San Jose State University SJSU ScholarWorks

Master's Theses

Master's Theses and Graduate Research

2000

Psychological boundaries and health

Samara Madrid
San Jose State University

Follow this and additional works at: http://scholarworks.sjsu.edu/etd theses

Recommended Citation

Madrid, Samara, "Psychological boundaries and health" (2000). *Master's Theses*. 2055. http://scholarworks.sjsu.edu/etd_theses/2055

This Thesis is brought to you for free and open access by the Master's Theses and Graduate Research at SJSU ScholarWorks. It has been accepted for inclusion in Master's Theses by an authorized administrator of SJSU ScholarWorks. For more information, please contact scholarworks@sjsu.edu.

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

UMI°

Bell & Howell Information and Learning 300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA 800-521-0600

PSYCHOLOGICAL BOUNDARIES AND HEALTH

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

Samara Madrid

August 2000

UMI Number: 1400668

Copyright 2000 by Madrid, Samara Dawn

All rights reserved.



UMI Microform 1400668

Copyright 2000 by Bell & Howell Information and Learning Company.

All rights reserved. This microform edition is protected against unauthorized copying under Title 17, United States Code.

Bell & Howell Information and Learning Company 300 North Zeeb Road P.O. Box 1346 Ann Arbor, MI 48106-1346

© 2000

Samara Madrid

ALL RIGHTS RESERVED

APPROVED FOR THE DEPARTMENT OF PSYCHOLOGY

Dr. Robert A. Hicks

Dr. Robert Fellegrini

Dr. Cheryl Chancellor-Freeland

APPROVED FOR THE UNIVERSITY

ABSTRACT

PSYCHOLOGICAL BOUNDARIES AND HEALTH

By Samara Madrid

Psychological boundaries are a dimension of personality that has been developed and studied by Ernest Hartmann. In his clinical observations of thick and thin boundary persons, Hartmann noted that persons with thin boundaries seemed to report more illness than individuals with thick boundaries. This study was designed to quantify the differences between thick and thin boundary individuals and their reports of stress-related health symptoms and health behaviors as a test of Hartmann's earlier clinical obserations. The data examined came form 464 university students who were tested with Hartmann's 18-item version of his Boundary Questionnaire, the 48-item Stress-Related Health Problems Scale and the Health Behavior Scale. The present findings are consistent with those of Hartmann's earlier clinical observations in that thin boundary individuals reported significantly more stress-related health problems than thick boundary individuals.

ACKNOWLEDGEMENTS

I am especially grateful to Dr. Robert Hicks for being such an outstanding mentor and for the invaluable guidance he gave me on this project. I would also like to thank Dr. Robert Pellegrini and Dr. Cheryl Chancellor-Freeland for their input and encouragement with this paper. In addition, I would like to express my gratitude to my husband, Gilbert, for being a source of strength throughout this process. Most importantly, I would like to dedicate this work to my three beautiful children: Alex, Kaylee, and Angel.

TABLE OF CONTENTS

SECTION	PAGE
INTRODUCTION	1
METHOD	4
Research Participants	4
Materials	5
Procedure	6
RESULTS	7
DISCUSSION	10
REFERENCES	13
APPENDICES	
Appendix A. Boundary Questionnaire	15
Appendix B. Health Behavior Scale	16
Appendix C. Stress-Related Health Problems Scale	17

LIST OF TABLES

TABL	LE CONTRACTOR OF THE CONTRACTO	PAGE
1.	Means and standard deviations, and the $\underline{\iota}$ and est. ω^2 statistics	
	used to compare the means of the Thick and Thin Boundary	
	Groups on each parameter of the Stress-Related Health Problems	
	Scale	8
2.	Means and standard deviations, and the \underline{t} and est. ω^2 statistics	
	used to compare the Thick and Thin Boundary Groups and the	
	number of hours they reported doing for each activity within a	
	24 hour period	9

Psychological Boundaries and Health

Recently, Hartmann (1997) concluded that boundary thickness is a dimension of personality that measures an individual's degree of separateness or fluidity in mental functions. He postulated that the boundaries between ones mental regions or processes are not separate absolutions and "they can be relatively thick or solid on one hand or relatively thin or permeable on the other hand. In this sense, our interpersonal boundaries are only one of many sorts of boundaries that we maintain in our minds" (p. 147). Initially, Hartmann's (1991) interest in boundaries developed as a consequence of his research on nightmares. During the process of interviewing participants about their nightmares, he noticed that some participants were very open and vulnerable and would share freely aspects of their lives. In contrast, he noticed that other participants were very closed and guarded and reluctant to share much about their lives with him. In applying this scheme to his observations, Hartmann (1991) concluded that thin boundary individuals could be characterized as "sensitive, vulnerable, and open" (p. 4) individuals that allow thoughts and feelings to merge. They tended to think in shades of gray and were impacted by harsh reality. On the other hand, thick boundary individuals could be characterized as "solid and well-organized" (p. 4) individuals that tended to think in black and white while keeping their thoughts and feelings to themselves.

These observations of individual differences in boundaries led Hartmann to develop the Boundary Questionnaire (1991) and to formalize the concept of thick and thin boundaries. In his seminal study, Hartmann (1989) distributed his new 145-item Boundary Questionnaire to 981 participants and found that persons who were identified

with either extreme thick or thin boundaries displayed clear differences in certain characteristics and behaviors. To elaborate, he reported that there was a correlation between age and boundary thickness with older individuals being more likely to have thicker boundaries. Second, he noted that women tended to have thinner boundaries than men. Further, when he examined the 15 thickest and 15 thinnest boundary participants, he found that the thick boundary individuals were mostly employed as salesman, lawyers, and businessmen and the thin boundary individuals were mostly employed as artists, teachers and housewives. In regards to psychiatric diagnosis, one thin boundary individual was diagnosed with a borderline personality disorder, one with a schizotypal personality disorder, and one as a schizophrenic. Whereas, three individuals in the thick boundary group had been diagnosed with obsessional personality disorder. Other research on schizotypal personalities (Levin, 1986) and borderline personality disorders (Celenza, 1986) support Hartmann's finding in that they also found these disorders to be related to thin boundaries.

Subsequently, Hartmann (1991) used 300 participants to examine the relationship between the Boundary Questionnaire and the responses to the scales of the Minnesota Multiphasic Personality Inventory (MMPI). He concluded that even though there were some significant correlations between the Boundary Questionnaire and scales of the MMPI, that none of these were large enough to argue that the Boundary Questionnaire and MMPI measured any of the same personality constructs. More recent research, however, has demonstrated that thinness of boundaries is positively correlated with Openness to Experience (McCrae, 1994) and with the Intuition, Feelings and Perceiving

subscales from the Myers-Briggs Type Indicator (Ehrman, 1993). Generally, these findings supported Hartmann's research in that he described thin boundary individuals as open and sensitive and thick boundary individuals as closed and guarded.

A majority of the research conducted on thick and thin boundaries using versions of the Boundary Questionnaire has focused on relationships between boundary scores and aspects of sleeping and dreaming. For example, thinness of boundaries has been found to be related to vividness of a dream, amount of emotion in a dream, and amount of detail given about a dream (Hartmann, 1991; Hartmann, Elkin, & Garg, 1991; Hartmann, Rosen, & Rand, 1998). In addition, thin boundary individuals have been found to have greater dream recall and dreams that are more intense and more bizarre than thick boundary individuals (Hartmann, 1989; Kunzendorf, Hartmann, Cohen, & Cutler, 1997; Schredl, Kleinferchner, & Gell, 1996). Furthermore, nightmare sufferers have been found to have relatively thin boundaries (Cowen & Levin, 1995; Levin, Galin, & Zywiak, 1991) and the Boundary Questionnaire has been found to be correlated with nightmare distress (Belicki, 1992).

While a fair amount of research has been conducted on dreams and boundaries, very little has been done to establish the relationship between boundaries and physical health. In the only study of this type study, Hartmann (1991) examined the relationship between illness and boundaries by comparing the responses of 22 extremely thick boundary and 14 extremely thin boundary individuals to the Cornell Index. This scale consists of 101 items that measure self-perceptions of various health symptoms. He reported that the extremely thin boundary individuals generally reported more illness than

the extremely thick boundary individuals, but did not relate any specific symptoms to the boundary status of these groups. Lastly, when describing individual differences related to boundary thickness, Hartmann (1991) postulated:

Such differences as we are beginning to see, underlie how we think, and remember; how we react to chemicals and how we react to other people; what physical and mental illness we may develop; and how we adapt to stress and remain healthy. (p. 248)

The purpose of this study was to examine the differences in stress-related health problems reported by individuals with very thin boundaries and very thick boundaries. The second purpose of this study was to extend Hartmann's (1991) research on health and boundaries by measuring the differences in the health-related behaviors of individuals with either very thick or very thin boundaries. Based on past research, it was hypothesized that because of their openness to the environment, very thin boundary individuals would report more stress-related health problems than very thick boundary individuals. Consistent with this prediction, it was also hypothesized that the very thin boundary individuals would report more negative health behaviors than the very thick boundary individuals.

Method

Participants

The data examined came from 464 undergraduate introductory students who were asked to complete a questionnaire as part of an introductory psychology research requirement. From this group, those who were classified as having either very thick or

very thin boundaries served as the participants for this study. This resulted in 112 participants in the very thick boundary group and 41 participants in the very thin boundary group. The mean age of the participants was 19 years. The majority of the sample was Caucasian (30%), Asian (28.8%), or Mexican American (17.6%).

Materials

The 18-item short form of Hartmann's Boundary Questionnaire (Kunzendorf et al., 1997) was used to identify very thick and very thin boundary individuals (see Appendix A). Like the longer version of this scale, the 18-item form of the Boundary Questionnaire asks participants to rate each statement as to how true it is of them.

Responses are measured on a five-point scale that is anchored by 0 "not at all true of me" and 4 "very true of me". To score the Boundary Questionnaire, the rating scales on items 5-7 and 16 are inverted and then all 18 items are added to get a total score. Using Hartmann's guidelines, the Boundary Questionnaire is scored as such that those who score from 0 to 29 are considered to have very thick boundaries and those who score from 45 to 72 are considered to have very thin boundaries. The short form version of the Boundary Questionnaire has been shown to be highly correlated with the longer 138-item version and thus provides great economy in the administration and scoring of this test without sacrificing its validity or reliability (Kunzendorf et al., 1997).

The 48-item Stress-Related Health Problems Scale (Hicks & Hyler, 1998) was used to assess the number of stress-related health symptoms an individual experiences (see Appendix B). Participants are asked to rate on a five-point scale the frequency that they experience stress-related health problems (i.e., never, seldom, occasionally,

frequently, or always). The items of this scale are scored to measure seven sets of symptoms: Allergy, Anxiety, Circulatory, Gastric, Headache, Pain and Sensitivity, and Respiratory symptoms. The scale is scored as such that specific questions relating to each symptom are grouped and then added to get an individual score for each health symptoms. To derive an overall health score, all 48-items were summed.

The Health Behavior Scale measures how important specific health behaviors are to an individual (see Appendix C). Using a four point scale that is anchored by 1, "very important", and 4, "not at all important" participants are asked to rate how important specific activities, such as managing stress, eating healthy, and sleeping eight hours a day, are to their health. The 17 items are totaled to get on overall health importance score. In addition to the health importance questions, participants were asked to appoint the amount of time that they spent doing the following 11 activities within a 24-hour period: attending classes, working, sleeping, exercising, social activities, studying, relaxing, eating, family activities, sports and napping.

Procedure

Tests were given as part of a larger questionnaire packet that was handed out to introductory psychology classes. Participants were assigned to the thick group or thin group based on their Boundary Questionnaire score, with the thick group being comprised of those who scored from 0 to 29 and the thin group being comprised of those who scored from 45 to 72. Those who scored between 30 and 44 were not used in the analyses.

Results

Consistent with Hartmann's observations that women are more likely to report thin boundaries, the thin boundary group consisted of 33 females and 8 males and the thick boundary group consisted of 66 females and 46 males. The difference between this distribution was significant (χ^2 (1) = 6.11, \mathbf{p} < .025), but the strength of the association between these distributions was low (ϕ^2 = .04).

Health Symptoms

The means and standard deviations for the responses of the thick and thin boundary groups to the Stress-Related Health Problems Scale are summed in Table 1. The separate t and est. ω^2 statistics that were used to test the differences between these means are also listed in Table 1. Relative to the thick boundary group, the thin boundary group scored significantly higher on each scale of the Stress-Related Health Problems Scale. Further, each of the est. ω^2 statistics that were computed indicated that it was a moderately meaningful relationship between the groups with regard to their self-reported levels of stress-linked symptoms. As is also shown in Table 1, there was a significant difference in the number of overall stress-related symptoms reported between the thick and thin boundary groups with the thin boundary group reporting a greater number of overall health symptoms compared to the thick boundary group.

Health Behavior

The means and standard deviations for the responses of thick and thin boundary groups to the Health Behavior Scale are summed in Table 2, together with the t and est. ω^2 statistics that were computed to analyze these data. As can be seen by inspecting

Table 1 The means and standard deviations, and the t and $est.\omega^2$ statistics used to compare the Thick and Thin Boundary Groups on each parameter of the Stress-Related Health Problems Scale

Stress-related Boundary Group							
Symptoms	Thin (r	Thin $(n = 41)$ Thick $(n = 112)$					
	M	SD	M	SD	1*	p	est. ω^2
					†		
Allergy	11.39	2.80	8.93	2.81	4.08	<.001	.09
Anxiety	17.49	4.56	13.34	3.96	5.05	<.001	.14
Circulatory	9.98	3.23	7.75	2.39	4.62	<.001	.12
Gastric	18.85	4.55	15.31	4.59	4.24	<.001	.10
Headache	11.73	3.70	8.56	2.91	5.52	<.001	.16
Pain & Sensitivity	15.46	4.44	12.03	4.09	4.51	<.001	.11
Respiratory	19.24	5.19	15.43	4.02	4.77	<.001	.12
Overall	109.9	21.61	87.03	18.86	6.31	<.001	.20

^{*}df = 151

Table 2 The means and standard deviations, and the t and est. ω^2 statistics that were used to compare the means of Thick and Thin Boundary Groups and the number of hours they reported doing for each activity within a 24-hour period

Daily Activity		Bounda	ry Group		<u>_</u>		
	Thin (r	<u>1 = 41)</u>	Thick	(n = 112	2)		
	M	SD	M	SD	ţ*	p	est. ω^2
Attending class	4.22	1.69	4.11	1.91	0.33	n.s	.006
Sleeping	6.43	1.36	6.63	1.37	0.33	n.s	.006
Exercising	1.51	3.34	1.31	1.69	0.75	n.s	.002
Social Activities	2.58	2.17	2.46	1.58	0.47	n.s	.005
Studying	3.11	1.93	2.57	1.56	1.74	n.s	.013
Working	3.30	2.62	3.07	2.75	0.45	n.s	.005
Relaxing	2.19	2.28	1.38	1.41	2.57	<.05	.035
Eating	1.70	1.84	1.62	1.11	0.34	n.s	.006
Family Activities	1.04	1.44	0.87	1.35	0.65	n.s	.004
Sports	1.09	3.03	0.57	1.03	1.49	n.s	.008
Napping	1.24	1.25	0.78	0.92	2.37	<.05	.023

^{*}df = 151

this table, with exception to relaxing and napping, the differences between the thick and the thin boundary groups were not significant and the meaningfulness of those differences that are significant is low. A \mathbf{t} statistic was also computed to test for differences between means of the thick and thin boundary groups and the importance they rated to health related activities such as eating healthy and managing stress. There was not a significant difference between the thick boundary group and the thin boundary group and the importance they gave to health related activities, $\mathbf{t}(1) = .849$, $\mathbf{p} > .05$. Collectively, these data suggest that if there are differences between the groups on the health related behaviors, they result from the possibility that persons with thick boundaries are more involved with work than people with thin boundaries.

Discussion

In part, these data support Hartmann's (1991) past research on boundary thickness and health in that individuals with very thin boundaries reported significantly more stress-related health problems than was the case for individuals with very thick boundaries. These significant differences were uniform across all eight parameters of the Stress-Related Health Problems Scale. Thus, these results appear to validate Hartmann's (1991) observation that thin boundary individuals tend to allow more stimuli to get in and that, "people with thick boundaries can be considered better adapted to a tough world full of stress" (p. 186).

However, the results of the Health Behavior Scale suggest that with the exception of relaxation and napping, the groups are about the same. These data are, at best, only modestly consistent with Hartmann's (1991) postulation that, "boundaries is certainly

one important factor in the mental and physical problems that we develop, and in the way we adapt to the stressful situations around us" (p.188). In this regard, it could be the case that people with very thin boundaries are more impacted by stress, depression or fatigue and may cope with this by spending more time relaxing and napping than those with very thick boundaries. In addition, the overall difference between the groups on the total score for the Health Behavior Scale was not significant. These data suggest that both the thick and the thin boundary groups understand the importance of specific activities to their health. Thus, the difference in stress-related health problems between the groups appears to be a function of boundary thickness and not a differential lack of concern (or over concern) about health.

Finally it should be noted that the sex distribution of the thick and thin boundary individuals was different. Consistent with Hartmann's earlier finding, the present study found that women tend to score thinner on the Boundary Questionnaire than men. However, it does not appear that the difference found in the number of stress-related health problems reported was due to gender, as the strength of that relationship was weak. Also, a follow up analysis was conducted in which the Boundary Questionnaire scores of the 66 thick boundary females and the 33 thin boundary females were compared to their overall health score on the Stress-Related Health Problems Scale and the amount of time per day that they spent relaxing and napping. The results were the same as when the males were included in the analyses, with the thin female boundary group reporting more overall health problems and spending more time per day relaxing and napping than the

thick female boundary group. Thus, it is unlikely that these differences are a function of gender.

Overall, it appears that very thin boundary individuals are more susceptible to stress-related health problems, which in turn may be correlated with their daily activity levels. The degree of connection, overlap, and blending between boundaries seems to have an impact on a person's ability to cope with stress and their health and it appears that boundary structure does influence they way that a person responds to their internal and external environment. To conclude, these data contribute to establishing the importance of the Boundary Questionnaire as a predictor of health. However, one limitation of this study is that only self-report measures were used. Further research should examine the physiological responses of thick and thin boundary individuals to stress and the relationship of boundaries with both depression and fatigue may want to be further explored.

References

- Belicki, K. (1992). Nightmare Frequency versus nightmare distress: relation to psychopathology and cognitive style. <u>Journal of Abnormal psychology</u>, 101 (3), 592-597.
- Celenza, A. (1986). Empathy, ego boundaries and deficits. (Doctoral dissertation, Boston University) <u>Dissertation Abstracts International</u>, 47 (5-B), 2152-2153.
- Cowen, D. & Levin, R. (1995). The use of the Hartmann Boundary Questionnaire with an adolescent population. <u>Dreaming</u>, 5 (2), 105-114.
- Ehrman, M. (1993). Ego boundaries revisited: Toward a model of personality and learning. In J.E Atlas (Ed.), <u>Strategic Interaction and Language Acquistion: Theory.</u>

 <u>Practice, and Research</u> (pp. 331-362). Washington, DC: Georgetown University Press.
- Hartmann, E. (1989). Boundaries of dreams, boundaries of dreamers: Thin and thick boundaries as a new personality measure. <u>Psychiatric Journal of the University of Ottawa</u>, 14 (4), 557-560.
- Hartmann, E. (1991). <u>Boundaries of the mind: A new psychology of personality</u>. New York: Basic Books.
- Hartmann, E. (1997). The concept of boundaries in counselling and psychotherapy. British Journal of Guidance and Counselling, 25 (2), 147-162.
- Hartmann, E., Elkin, R., & Garg, M. (1991). Personality and Dreaming: The dreams of people with very thick or very thin boundaries. <u>Dreaming</u>. 1 (4), 311-324.
- Hartmann, E., Rosen, R., & Rand, W. (1998). Personality and dreaming: Boundary structure and dream content. <u>Dreaming</u>, 8 (1), 31-39.
- Hicks, R. A., & Hyler, B. (1998). Handedness and stress-related health problems. Perceptual and Motor Skills, 87, 1042.
- Kunzendorf, R., Hartmann, E., Cohen, R., & Cutler, J. (1997). Bizarreness of the dreams and daydreams reported by individuals with thin and thick boundaries. <u>Dreaming</u>, 7 (4), 265-271.
- Levin, R. (1986). Ego Boundary impairment and thought disorder in frequent nightmare suffers Evidence for a proposed pathognomonic relationship to schizophrenia. Unpublished doctoral dissertation, University of Buffalo.
- Levin, R., Galin, J., & Zywiak, B. (1991). Nightmares, boundaries, and creativity. Dreaming, 1 (1), 63-73.

McCrae, R. (1994). Openness to experience: expanding the boundaries of factor V. <u>European Journal of Personality</u>, 8, 251-272.

Schredl, M., Kleinferchner, P., & Gell, T. (1996). Dreaming and Personality: Thick vs. thin Boundaries. <u>Dreaming</u>, 6 (3), 219-223.

Appendix A Boundary Questionnaire

Please rate each of the statements from 0 to 4 (0 indicates "not at all true of me"; 4 indicates "very true of me"). Try to respond to all of the statements as quickly as you can.

1. My feelings blend into one another.	0	1	2	3	4
2. I am very close to my childhood feelings.	0	1	2	3	4
3. I am easily hurt.	0	1	2 2	3	4
4. I spend a lot of time daydreaming, fantasizing or in reverie.	0	1	2	3	4
5. I like stories that have a definite beginning, middle, and end.	0	1	2	3	4
6. A good organization is one in which all the lines of					
responsibility are precise and clearly established.	0	1	2	3	4
7. There is a place for everything, and everything should	_	-	_	_	
be in its place.	0	1	2	3	4
8. Sometimes it's scary when one gets to involved with	•	•	_	•	
another person.	0	1	2	3	4
9. A good parent has to be a bit of a child, too.	0	1	2 2	3	4
10. I can easily imagine myself as an animal or what it	•	_			
might be like to be an animal.	0	1	2	3	4
11. When something happens to a friend of mine or to a lover,					
it is almost as if it happened to me	0	1	2	3	4
12. When I work on a project, I don't like to tie myself down to	-				
a definite outline. I rather like to let my mind wander.	0	1	2	3	4
13. In my dreams, people sometimes merge into each other					
or become other people.	0	1	2	3	4
14. I believe I am influenced by forces that that no one					
can understand.	0	1	2	3	4
15. There are no sharp dividing lines between normal people,					
people with problems and people who are					
considered psychotic or crazy.	0	1	2	3	4
16. I am a down-to-earth no-nonsense kind of person.	0	1	2	3	4
17. I think I would enjoy being some kind of creative artist.	0	1	2 2 2	3	4
18. I have had the experience of someone calling me or					
speaking my name and not being sure whether it was					
really happening or whether I was imagining it.	0	1	2	3	4
,					

Appendix B Health Behavior Scale

Using the following scale rate how important these items are to your health. (Circle correct answer)

- 1 = Very important
- 2 = Moderately important
- 3 = Mildly important
- 4 = Not at all important

Managing Stress	1 2 3 4
Eating Healthy	1 2 3 4
Sleeping 8 hours a day	1 2 3 4
Spiritual Growth	1 2 3 4
Decreasing caffeine consumption	1 2 3 4
Exercising	1 2 3 4
Watching TV	1 2 3 4
Decreasing Alcohol consumption	1 2 3 4
Drinking 6-8 glasses of water each day	1 2 3 4
Decreasing exposure to smoke	1 2 3 4
Reading something positive each day	1 2 3 4
Setting aside time to relax before bedtime	1 2 3 4
Meditating	1 2 3 4
Taking vitamins and or food supplements	1 2 3 4
Going to bed at the same time each day	1 2 3 4
Associating with positive people	1 2 3 4
Avoiding Hassles	1 2 3 4

You Have 24 hours-appoint the amount of time that you spend doing each of the activities, using up the whole 24 hr's, as well as the time you would like to spend for each activity.

NUMBER OF HOURS

ACTIVITY	I SPEND	I WOULD LIKE TO SPEND
Attending Classes		
Sleeping Exercising		
Social Activities		
Studying Working		
Relaxing Eating		
Family Activities		
Sports Napping		

Appendix C Stress-Related Health Problems Scale

This questionnaire is concerned with a variety of health related items. For each question select the response that best describes your experience from among the following alternatives.

Never (or almost never) Seldom Occasionally Frequently Always (or almost always)

	f	NCOFA
1.	I am troubled by headaches	
2.	I experience migraine headaches	
3.	I am bothered by allergies	
4.	I have skin problems	
5 .	My stomach feels upset	
6.	I experience abdominal pain	
7.	I am constipated	
8.	I experience diarrhea.	
9.	I experience a sore throat	
10.	I am bothered by a racing heart	
11.	I experience chest pains	
12.	I experience heartburn	
13.	I wish that I was healthier	NSOFA
14.	I worry about my health	NSOFA
15.	Ill health affects my ability to get things done	NSOFA
16.	My family has problems with their health	
17.	I feel unhappy	
18.	I am in excellent health	
	I am bothered by severe itching.	NSOFA
20.	I experience shortness of breath	
21.	l experience ringing in my ears	
22.	My nose is congested	
23.	My hands are sweaty	
24.	My eyes are watery	
25.	I experience dizziness	
26.	I experience a flushed face	
20. 27.	My hands are cold.	
28.	I experience pain in my eyes	
29.	My eyes are red or inflamed	
30.	I am hard of hearing	
	I experience choking and a lump in my throat	
31.	I experience a running nose	NSOFA
32.		
33.	I experience nose bleeds	
34.	l experience coughing	
	I sweat	
	I have difficulty breathing	
37.	I feel out of breath	.NSOFA
38.	I experience swollen ankles	
39.	I experience cramps in my legs	
40.	I experience bleeding of my gums	.NSOFA
41.	I experience toothaches	
	I experience a poor appetite	
43.	I feel bloated after eating	NSOFA
44.	I belch after eating	. N S O F A
4 5.	I experience swollen joints	NSOFA
46.	I experience severe pain in my arms and legs	NSOFA
47.	I experience back pain	NSOFA
48.	I experience sensitive tender skin	NSOFA
49.	I experience hot/cold spells	NSOFA
50.	I feel faint	NSOFA
51.	I experience numbness or tingling.	NSOFA

52.	I shake or tremble	NSOFA
53.	I feel keyed up or jittery	NSOFA_