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Hardiness level and the ability to cope with stressful situations

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**HARDINESS LEVEL AND THE ABILITY TO COPE
WITH STRESSFUL SITUATIONS**

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

Jeffrey B. Hauger

December 2001

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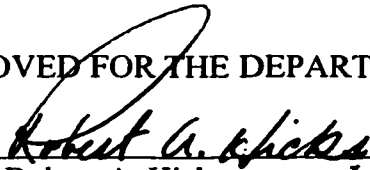
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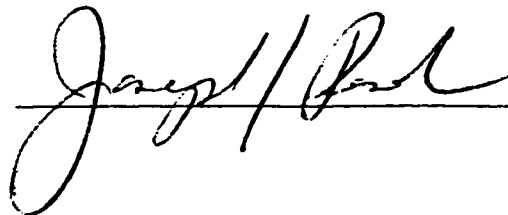


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ABSTRACT

HARDINESS LEVEL AND THE ABILITY TO COPE WITH STRESSFUL SITUATIONS

by Jeffrey B. Hauger

The research focused on exposure to stress, social support, ability to cope with stress, and hardiness. The participants were 100 students in an Introductory to Psychology class. Participants were broken into two groups (i.e., High and Low Hardiness groups), based upon the median score (median = 57) of the Personal Views Survey. Then these Hardiness groups were compared on each of the stress dimensions. The results derived from their responses to this scale of these comparisons indicated that low hardiness individuals experienced more hassles than high hardiness individuals, $t(98) = 2.73, p < .01$; people who were high in hardiness had more social support than low hardiness individuals, $t(98) = -4.96, p < .01$; and low hardiness individuals were more likely to use an Escape-Avoidance style of coping than high hardiness individuals, $t(98) = 2.61, p < .05$.

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HARDINESS LEVEL AND THE ABILITY TO COPE WITH STRESSFUL SITUATIONS

CHAPTER 1

INTRODUCTION

Since the concept of stress was first introduced by Hans Selyé in 1936, the importance of coping successfully with excessive levels of stress has been well documented. As Selyé first pointed out, stress may be a threat to health and survival. An intriguing feature of the literature that followed from Selyé's seminal paper is the links between personality and the health risks of stressful experiences. While it appears to be the case that personality traits are linked to the salience of stressful experience (e.g., the substantial literature on Type A-B behavior), at present, there is insufficient evidence to speculate on the precise nature of these traits. Thus, in this regard, it seems prudent for research to elaborate further on the promising relationships between specific dimensions of personality and stressful experience that have emerged to date. Therefore, the focus of this research was on the relationships between aspects of stressful experience and hardiness (i.e., a personality trait that has been identified by Kobasa and her colleagues) (Kobasa, 1979; Kobasa, Maddi, & Kahn, 1984).

The Concept of Hardiness

Hardiness is considered to be a set of personality dispositions that may function as a buffer against the onset of stressful life events (Kobasa, 1979) (i.e., hardiness is defined as three testable dispositions: commitment, control, and challenge [Kobasa et al., 1984]). To elaborate, commitment is defined as a trait that measures the degree to which

people are active, rather than passive, in their environment. People who are assessed as committed tend to follow through on their goals and objectives. Control is a trait that measures the degree that individuals feel they have influence on the environment, as opposed to feeling helpless. Individuals who perceive themselves as in control feel that when an unplanned event happens to them, that is a learning process and they continue on. They do not get upset and do not view the experience as a devastating event. Challenge is a disposition which views life as a series of unexpected events that require adaptation as these events present themselves. Individuals who are high in this category will adjust to situations and seek alternative ideas and innovations that will enhance their abilities to adapt.

The Hardy Individual

To understand the hardiness concept in a more applied way, it is necessary to consider the characteristics of the hardy individual. Hardy individuals have the resources to overcome unfortunate situations and turn them into their advantage. For example, Kobasa and Maddi (1998) observed a phone company in Chicago during a time of layoffs. An interesting observation was that about one-third of the individuals thrived during a time that most people were struggling to deal with life. This select group of people took the bad news in stride and actually were healthier mentally and physically than their counterparts. This was one of the first observations that there are some personality traits that may protect people from stressful situations. In this case, the traits observed by Kobasa and Maddi (1998) eventually became known as hardiness. From observations like this, they developed the theory of hardiness. With regard to this

observation, the theory suggested that social support and coping strategies (components of stress management) differ systematically between individuals with different levels of hardiness.

In support of the above observation, Kobasa, Maddi, Puccetti, and Zola (1985) analyzed the effects of hardiness, social support, and exercise as resources against illness. They concluded that these factors decreased the likelihood of illness. Using regression analysis, hardiness emerged as the most important of these variables in buffering the reoccurrence of illnesses. Over the years, Kobasa and Maddi (1998) have included an item for hardiness that they call “Hardy Social Support.” They explain “Hardy Social Support” as the ability to give and receive help from others that boosts their attitude, performance, stamina, and morale.

Coping has also been incorporated into the hardiness concept. For example, Funk (1992) demonstrated that high hardiness individuals react differently to stressful experiences psychologically than do low hardiness individuals. More recently, Florian, Mikulincer, and Taubman (1995) found that high and low hardiness individuals experience stressful situations the same, but high hardiness individuals evaluate these situations as more manageable and less threatening than low hardiness individuals. Further, they demonstrated that high hardiness individuals tend to use more active and problem-focused coping styles, while low hardiness individuals are more likely to employ more emotion-focused coping strategies. Kobasa and Maddi (1998) have included coping into the hardiness model by incorporating what they called “Hardy Coping.” This is the ability of a hardy individual to be able to take an unfortunate

experience and get a deeper and more meaningful perspective from the experience. Hardy individuals are also better able to plot a course of action and deal with the stressor instead of not dealing with it and hoping it will go away as is more likely to be the case with low hardiness individuals.

Hardiness and Stressful Experiences

In a limited way, hardiness has been identified as a moderator of stress. For example, Banks and Gannon (1988) reported a negative relationship between hardiness level and the perceived stressfulness of minor daily events. As Florian et al. (1995) pointed out, results did not suggest that people who are high in hardiness have less stress, but rather they may indicate that their stressful experience is viewed as less threatening and more manageable than is the case for individuals who are low in hardiness. That is, the hardier person may be able to process a stressful experience as less significant than the person who is lower in hardiness.

Aspects of Stressful Experiences

The literature on stress has identified a number of parameters of stressful experiences. Important among these parameters are the degree of exposure to stressful experiences, the availability and use of social support, and the methods of coping used in managing stressful experiences. Each of these aspects of a stressful experience was considered in this study and are discussed in the following paragraphs.

Exposure to Stressful Experiences

One way to measure how much stress an individual experiences is to determine the number of daily hassles that person encounters. According to Kanner, Coyne,

Schaefer, and Lazarus (1981), hassles are defined as everyday stressors which range from annoyances to major pressures and difficulties. For example, an annoyance would be something such as running late for an appointment because of traffic congestion. An example of a major pressure and/or difficulty would be being fired from a job.

According to Folkman (1984), not all events that may be viewed as hassles are considered to be negative. In this regard, she stated that when an individual encounters such an event, he/she engages in a process that is known as “primary appraisal,” which is used to determine how significant the event is to the individual. During the primary appraisal period, individuals seek to classify the hassle as either a threat or a challenge. Then, Folkman suggests, individuals use the secondary appraisal process to judge the resources they possess for coping with the event in question. These resources include such things as personal abilities and social support. In the outcome of these processes, individuals determine how serious the threat is or how challenging an event will be. If the event is classified as a threat, it may evoke feelings such as depression and anxiety. However, if the event is viewed as a challenge, it provides the individual with feelings of opportunity and personal growth.

Social Support

Social support, as a buffer to stress, has been frequently researched in the last 20 years. Researchers have found mixed results in their conclusions on how effective social support is able to buffer stress. Cohen and Hoberman (1983) found that it takes an individual able to perceive the availability of support to be able to produce a buffer in highly stressful situations. However, congruent with the data, Cohen and Hoberman

noted that if an individual, at one time, had had a strong social support system but currently this was no longer the case, or if the individual was not currently experiencing high levels of stress, he/she did not experience a social support buffer effect against stress.

In a subsequent study, DeLongis, Folkman, and Lazarus (1988) measured the behaviors of married couples over a period of time. They reported that people who were in nonsupportive relationships and had low self-esteem were significantly more likely to report psychological and mental health problems than their counterparts who had high self-esteem and high support. They also noted that these symptoms persisted even after a stressful event had taken place.

In a recent study, evidence was found that lack of social support had a significant relationship to psychosomatic symptoms (Fraser-Newby & Schlebusch, 1997). The study was performed with 247 college students and measured social support, self-efficacy, and assertiveness on student stress levels. The results indicated that social support and self-efficacy were significantly related to academic performance and stress symptoms. That is, lack of social support seemed to have a negative effect on both the academic performance of students and their mental health.

Methods of Coping

Folkman and Lazarus (1984) stated that coping is considered to be behavioral efforts by the individual to deal with stressful situations. They felt that stressful experience comes from the process between individuals and the environment when individuals exceed their reservoir of resources to deal with the environment. Folkman

and Lazarus have demonstrated that there are several styles of coping that should be measured if one wishes to provide a comprehensive assessment of coping. The subscales of the Methods of Coping Questionnaire contain eight subscales. They include Confrontive Coping, Distancing, Self-Controlling, Seeking Social Support, Accepting Responsibility, Escape-Avoidance, Planful Problem Solving, and Positive Reappraisal (see Table 1).

Confrontive coping consists of behaviors such as using hostility and aggression to deal with the stressor—using an aggressive style to alter the situation instead of dealing with the stressor directly (Folkman & Lazarus, 1984).

The Distancing coping style cognitively distances individuals from the stressor that may cause them discomfort. By detaching from the stressor, it makes the situation less threatening or significant (Folkman & Lazarus, 1984).

The Self-Controlling coping style is defined as trying to regulate feelings and actions to better handle the stressor (Folkman & Lazarus, 1984).

Seeking Social Support describes a coping style in which individuals seek informational support, tangible support, and emotional support from other individuals (Folkman & Lazarus, 1984).

Accepting Responsibility is a coping style in which individuals acknowledge the stressor and make a commitment of trying to relieve the stressor (Folkman & Lazarus, 1984).

Table 1

Description of the Coping Scales

Coping style	Description
Confrontive Coping	Describes aggressive efforts to alter the situation and suggests some degree of hostility and risk-taking.
Distancing	Describes cognitive efforts to detach oneself and to minimize the significance of the situation.
Self-Controlling	Describes efforts to regulate one's feelings and actions.
Seeking Social Support	Describes efforts to seek informational support, tangible support, and emotional support.
Accepting Responsibility	Acknowledges one's own role in the problem with a concomitant theme of trying to put things right.
Escape-Avoidance	Describes wishful thinking and behavioral efforts to escape or avoid the problem. Items on this scale contrast with those on the Distancing scale, which suggest detachment.
Planful Problem Solving	Describes deliberate, problem-focused efforts to alter the situation, coupled with an analytic approach to solving the problem.
Positive Reappraisal	Describes efforts to create positive meaning by focusing on personal growth. It also has a religious dimension.

Escape-Avoidance is the behavior of an individual who does not deal with the stressor directly. People who use this method of coping try to wish away or avoid the problem instead of dealing with the stressor. This is similar to the Distancing coping style, except that in the Distancing coping style, individuals altogether detach themselves

from the stressor. In the Escape-Avoidance coping style, individuals preoccupy themselves with other less significant events which may be the cause of the stressor and not the stressor itself (Folkman & Lazarus, 1984).

Planful Problem Solving describes individuals who think about ways they will be able to reduce the stressor. Individuals who are Planful Problem Solvers use an analytical approach to the stressor and try to change the problem to reduce the uncomfortable feelings the stressor may produce (Folkman & Lazarus, 1984).

Positive Reappraisal is the ability to create a positive meaning out of the stressor. Individuals focus on how the stressor can help them grow personally. Some of the dimensions of the scale have a religious dimension; but more importantly, it is about learning from the event which is causing discomfort (Folkman & Lazarus, 1984).

Hypotheses

This research has focused on the relationship between hardiness and exposure to stress, social support, and the ability to cope with stress. The first hypothesis (Hypothesis 1) is that high hardiness individuals will report experiencing fewer hassles than individuals who are low in hardiness. According to Kobasa and Maddi (1998), “Hardi Social Support” is viewed as the ability of high hardiness individuals to use others as a way to boost attitude, performance, stamina, and morale. Therefore, the second hypothesis (Hypothesis 2) is that the individuals who are high in hardiness will report more social support than people who are low in hardiness. The third hypothesis (Hypothesis 3) is that individuals who are high in hardiness cope with stress differently than low hardiness individuals.

Kobasa and Maddi (1998) have recently included “Hardi Coping.” This theory states that there will be different coping styles between high and low hardiness groups. Specifically, it is thought that the low hardiness group will cope with more of a Confrontive, Escape-Avoidance style than high hardiness individuals. Conversely, high hardiness individuals will cope with more of a Distancing, Self-Controlling, Seeking Social Support, Planful Problem Solving, and Positive Reappraisal than low hardiness individuals. Accepting Responsibility was not predicted as a coping style by either high or low hardiness individuals because it could be interpreted either way. Individuals may acknowledge the stressor and take responsibility for the cause, but it does not clearly define an action toward dealing with the situation. The specific definition of Accepting Responsibility uses unclear terminology as “a commitment theme of trying to put things right.”

CHAPTER 2

METHODS

Participants

The participants were 100 undergraduate students (i.e., 50 male and 50 female students) at San Jose State University. The students were all enrolled in the Introductory Psychology course and received course credit for their participation in this research project.

The mean age of the participants was 19.78 years, and the ethnic makeup of this sample was consistent with the overall demographics of the university. Of importance to this study, there were no significant differences between the hardiness group's age, gender, or ethnicity.

Materials

The following scales were used to assess the variables that were used to test the hypotheses of this study.

Personal Views Survey III

The Personal Views Survey III (Kobasa & Maddi, 1998) is used to determine the commitment, control, and challenge of the individual. When the individual scores are looked at collectively, they give the overall hardiness level of the individual. Since hardiness is a combination of three individual factors, control, commitment, and challenge, it is prudent to score the survey as an overall score rather than looking at the three subscores individually. The purpose of the research is to look at the global issue of

hardiness and not individual subscale scores that are acknowledged as having benefit to researchers as well.

The Personal Views Survey III includes 30 questions that give the individual four different choices. The choices range from “not at all true” to “completely true.” The scale was scored by entering the responses of the participants over the Hardiness Institute’s Web site. Since the survey is not published and administered over the Web, only the overall hardiness level score was produced. The survey makes it clear that participants should answer the questions that describe their “current life situation.” Personal communication indicates that this scale is reliable and valid. (See Appendix A for a copy of this scale.)

The Hassles and Uplifts Scale

The Hassles and Uplifts Scale (DeLongis et al., 1988) measures the daily activities of individuals. Hassles are considered events that happen during the day which are considered irritants. Uplifts are considered daily activities that make you feel good during the day. There are 53 items in the survey, and the individuals choose if each item is a hassle or an uplift. To determine the degree of hassle or uplift, individuals have four choices. The choices range from 0 (“none or not applicable”) to 3 (“a great deal”). The overall Hassles and Uplifts score was created by the summing up of all the individual items. The test-retest reliability is .79 for Hassles Frequencies and .48 for Hassles Intensity. For the purpose of this study, only the Hassles scale was used. (See Appendix B for a copy of this scale.)

Interpersonal Support Evaluation List - College Student Version (ISEL)

The ISEL scale (Cohen & Hoberman, 1983) was used to determine how much perceived social support individuals felt they had at the moment. The survey has 48 questions and individuals can answer the questions one of two ways. The forced choices are either A (“true or mostly true”) and B (“false or mostly false”). Scoring of the ISEL Survey was created by summing up all the individual scores, such as A = 1 and B = 2. Questions 7, 8, 9, 10, 11, 12, 19, 20, 21, 22, 23, 24, 31, 32, 33, 34, 35, 36, 43, 44, 45, 46, 47, and 48 are reverse scored. The internal reliability of the entire scale is .77. (See Appendix C for a copy of this scale.)

Ways of Coping Questionnaire

The Ways of Coping Questionnaire (Folkman & Lazarus, 1988) measures the participant’s coping styles. The subjects are asked to describe and answer questions pertaining to a stressful event which has occurred in the past month. There are eight types of coping strategies that are tested. They are Confronting, Distancing, Self-controlling, Seeking Social Support, Accepting Responsibility, Escape-Avoidance, Planful Problem Solving, and Positive Reappraisal. The Ways of Coping Style scores are calculated by summing up each individual item. The coefficients alpha for the subscales ranges from .59 to .83. (See Appendix D for a copy of this scale.)

Procedures

During a class period, each student who volunteered to participate was given a questionnaire that included the scales that were critical to this study. The students

responded outside of class and returned the completed questionnaire to the next scheduled meeting of the class to receive credit for their participation.

The students' scores on the ISEL and Hassles and Uplifts scores were computed using the students' overall score on each questionnaire. Then, on the basis of their overall hardiness scores, the total group was split at the median into high and low hardiness groups (median = 57). The Ways of Coping Questionnaire was scored on the basis of the subscales. It was determined that to properly analyze our hypotheses, it was necessary to use the subscales rather than the total score. The difference between the means for the high and low hardiness groups were tested for each variable using a t -statistic.

CHAPTER 3

RESULTS

The means and standard deviations and the *t*-test statistics that were used to test the differences between hardiness groups are listed in Table 2.

Table 2

Descriptive and t-test Statistics

	Low Hardiness		High Hardiness		<i>t</i>	df	<i>p</i>	est ω^2
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>				
Hassles	54.69	22.26	42.35	22.66	2.730	98.0	.01	.06
ISEL	31.47	7.11	37.84	5.61	-4.960	98.0	.01	.19
Confrontive coping style	6.45	3.78	6.29	3.89	.220	98.0	.83	
Distance coping style	5.80	2.95	6.24	3.52	-.680	98.0	.50	
Self-controlling coping style	7.59	3.65	7.92	3.87	-.440	98.0	.66	
Seeking Social Support coping style	7.65	4.73	8.10	5.20	-.460	98.0	.65	
Accepting Responsibility coping style	3.71	2.48	3.63	2.70	.140	98.0	.89	
Escape-Avoidance coping style	8.02	4.81	5.73	3.88	2.610	98.0	.10	.05
Planful Problem Solving style	7.22	4.58	8.33	4.43	-1.230	98.0	.22	
Positive Reappraisal coping style	7.22	5.95	7.47	5.85	-.215	98.0	.83	
Overall coping style	53.65	3.41	53.71	3.29	-.010	98.0	.99	

Hypothesis 1

This hypothesis stated that high hardiness individuals will report experiencing fewer hassles than individuals who are low in hardiness. As can be seen in Table 2, consistent with the prediction, the high hardiness group reported 29% fewer hassles than the low hardiness group. The difference between these means was significant with $t(98) = 2.73, p < .01$ and the $est\hat{\omega}^2 = .06$. Thus, this hypothesis was confirmed.

Hypothesis 2

This hypothesis stated that individuals who are high in hardiness will report more social support than people who are low in hardiness. As can be seen in Table 2, consistent with the prediction, the high hardiness group reported using 20% more social support than the low hardiness groups. The difference between these means was significant with $t(98) = -4.96, p < .001$ and $est\hat{\omega}^2 = .19$. Therefore, this hypothesis was confirmed.

Hypothesis 3

This hypothesis stated that persons who were high in hardiness would use different coping styles than persons who were low in hardiness. Specifically, it was predicted that the high hardiness group would score higher on the Distancing, Self-Controlling, Seeking Social Support, Planful Problem Solving, and Positive Reappraisal scales of the Ways of Coping Questionnaire than the low hardiness group. It was also predicted that the low hardiness group would score higher than the high hardiness group on the Confrontive coping and Escape-Avoidance scales of the Ways of Coping Questionnaire. By inspecting the pattern of the means listed in Table 2, it is clear that the

direction of the difference between the hardiness groups means for each of the Ways of Coping Questionnaire scale was in the predicted direction (i.e., all seven of the predictions that were advanced in Hypothesis 3 were realized). Using Pascal's Triangle (Edwards, 1946), the probability of observing this pattern by chance is equal to 1/128. Thus, the overall pattern of these data is significant. However, as is shown in Table 2, only one of the differences between the scale means (for the Escape-Avoidance coping style) was significant. Thus, collectively, the data derived from the Ways of Coping Questionnaire, at best, offer only marginal support for Hypothesis 3.

CHAPTER 4

DISCUSSION AND CONCLUSIONS

Discussion

As is shown in Table 2, low hardiness individuals reported significantly more hassles than high hardiness individuals. This finding was predicted on the assumption that high hardiness individuals are better able to manage stress and would be likely to view fewer events as stressful. Recently, Kobasa and Maddi (1998) explained this difference as the ability of high hardiness individuals to take a broader perspective and have a deeper understanding during disruptive situations than low hardiness individuals, plus they are also able to plan actions that will take care of the problem instead of letting it fester. However, these data may not be consistent with Florian et al.'s (1995) argument that high and low hardiness individuals experience the same levels of stress. That is, these data indicate that the low hardiness group experienced 29% more hassles than the high hardiness group. These data suggest that there may be some buffering effects from stress that high hardiness individuals are able to produce which low hardiness individuals cannot.

The data summarized in Table 2 suggest, as was predicted, that there is a significant direct relationship between hardiness level and perceived social support. Specifically, high hardiness individuals reported greater levels (i.e., 20%) of social support than low hardiness individuals. Since it is well documented that social support is an important component of successful stress management, it may be the case that this is a primary reason why high hardiness individuals are able to get through stressful situations

more effectively than low hardiness individuals. The ability of talking to people who will listen or who can relate seems to be an important advantage for high hardiness individuals compared to low hardiness individuals. Kobasa and Maddi (1998) explained this difference as the ability of a hardy individual to be able to give and receive assistance and encouragement from others to enhance their performance, stamina, morale, and health. Social support remains a key ingredient in becoming a hardier individual. This was the strongest relationship the study found ($\text{est}\hat{\omega}^2 = .19$).

While there were no differences between the overall coping levels between hardiness groups, the pattern of responses between hardiness groups and the coping styles subscales indicated differences which were uniformly consistent with the predictions made in Hypothesis 3 of this study. Further, as has been noted, there was a statistically significant difference between the hardiness groups on the Escape-Avoidance scale. That is, the low hardiness individuals used 40% more Escape-Avoidance coping than high hardiness individuals. High hardiness people seem to have the ability to be able to take on stressors rather than to avoid them, hence, the challenge aspect of hardiness. Low hardiness individuals seem to try to get away from or not directly deal with stressors, which eventually can become unhealthy.

None of the other coping scales was significantly different between high hardiness and low hardiness individuals. There are a number of reasons that could be advanced to explain this, including the possibility that for these groups, there simply was not much difference in coping between them. The method used to form the high and low

hardiness groups was conservative (i.e., using the median as the dividing point), and this certainly reduced the salience of high and low hardiness within each group.

An interesting finding that emerged from comparing the means included in Table 2 to the means collected from Folkman and Lazarus's (1988) normative sample were that the levels of coping for the hardiness groups on all the coping scales were substantially greater than the normative group. Further, while the means of the coping scales reported in this study were larger than those of the normative sample, they were not as great as the means for the specific scales that Hicks, Marical, and Conti (1991) reported for The Ways of Coping Questionnaire they administered immediately after the Loma Prieta earthquake. These observations raise the possibility that the students who participated in this study were collectively faced with higher levels of stress than those who participated in the normative sample. This suggests that the failure to observe significant differences between the specific coping scale means could be at least, in part, due to the high initial values that were apparent in both hardiness groups (see Table 3).

Conclusions

In this study, hardiness was a factor that helped mitigate stressful situations. High hardiness individuals had fewer stressful experiences and reported greater social support than did low hardiness individuals. The relationship between levels of hardiness and coping styles is less clear, and it is premature at this point to speculate concerning its specific nature. However, level of hardiness was associated with a uniform accurate set of predictions concerning coping style. Therefore, it seems fair to conclude that

hardiness is a personality dimension that plays a role in how stress is experienced and the degree to which it is managed successfully.

Table 3

High and Low Hardiness Individuals Compared to Lazarus Ways of Coping Norms

	Low Hardiness		High Hardiness		Norm Values	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Confrontive	6.63	3.80	6.13	3.85	3.90	2.10
Distancing	5.94	2.88	6.10	3.54	3.00	1.80
Self-controlling	7.85	3.55	7.65	3.94	5.80	2.90
Seeking Social Support	7.92	4.69	7.83	5.21	5.40	2.40
Accepting Responsibility	3.81	2.51	3.54	2.65	1.90	1.40
Escape-Avoidance	8.30	4.78	5.58	3.82	3.20	2.50
Planful Problem Solving	7.40	4.65	8.10	4.41	7.20	2.30
Positive Reappraisal	7.46	5.94	7.23	5.87	3.50	3.00

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APPENDIX A

PERSONAL VIEWS SURVEY III*

There are no right or wrong answers. This is not a test. Please answer each question in the way that best describes your current life situation. For each question, circle the number that describes you now.

	Not At All True	A Little True	Mostly True	Completely True
In General...				
1. Most of my time gets spent doing things that are worthwhile.	0	1	2	3
2. Planning ahead can help avoid most future problems.	0	1	2	3
3. No matter how hard I try, my efforts usually accomplish nothing.	0	1	2	3
4. I don't like to make changes in my everyday schedule.	0	1	2	3
5. I am not equipped to handle the "curve balls" that life sends my way.	0	1	2	3
6. Working hard doesn't matter, since only the bosses profit by it.	0	1	2	3
7. By working hard, you can always achieve your goals.	0	1	2	3
8. Most of what happens in life is just meant to be.	0	1	2	3
9. When I make plans, I am certain I can make them work.	0	1	2	3
10. It's exciting to learn something about myself.	0	1	2	3
11. I really look forward to my work.	0	1	2	3
12. If I'm working on a difficult task, I know when to seek help.	0	1	2	3
13. I won't answer a question until I'm really sure I understand it.	0	1	2	3
14. I like a lot of variety in my work.	0	1	2	3
15. Most of the time, people listen carefully to what I have to say.	0	1	2	3
16. Thinking of yourself as a free person just leads to frustration.	0	1	2	3
17. Trying your best at work usually pays off in the end.	0	1	2	3
18. My mistakes are usually very difficult to correct.	0	1	2	3
19. It bothers me when my daily routine gets interrupted.	0	1	2	3
20. Most good athletes and leaders are born, not made.	0	1	2	3
21. I often wake up eager to take on life wherever it left off.	0	1	2	3
22. Lots of time, I really don't know my own mind.	0	1	2	3
23. I sometimes miss the importance of things until it's too late.	0	1	2	3
24. I try to make the best out of most stressful circumstances.	0	1	2	3
25. I can't do much to prevent it if someone wants to harm me.	0	1	2	3
26. Changes in routine are interesting to me.	0	1	2	3
27. Most days, life is really interesting and exciting for me.	0	1	2	3
28. It's hard to imagine anyone getting excited about working.	0	1	2	3
29. What happens to me tomorrow depends on what I do today.	0	1	2	3
30. I try to learn something new through reading or some formal instruction.	0	1	2	3

- * The scale was scored by entering the responses of the participants over the Hardiness Institute's Web site. Since the survey is not published and administered over the Web, only the overall hardiness level score was produced.

APPENDIX B

THE HASSLES AND UPLIFTS SCALE

HASSLES are irritants—things that annoy or bother you; they can make you upset or angry. UPLIFTS are events that make you feel good; they can make you joyful, glad, or satisfied. Some hassles and uplifts occur on a fairly regular basis and others are relatively rare. Some have only a slight effect. Others have a strong effect.

This questionnaire lists things that can be hassles and uplifts in day-to-day life. You will find that during the course of a day some of these things will have been only a hassle for you and some will have been only an uplift. Others will have been both a hassle AND an uplift.

DIRECTIONS: Please think about how much of a hassle and how much of an uplift each item was for you yesterday. Please indicate on the left-hand side of the page (under "HASSLES") how much of a hassle the item was by circling the appropriate number. Then indicate on the right-hand side of the page (under "UPLIFTS") how much of an uplift it was for you by circling the appropriate number.

Remember, circle one number on the left-hand side of the page and one number on the right-hand side of the page for each item.

HASSLES AND UPLIFTS SCALE

How much of a hassle was this item for you? How much of an uplift was this item for you?

HASSLES

- 0 – None or not applicable
1 – Somewhat
2 – Quite a bit
3 – A great deal

UPLIFTS

- 0 – None or not applicable
1 – Somewhat
2 – Quite a bit
3 – A great deal

DIRECTIONS: Please circle one number on the left-hand side and one number on the right-hand side for each item.

- | | | | | |
|---------|---|---------|--|---------|
| 0 1 2 3 | 1. Your child(ren) | 0 1 2 3 | 22. Financial care for someone who doesn't live with you | 0 1 2 3 |
| 0 1 2 3 | 2. Your parents or parents-in-law | 0 1 2 3 | 23. Investments | 0 1 2 3 |
| 0 1 2 3 | 3. Other relatives | 0 1 2 3 | 24. Your smoking | 0 1 2 3 |
| 0 1 2 3 | 4. Your spouse | 0 1 2 3 | 25. Your drinking | 0 1 2 3 |
| 0 1 2 3 | 5. Time spent with family | 0 1 2 3 | 26. Mood-altering drugs | 0 1 2 3 |
| 0 1 2 3 | 6. Health or well-being of a family member | 0 1 2 3 | 27. Your physical appearance | 0 1 2 3 |
| 0 1 2 3 | 7. Sex | 0 1 2 3 | 28. Contraception | 0 1 2 3 |
| 0 1 2 3 | 8. Intimacy | 0 1 2 3 | 29. Exercise(s) | 0 1 2 3 |
| 0 1 2 3 | 9. Family-related obligations | 0 1 2 3 | 30. Your medical care | 0 1 2 3 |
| 0 1 2 3 | 10. Your friend(s) | 0 1 2 3 | 31. Your health | 0 1 2 3 |
| 0 1 2 3 | 11. Fellow workers | 0 1 2 3 | 32. Your physical abilities | 0 1 2 3 |
| 0 1 2 3 | 12. Clients, customers, patients, etc. | 0 1 2 3 | 33. The weather | 0 1 2 3 |
| 0 1 2 3 | 13. Your supervisor or employer | 0 1 2 3 | 34. News events | 0 1 2 3 |
| 0 1 2 3 | 14. The nature of your work | 0 1 2 3 | 35. Your environment (e.g., quality of air, noise level, greenery) | 0 1 2 3 |
| 0 1 2 3 | 15. Your workload | 0 1 2 3 | 36. Political or social issues | 0 1 2 3 |
| 0 1 2 3 | 16. Your job security | 0 1 2 3 | 37. Your neighborhood (e.g., neighbors, setting) | 0 1 2 3 |
| 0 1 2 3 | 17. Meeting deadlines or goals on the job | 0 1 2 3 | 38. Conserving (e.g., gas, electricity, water, gasoline, etc.) | 0 1 2 3 |
| 0 1 2 3 | 18. Enough money for necessities (e.g., food, clothing, housing, health care, taxes, insurance) | 0 1 2 3 | 39. Pets | 0 1 2 3 |
| 0 1 2 3 | 19. Enough money for education | 0 1 2 3 | 40. Cooking | 0 1 2 3 |
| 0 1 2 3 | 20. Enough money for emergencies | 0 1 2 3 | 41. Housework | 0 1 2 3 |
| 0 1 2 3 | 21. Enough money for extras (e.g., entertainment, recreation, vacations) | 0 1 2 3 | 42. Home repairs | 0 1 2 3 |
| | | 0 1 2 3 | 43. Yardwork | 0 1 2 3 |
| | | 0 1 2 3 | 44. Car maintenance | 0 1 2 3 |
| | | 0 1 2 3 | 45. Taking care of paperwork (e.g., paying bills, filling out forms) | 0 1 2 3 |
| | | 0 1 2 3 | 46. Home entertainment (e.g., TV, music, reading) | 0 1 2 3 |
| | | 0 1 2 3 | 47. Amount of free time | 0 1 2 3 |
| | | 0 1 2 3 | 48. Recreation and entertainment outside of the home (e.g., movies, sports, eating out, walking) | 0 1 2 3 |
| | | 0 1 2 3 | 49. Eating (at home) | 0 1 2 3 |
| | | 0 1 2 3 | 50. Church or community organization | 0 1 2 3 |
| | | 0 1 2 3 | 51. Legal matters | 0 1 2 3 |
| | | 0 1 2 3 | 52. Being organized | 0 1 2 3 |
| | | 0 1 2 3 | 53. Social commitments | 0 1 2 3 |

* The overall Hassles and Uplifts score was created by the summing up of all the individual items.

APPENDIX C

ISEL*

The statements in this test represent experiences, or feelings, that are true of some people but are not true of others. Read each statement and decide whether or not it is true with respect to yourself. If it is true or mostly true, check in the A in the answer column. If the statement is not usually true or is not true at all, check the letter B.

Work quickly, and don't spend too much time over any question; record your first reaction, not a long thought process. Answer each statement as honestly as you can. There are no right or wrong answers.

Remember: A for true or mostly true
B for false or mostly false

- | A | B | |
|-----|-----|---|
| ___ | ___ | 1. I know someone who would loan me \$50 so I could go away for the weekend. |
| ___ | ___ | 2. I know someone who would give me some old dishes if I moved into my own apartment. |
| ___ | ___ | 3. I know someone who would loan me \$100 to help pay my tuition. |
| ___ | ___ | 4. If I needed it, my family would provide me with an allowance and spending money. |
| ___ | ___ | 5. If I wanted a date for a party next weekend, I know someone at school or in town who would fix me up. |
| ___ | ___ | 6. I know someone at school or in town who would bring my meals to my room or apartment if I were sick. |
| ___ | ___ | 7. I don't know anyone who would loan me several hundred dollars to pay a doctor bill or dental bill. |
| ___ | ___ | 8. I don't know anyone who would give me some old furniture if I moved into my own apartment. |
| ___ | ___ | 9. Even if I needed it my family would (or could) not give me money for tuition and books. |
| ___ | ___ | 10. I don't know anyone at school or in town who would help me study for an exam by spending 7 hours reading me questions.. |
| ___ | ___ | 11. I don't know anyone at school or in town who would loan me their car for a couple of hours. |
| ___ | ___ | 12. I don't know anyone at school or in town who would get assignments for me from my teachers if I was sick. |
| ___ | ___ | 13. There are people at school or in town who I regularly run with, exercise with, or play sports with. |
| ___ | ___ | 14. I hang out in a friend's room or apartment quite a lot. |
| ___ | ___ | 15. I can get a date who I enjoy spending time with whenever I want. |
| ___ | ___ | 16. If I decided at dinnertime to take a study break this evening and go to a movie, I could easily find someone to go with me. |
| ___ | ___ | 17. People hang out in my room or apartment during the day or in the evening. |
| ___ | ___ | 18. I belong to a group at school or in town that meets regularly or does things together regularly. |
| ___ | ___ | 19. I am not a member of any social groups (such as church groups, clubs, teams, etc.) |
| ___ | ___ | 20. Lately, I often feel lonely, like I don't have anyone to reach out to. |
| ___ | ___ | 21. I don't have friends at school or in town who would comfort me by showing some physical affection. |
| ___ | ___ | 22. I don't often get invited to do things with other people. |
| ___ | ___ | 23. I don't talk to a member of my family at least once a week. |
| ___ | ___ | 24. I don't usually spend two evenings on the weekend doing something with others. |
| ___ | ___ | 25. I know someone who I see or talk to often with whom I would feel perfectly comfortable talking about problems I might have budgeting my time between school and my social life. |
| ___ | ___ | 26. I know someone who I see or talk to often with whom I would feel perfectly comfortable talking about any problems I might have adjusting to college life. |
| ___ | ___ | 27. I know someone who I see or talk to often with whom I would feel perfectly comfortable talking about sexually-transmitted diseases. |
| ___ | ___ | 28. I know someone who I see or talk to often with whom I would feel perfectly comfortable talking about any problems I might have meeting people. |
| ___ | ___ | 29. I know someone who I see or talk to often with whom I would feel perfectly comfortable discussing any sexual problems I might have. |
| ___ | ___ | 30. I know someone who I see or talk to often with whom I would feel perfectly comfortable talking about any problems I might have with drugs. |

- | A | B | |
|-----|-----|---|
| ___ | ___ | 31. There isn't anyone at school or in town with whom I would feel perfectly comfortable talking about any problems I might have with making friends. |
| ___ | ___ | 32. There isn't anyone at school or in town with whom I would feel perfectly comfortable talking about any problems I might have getting along with my parents. |
| ___ | ___ | 33. There isn't anyone at school or in town with whom I would feel perfectly comfortable talking about difficulties with my social life. |
| ___ | ___ | 34. There isn't anyone at school or in town with whom I would feel perfectly comfortable talking about my feelings of loneliness and depression. |
| ___ | ___ | 35. I don't know anyone at school or in town who makes my problems clearer and easier to understand. |
| ___ | ___ | 36. Lately, when I've been troubled, I keep things to myself. |
| ___ | ___ | 37. Most people who know me well think highly of me. |
| ___ | ___ | 38. Most of my friends think that I'm smart. |
| ___ | ___ | 39. Most of my friends don't do as well as I do in school. |
| ___ | ___ | 40. I will have a better future than most other people will. |
| ___ | ___ | 41. Most of my friends have not adjusted to college as easily as I have. |
| ___ | ___ | 42. Most people think I have a good sense of humor. |
| ___ | ___ | 43. I don't feel friendly with any teaching assistants, professors, or campus or student officials. |
| ___ | ___ | 44. Most of my friends are more satisfied or happier with themselves than I am. |
| ___ | ___ | 45. Most of my friends are more popular than I am. |
| ___ | ___ | 46. Most of my friends are more interesting than I am. |
| ___ | ___ | 47. Most of my friends have more control over what happens to them than I do. |
| ___ | ___ | 48. Most people are more attractive than I am. |

* Scoring of the ISEL Survey was created by summing up all the individual scores, such as A = 1 and B = 2. Questions 7, 8, 9, 10, 11, 12, 19, 20, 21, 22, 23, 24, 31, 32, 33, 34, 35, 36, 43, 44, 45, 46, 47, and 48 are reverse scored.

APPENDIX D

WAYS OF COPING QUESTIONNAIRE*

Now take a few moments to think about the most stressful situation that you have experienced in the past week. By "stressful" we mean a situation that was difficult or troubling for you, either because you felt distressed about what happened, or because you had to use considerable effort to deal with the situation. It might have been a discussion or confrontation with someone close to you, a problem at work, a medical problem, a separation from someone you care about, a problem with your car, or something else.

In the space below describe briefly who was involved, what happened, and what made the situation stressful for you.

Please read each option below and indicate by circling the appropriate number to what extent you used it in the situation you just described.

- 0 - Does not apply and/or not used
 1 - Used somewhat
 2 - Used quite a bit
 3 - Used a great deal

1. Stood my ground and fought for what I wanted. 0 1 2 3
 2. Tried to get the person responsible to change his or her mind. 0 1 2 3
 3. I expressed anger to the person(s) who caused the problem. 0 1 2 3
 4. I let my feelings out somehow. 0 1 2 3
 5. Took a big chance or did something very risky. 0 1 2 3
 6. I did something which I didn't think would work, but at least I was doing something. 0 1 2 3
 7. Made light of the situation; refused to get too serious about it. 0 1 2 3
 8. Went on as if nothing had happened. 0 1 2 3
 9. Didn't let it get to me; refused to think about. 0 1 2 3
 10. Tried to forget the whole thing. 0 1 2 3
 11. Looked for the silver lining, so to speak; tried to look on the bright side of things. 0 1 2 3
 12. I tried to keep my feelings to myself. 0 1 2 3
 13. Kept others from knowing how bad things were. 0 1 2 3
 14. Tried not to burn my bridges, but leave. 0 1 2 3
 15. I tried not to act too hastily or follow my first hunch. 0 1 2 3

16. I tried to keep my feelings from interfering with other things too much. 0 1 2 3
 17. I went over in my mind what I would say or do. 0 1 2 3
 18. Talked to someone to find out more about the situation. 0 1 2 3
 19. Talked to someone who could do something concrete about the problem. 0 1 2 3
 20. I asked a relative or friend I respected for advice. 0 1 2 3
 21. Talked to someone about how I was feeling. 0 1 2 3
 22. Accepted sympathy and understanding from someone. 0 1 2 3
 23. I got professional help. 0 1 2 3
 24. Criticized or lectured myself. 0 1 2 3
 25. Realized I brought the problem on myself. 0 1 2 3
 26. I made a promise to myself that things would be different next time. 0 1 2 3
 27. I apologized or did something to make up. 0 1 2 3
 28. Wished that the situation would go away or somehow be over with. 0 1 2 3
 29. Hoped a miracle would happen. 0 1 2 3
 30. Had fantasies about how things might turn out. 0 1 2 3
 31. Tried to make myself feel better by eating, drinking, smoking, using drugs or medication, and so forth. 0 1 2 3
 32. Avoided being with people in general. 0 1 2 3
 33. Refused to believe that it had happened. 0 1 2 3
 34. Took it out on other people. 0 1 2 3
 35. Slept more than usual. 0 1 2 3
 36. I knew what had to be done, so I doubled my efforts to make things work. 0 1 2 3
 37. I made a plan of action and followed it. 0 1 2 3
 38. Just concentrated on what I had to do next—the next step. 0 1 2 3

* The Ways of Coping Style scores are calculated by summing up each individual item.

APPENDIX E

IRB APPROVAL FORM



Office of the Academic
Vice President
Assistant Vice President
Graduate Studies and Research

TO: Jeff Hauger
689 Windmill land
Pleasanton, CA 94566

FROM: Nabil Ibrahim, *N. Ibrahim*
AVP, Graduate Studies & Research

DATE: September 20, 2000

The Human Subjects-Institutional Review Board has approved your request to use human subjects in the study entitled:

"Hardiness Level and the Ability to Cope
with Stressful Situations"

This approval is contingent upon the subjects participating in your research project being appropriately protected from risk. This includes the protection of the anonymity of the subjects' identity when they participate in your research project, and with regard to any and all data that may be collected from the subjects. The approval includes continued monitoring of your research by the Board to assure that the subjects are being adequately and properly protected from such risks. If at any time a subject becomes injured or complains of injury, you must notify Nabil Ibrahim, Ph.D., immediately. Injury includes but is not limited to bodily harm, psychological trauma and release of potentially damaging personal information. This approval is in effect for one-year and data collection beyond September 20, 2001 requires an extension request.

Please also be advised that all subjects need to be fully informed and aware that their participation in your research project is voluntary, and that he or she may withdraw from the project at any time. Further, a subject's participation, refusal to participate, or withdrawal will not affect any services the subject is receiving or will receive at the institution in which the research is being conducted.

If you have any questions, please contact me at
(408) 924-2480.