3. Most people regard me as a tolerant and forgiving person.
- ____ 4. I have found that talking about successes that I am looking forward to can keep them from happening.
- ____ 5. When I have learned that someone I love loves me, it has made me feel like a wonderful person and that I can accomplish whatever I want.

- ___ 6. I have learned from bitter experience that most people are not trustworthy.
- ___ 7. When I am faced with a difficult task, I think encouraging thoughts that help me to do my best.
- ___ 8. I have washed my hands before eating at least once in the past month.
- ___ 9. If I said something foolish when I spoke up in a group, I would chalk it up to experience and not worry about it.
- ___ 10. I often avoid facing problems.
- ___ 11. I usually feel that it is acceptable for me to do well in some things and not so well in others.
- ___ 12. When something bad happens to me, I feel more bad things are likely to follow.
- ___ 13. I think everyone should love their parents.
- ___ 14. If I do poorly on an important test, I feel like a failure and that I won't go very far in life.
- ___ 15. I get so distressed when I notice that I am doing poorly in something that it makes me do worse.
- ___ 16. The slightest indication of disapproval gets me upset.
- ___ 17. If I have something unpleasant to do, I try to make the best of it by thinking in positive terms.

- ___ 18. When someone I know is rejected by a person I love, I feel they are inadequate and will never be able to accomplish anything.
- ___ 19. I have never seen anyone with blue eyes.
- ___ 20. I believe that some people can make me aware of them just by thinking about me.
- ___ 21. I don't get very distressed over the mistakes of others, but try to deal with them in a constructive way.
- ___ 22. If I do well on an important test, I feel like a total success and that I will go very far in life.
- ___ 23. When I have to be in an unpleasant or boring situation for a while, I keep watching the clock and wishing I were somewhere else.
- ___ 24. I think about how I will deal with threatening events ahead of time, but I don't worry needlessly.
- ___ 25. I avoid challenges because it hurts too much when I fail.
- ___ 26. There are basically two kinds of people in this world, good and bad.
- ___ 27. I believe if I think terrible thoughts about something, it can affect that person's well-being.
- ___ 28. When people judge me unfavorably, I tend to think they are right.

- _____ 29. When someone I know is loved by a person they love, I feel that they are a wonderful person and can accomplish anything they want to.
- _____ 30. When something unfortunate happens to me, it reminds me of all those other things wrong in my life, which adds to my unhappiness.
- _____ 31. It bothers me when anyone doesn't like me.
- _____ 32. I look at challenges not as something to fear, but as an opportunity to test myself and learn.
- _____ 33. I think there are many wrong ways, but only one right way, to do almost anything.
- _____ 34. I do not believe in any superstitions.
- _____ 35. I spend much more time mentally rehearsing my failures than remembering my successes.
- _____ 36. I believe that most birds can run faster than they can fly.
- _____ 37. If someone I know were accepted at an important job interview, I would think that he or she would always be able to get a good job.
- _____ 38. I believe that most people are only interested in themselves.
- _____ 39. I don't let little things bother me.

- _____ 40. If I were rejected at an important job interview,
I would feel very low and think that I would never be
able to get a good job.
- _____ 41. I believe that in order to have a good
relationship, you have to work on it.
- _____ 42. When I am faced with a new situation, I tend to
think the worst possible outcome will happen.
- _____ 43. I believe in not taking any chances on Friday the
13th.
- _____ 44. I believe that people can accomplish anything they
want to if they have enough willpower.
- _____ 45. I feel that people who wear glasses usually can
see better without their glasses.
- _____ 46. I tend to dwell more on pleasant than unpleasant
incidents from the past.
- _____ 47. When unpleasant things happen to me, I don't let
them prey on my mind.
- _____ 48. When faced with upcoming unpleasant events, I
usually carefully think through how I will deal with
them.
- _____ 49. If I do very poorly on a test, I realize it is
only a single test, and it doesn't make me feel
generally incompetent.

- ___ 50. I tend to classify people as either for me or against me.
- ___ 51. It would not bother me in the least if a black cat crossed my path and I walked under a ladder on the same day.
- ___ 52. If I were accepted at an important job interview, I would feel very good and think that I would always be able to get a good job.
- ___ 53. My mind sometimes drifts to unpleasant events from the past.
- ___ 54. I tend to take things personally.
- ___ 55. Although women sometimes wear pants, they do not wear them, on the average, as often as men.
- ___ 56. When doing unpleasant chores, I make the best of it by thinking pleasant or interesting thoughts.
- ___ 57. When faced with a large amount of work to complete, I tell myself I can never get it done, and feel like giving up.
- ___ 58. I try to accept people as they are without judging them.
- ___ 59. I sometimes think that if I want something to happen too badly, it will keep it from happening.

- ___ 60. I have very definite ideas about how things should be done, and I get distressed when they are not done that way.
- ___ 61. It is so distressing to me to try hard and fail, that I rarely make an all-out effort to do my best.
- ___ 62. When someone I love has rejected me, it has made me feel inadequate and that I will never be able to accomplish anything.
- ___ 63. I am very sensitive to being made fun of.
- ___ 64. When something good happens to me, I believe it is likely to be balanced by something bad.

Appendix E

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 on 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 at the right of the items you circled. Indicate by circling 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.

HASSLES

		Somewhat severe	1	
		Moderately severe	2	
		Extremely severe	3	
(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

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(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 workers. . . .	.1	2	3
(28)	Customers/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

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(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
(34) 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 gender.	.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 w/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 work1	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 separations . . .1	2	3
(88) Trouble with arithmetic skills1	2	3
(89) Gossip1	2	3
(90) Legal problems1	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) Television1	2	3
(94) Not enough personal energy1	2	3
(95) Concerns about inner conflicts1	2	3
(96) Feel conflicted about what to do1	2	3
(97) Regrets over past decisions.1	2	3
(98) Menstrual (period) problems.1	2	3

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(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) Yardwork or outside home maintenance. . .1		2	3
(112) Concerns about news events.	.1	2	3
(113) Noise	.1	2	3
(114) Crime	.1	2	3
(115) Traffic	.1	2	3
(116) Pollution	.1	2	3

Have we missed any of your hassles? If so, write them in
below:

(118)

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:

Appendix F

Social Readjustment Rating Questionnaire

Social readjustment includes the amount and duration of change one's accustomed pattern of life resulting from various life events. As defined, social readjustment measures the intensity and length of time necessary to accommodate to a life event, **regardless of the desirability of this event.**

You are asked to rate a series of life events as to their relative degrees of necessary readjustment. In scoring, **use all of your experience** in arriving at your answer. This means personal experience where it applies as well as what you have learned to be the case for others. Some persons accommodate to change more readily than others; some persons adjust with particular ease or difficulty to only certain events. Therefore, strive to give your opinion of the average degree of readjustment necessary for each event rather than the extreme.

The mechanics of rating are these: Event 1, Marriage, has been given an arbitrary value of 500. As you complete each of the remaining events think to yourself, "Is this event indicative of more or less readjustment than marriage?" "Would the readjustment take longer or shorter to accomplish?" If you decide the readjustment is more

intense and protracted, then choose a **proportionately larger** number and place it in the blank directly opposite the event in the column marked "VALUES." If you decide the event represents less and shorter readjustment than marriage, then indicate how much less by placing a **proportionately smaller** number in the opposite blank. (If an event requires intense readjustment over a short time span, it may approximate in value an event requiring less intense readjustment over a long period of time). If the event is equal in social readjustment to marriage, record the number 500 opposite the event.

Events	Values
1. Marriage	500
2. Troubles with the boss	—
3. Detention in jail or other institution	—
4. Death of spouse	—
5. Major change in sleeping habits (a lot more or a lot less sleep, or change in part of a day when asleep)	—
6. Death of a close family member	—

7. Major change in eating habits (a lot more or a lot less food intake, or very different meal hours or surroundings) _____
8. Foreclosure on a mortgage or loan _____
9. Revision of personal habits (dress, manners, associations, etc.) _____
10. Death of a close friend _____
11. Minor violations of the law (e.g. traffic tickets, jay walking, disturbing the peace, etc) _____
12. Outstanding personal achievement _____
13. Pregnancy _____
14. Major change in the health or behavior of family member _____
15. Sexual difficulties _____
16. In-law troubles _____
17. Major change in number of family get-togethers (e.g. a lot more or a lot less than usual) _____
18. Major change in financial state (e.g. a lot worse off or a lot better off than usual) _____
19. Gaining a new family member (e.g. through birth, adoption, oldster moving in etc.) _____
20. Change in residence _____
21. Son or daughter leaving home (e.g. marriage, attending college, etc.) _____

- 22. Marital separation from mate _____
- 23. Major change in church activities (e.g. a lot
more or a lot less than usual) _____
- 24. Marital reconciliation with mate _____
- 25. Being fired from work _____
- 26. Divorce _____
- 27. Changing to a different line of work _____
- 28. Major change in the number of arguments with spouse
(e.g. either a lot more or a lot less than usual
regarding childrearing, personal habits, etc.) _____
- 29. Major change in responsibilities at work
(e.g. promotion, demotion, lateral transfer) _____
- 30. Spouse beginning or ceasing work outside the home _____
- 31. Major change in working hours or conditions _____
- 32. Major change in usual type and/or amount of
recreation _____
- 33. Taking on a mortgage greater than \$10,000 (e.g.
purchasing a home, business etc.) _____
- 34. Taking on a mortgage or loan less than \$10,000
(e.g. purchasing a car, TV, freezer, etc.) _____
- 35. Major personal injury or illness _____
- 36. Major business readjustment (e.g. merger,
reorganization, bankruptcy) _____

- 37. Major change in social activities (e.g. clubs,
dancing, movies, visiting, etc.) _____
- 38. Major changes in living conditions (e.g. building
a new home, remodeling, deterioration of home or
neighborhood) _____
- 39. Retirement from work _____
- 40. Vacation _____
- 41. Christmas _____
- 42. Changing to a new school _____
- 43. Beginning or ceasing formal schooling _____