5-1986

Endurance and affiliation : traits as a priori self schemata in memory

Nancy Mackay Bruckner

ENDURANCE AND AFFILIATION:

TRAITS AS A PRIORI SELF SCHEMATA IN MEMORY

BY

NANCY MACKAY BRUCKER

APPROVED BY:

Kenneth A. Blick — committee chairperson — 6/23/86 — date

Barbara K. Shelley — committee member — date

Warren P. Hopkins — committee member — 6/23/86 — date

ENDURANCE AND AFFILIATION:
TRAITS AS A PRIORI SELF SCHEMATA IN MEMORY

BY

NANCY MACKAY BRUCKER

B.A., Mercer University of Atlanta, 1983

A Thesis
Submitted to the Graduate Faculty
of the University of Richmond
in Candidacy
for the degree of
Master of Arts
in Psychology

May 7, 1986
Richmond, Virginia

Running Head: ENDURANCE AND AFFILIATION

Abstract

This study investigated the hypotheses that subjects' scores on the trait of endurance would have a positive, significant correlation with their recall of endurance-related adjectives, and that subjects' scores on the trait of affiliation would have a positive, significant correlation with their recall of affiliation-related words. One hundred forty-five male and female undergraduates from the University of Richmond answered questions from the Affiliation and Endurance scales of the Personality Research Form (Jackson, 1967). As a separate task subjects decided whether or not each of forty-eight adjectives described themselves. Sixteen of these adjectives referred to endurance, sixteen to affiliation, and sixteen were filler words. After performing a nine minute, nonverbal distractor task, subjects were asked to recall as many of the adjectives as they could. The correlations found between the subjects' scores on the two personality traits and the number of content specific adjectives recalled for those two traits was not significant. It was concluded that the concept that personality traits serve as self-schemata in memory is not generalizable to the traits of endurance and affiliation.

Endurance and Affiliation: Traits as A Priori Self Schemata in Memory

There are three major points in the theoretical groundings of the present study. The first is the dualistic nature of the self. William James (1890) wrote of the self as an entity with two parts; the knower, or subject, and the known, or object. The known is the contents of the individual's memory store and is a structure that lists all of the features that an individual attributes to himself or herself (Rogers, Kuiper, & Rogers, 1979). The known is the individual's self concept. The knower is a set of processes rather than a structure, and these processes mediate the stream of consciousness in order to impart feelings of sameness to the person (Rogers et al., 1979). Specifically the functions of these processes include sorting, admitting, organizing, and construing new stimuli (Rogers, Kuiper, & Kirker, 1977). The dual parts of the self are united by a complex interaction between input and memory representations (Rogers et al., 1979).

The second point of the theoretical underpinnings of this study is the role of the self in selective attention. The world is full of stimuli which impinge on a person every moment that he or she is conscious, and it is impossible to attend to all of these stimuli. People are selective in what they attend to. The nature of an individual's

selective tendencies depend on the individual's internal cognitive structure, or schema (Markus, 1977). It is easiest to integrate input into a well differentiated schema. An individual's self schema is salient, personally relevant, and well articulated; in short, it may be the most well differentiated of all schemata (Ferguson, Rule, & Carlson, 1983). Self schemata are selective mechanisms that determine whether or not a new stimulus will be attended to, and what will subsequently happen to the stimuli that do merit attention (Markus, 1977).

A final point in the groundings of the present research relates to the role of self schemata in memory and learning. In order for learning to occur there must be attention. Selective attention is a process of the self, specifically a process of the knower. A second factor of learning and memory is that new information is assimilated and learned by relating it to preexisting information in the memory store (Bower & Gilligan, 1979; Lord, 1980). The contents of the memory store serve as a framework against which new stimuli can be perceived. The more embellished, differentiated and complex a cognitive framework is, the better a retrieval cue it will be. Thus the self schema, a well differentiated, complex structure, is an excellent memory aid (Lord, 1980). The value of self schemata as a memory aid has been proven in a number of experiments which

compared self-reference to other types of information processing.

Rogers et al. (1977) investigated the self as a personal information processor by having subjects rate adjectives on four dimensions: structural ("Is HAPPY spelled with two ps?"), phonemic ("Does HAPPY sound like SNAPPY?"), semantic ("Does HAPPY mean the same as GLAD?"), and self-referent ("Does HAPPY describe you?"). Subjects' recall of self-referenced adjectives was superior to their recall of adjectives rated on the other dimensions. Adjectives that subjects found to be descriptive of themselves were recalled better than adjectives that subjects rated as not descriptive of themselves. Even the nondescriptive adjectives, however, were recalled better than adjectives examined for structure, semantics, or phonemics. The results of this study provide evidence that the act of making a self-referent decision produces powerful internal reactions, creating a strong memory trace.

Bower and Gilligan (1979) concluded that the involvement of a person during the encoding of input, rather than the specific involvement of the self, creates a superior memory trace. This theory is referred to as the general person hypothesis. Bower and Gilligan's subjects could remember adjectives which they had related to an autobiographical event or to an event from their mothers' lives

as well as they could remember adjectives which they had judged for self-reference. Adjectives referenced to an unfamiliar other were less well recalled. Reference of adjectives to autobiographic events or to self resulted in superior recall than did semantic or surface analysis of the adjectives. Self-descriptive adjectives were recalled best, and adjectives which subjects had decided were not self-descriptive were recalled better than adjectives subjected to surface or semantic analysis.

Kuiper and Rogers (1979) investigated the possibility that superior recall produced by a self-referent task might be due to the involvement of a person-related schema rather than a self-related schema. Their experiments examined the differences between the encoding of personal information using self reference and the encoding of personal information using reference to another person. They found faster reaction time and superior recall for items processed under the self-referent condition compared to the other-referent condition, suggesting that the general person hypothesis is not valid.

Lord (1980) found comparable results in a study similar to that conducted by Rogers et al. (1977). The essential difference between Lord's study and the work of Rogers et al. is that schema differentiation or familiarity was taken into consideration in the Lord study, and the possible

responses to the question "Describes you?" included "depends on the situation". Lord suggested that greater schema differentiation for the self than for others may be one reason for the superiority of self-reference as a memory aid.

In order to access the self-referent processing level an individual presented with a list of trait adjectives would rate each word according to whether or not it describes himself or herself (Ingram, Smith, & Brehm, 1983). When the individual refers a trait adjective to the self, good encoding results because the individual can then use the self as a retrieval cue. Traits have been hypothesized to exist as sub-schemata which process and organize material related to personality. Several studies have produced evidence to support this hypothesis. The result of Cantor and Mischel's (1979) experiment indicates that the dimensions of extraversion-introversion exist as a self schema. Subjects in the Cantor and Mischel study were shown a series of statements descriptive of a fictional extraverted character, a fictional introverted character, and two fictional characters who were neither introverted nor extraverted. A second series of statements was then presented to the subjects. Some of the statements in the second series were identical to those in the first series of statements. Other statements in the second series had not appeared in the first series and were related to introversion or extraversion.

Subjects displayed a tendency to misidentify the new items that were conceptually related to the traits as items from the first series of statements. Cantor and Mischel suggested that the observed bias may reflect "'an information reduction mechanism' that facilitates cognitive economy in memory by providing simple mechanisms to structure and categorize" new input (p. 47).

Markus (1977) found that dependence-independence serves as a self schema. Markus rated female subjects on the traits of dependence and independence. Subjects were then asked to rate adjectives related to dependence and independence for self-reference. Using reaction time as the dependent variable, they found that subjects were able to process adjectives related to the trait they possessed faster than they could process other adjectives. Aschematics, those subjects who did not rate themselves as highly independent or highly dependent, and who claimed that those traits were unimportant to them, showed no difference in the time it took them to process adjectives related to either trait. Subjects were asked to supply behavioral evidence for the trait adjectives that they had selected as self-descriptive. Aschematics were not able to cite as many examples of behavior as did subjects with dependent or independent schemata. In a third task subjects were asked to predict the likelihood of their behaving in a dependent or independent manner described in a series of examples.

Independent subjects assigned a higher likelihood to independent behavior than to dependent behavior. Dependent subjects assigned a higher likelihood to dependent behavior than to independent behavior, and aschematics showed no difference between the likelihood assigned to behavior ascribed to either trait. Finally, subjects were provided with counterschematic information about their own behavior. Acceptance of false feedback was measured. Results showed that aschematics were more willing to accept incongruent information about themselves than were subjects with schemata. Self-schemata can be described as theories used by individuals to make sense of their past behavior and to predict their future behavior.

Antoher trait which has been studied as a self-schema, using the a priori method suggested by Ferguson et al. (1983), is depression. Derry and Kuiper (1981) included a group of clinical depressives, a group of psychiatric control patients, and a group of normal nondepressives in their investigation. Each group of subjects rated depressed and nondepressed content adjectives as to structure ("Is this word in capital letters?"), semantics ("Does this word mean the same as GLAD?"), and self-reference ("Does this word describe you?"). The clinically depressed subjects were able to recall depressed content words that they had self-referenced better than words they had rated structurally

or semantically. The subjects belonging to the two nondepressed groups were able to recall self-referenced nondepressed content words better than words rated on the other two dimensions. These findings support the contention that depressed individuals have a depressive self-schema. In a later experiment, Kuiper and Derry (1982) had a mildly depressed group of subjects and a nondepressed group of subjects rate depressed and nondepressed content specific adjectives for semantics and self-reference. Nondepressed subjects recalled more self-referenced non-depressed content adjectives than they did depressed content adjectives or adjectives that had been semantically rated. Mildly depressed subjects showed enhanced recall for both types of self-referenced adjectives compared to semantically rated adjectives. This finding suggests that the self-schema of mild depressives includes both depressed and nondepressed content. In a second experiment Kuiper and Derry had the subjects rate depressed and nondepressed content words for self-reference and other-reference ("Describes this person?"). Again, nondepressed subjects showed enhanced recall for self-referenced nondepressed content adjectives. Mild depressives displayed superior recall only for self-referenced depressed content adjectives compared to adjectives processed under the other-referent condition.

A third study on the trait of depression was conducted

by Ingram et al. (1983). Non-depressed and mildly depressed subjects were provided with success or failure feedback. Non-depressed subjects were able to use success feedback to activate a positive self-schema. Depressed subjects were unable to use success feedback to activate a positive self-schema, evidence that they may suffer from an enduring negative self-schema.

A recent study by Barrow (1985) investigated the concept that personality traits exist as self-schemata cognitive structures in memory. Barrow used an exploratory approach, scoring subjects for ten traits on the Personality Research Form. Subjects were then exposed to a list of adjectives with content specific to the traits. Nine of the ten correlations studied were not significant at the .05 level. The correlation between subjects' raw scores on the trait of endurance and their recall of endurance content specific words was significant. Barrow's study provided evidence that the trait of endurance serves as a self-schema in memory.

The evidence weighs in favor of personality traits serving as self-schemata by which new information may be assimilated into and retrieved from memory. The work of Cantor and Mischel (1977) substantiated the hypothesis that extraversion-introversion serves as a schema. Depression had been validated as a self-schema by Derry and Kuiper (1981), Kuiper and Derry (1982) and Ingram et al. (1983)

Markus (1977) found that dependence-independence serves as a schema. Conducted in a manner much like Barrow's (1985) study, the present study was predicted to provide further evidence that the personality trait of endurance serves as a self-schema in memory. The trait of affiliation, chosen because of its low correlation with the trait of endurance and on the basis of Cantor and Mischel's finding that extraversion-introversion serves as a schema, was also examined in the present study. Certain methodological problems which surfaced in Barrow's study were addressed. For example, the number of traits studied was reduced from ten to two. Therefore the number of content-specific adjectives was reduced from 160 to 48. Rather than have subjects underline each adjective, as they did in Barrow's study, subjects were asked to decide if each adjective described themselves. Adjectives were presented to the subjects one at a time , and the distractor task utilized was of a non-verbal nature in order to reduce retroactive inhibition of memory for the adjectives. A significant positive correlation was predicted between the traits under examination here and the recall of their respective content-specific adjectives.

Method

Subjects

A total of one hundred forty-five college students from the University of Richmon Introductory Psychology

subject pool served as voluntary participants. The data for six subjects who recalled only one adjective was eliminated from the analysis. Their scores indicate that they did not follow directions.

The remaining total of 139 subjects consisted of 76 female and 63 male subjects. All participants received one and one-half hour of research participation credit. The subjects were treated in accordance with the "Ethical Principles of Psychologists" (American Psychological Association, 1981). Subjects were given a consent form (see Appendix A) which informed them of the nature of the study, gave them permission to decline participation at any time, and assured them of confidentiality.

Materials

A questionnaire (see Appendix B) consisting of all sixteen items scored on the Endurance scale of the Personality Research Form-E (Jackson, 1967) and all sixteen items scored on the Affiliation scale of the PRF-E was used to measure personality traits. On the questionnaire, the items that comprise the Endurance scale are numbers 4,6,9,11,18, 24,28,29,30,35,36,37,51,56,58, and 62. The items that comprise the Affiliation scale are numbers 1,8,10,16,17,20, 22,25,33,34,41,46,55,59,60, and 63. In addition to these two scales, the sixteen items employed in the Infrequency scale of the PRF-E was added. The Infrequency scale, numbers

3,7,19,21,23,31,38,39,44,45,47,49,52,54,15, and 64, was intended to detect careless or nonpurposeful responding. The sixteen item Desireability scale from the PRF-E, numbers 2,5,12,13,14,26,27,32,40,42,43,48,50,53,57, and 61 on the questionnaire, was included for the purpose of thwarting the subjects' intent to determine what the questionnaire was measuring. Items from each of the four scales were presented in random order. There were 64 items on the questionnaire, with space provided for subjects to record their true-false responses next to each item. The PRF-E was chosen because it was developed for research and the use of nonclinical populations. In addition, the traits measured on the PRF-E are defined by a list of adjectives developed by Jackson (1967) in his Trait Rating Form (TRF). The reliability and validity of the PRF-E in use with college students is reported in Table 1.

Insert Table 1 about here

Subjects viewed 48 numbered slides of individual adjectives on a screen, using a standard slide projector. All adjectives were chosen from the TRF provided by Jackson (1967). Sixteen adjectives were related to the trait of endurance, and sixteen were related to the trait of affiliation. The remaining sixteen adjectives were filler words selected from adjectives related to the trait of

order. Order has a low correlation with the traits of endurance and affiliation. Slides were arranged in the random order in which they were presented, then numbered consecutively from one to forty-eight (see Appendix C). A sheet for scoring each of the forty-eight adjectives for self-reference was supplied (see Appendix D). A slide presentation consisting of a purse-snatching incident was used as a nonverbal distractor task. One piece of blank paper and a pencil were supplied to each participant in the study.

Procedure

Subjects were tested in groups ranging in size from 35 to 38. Each subject was presented with a packet of materials. First, subjects were asked to read the consent form, sign and date it, then place it under their desks. The first two groups of subjects were then asked to answer the questionnaire, following the instructions on the first page of the questionnaire. After fifteen minutes, subjects were asked to place the completed questionnaire under their desks. Next, subjects were told to remove the form entitled "Word Rating Form" and were given the following instructions

> You are about to view a series of numbered slides. On each slide an adjective is printed. Please look at each adjective as it is presented and decide if it describes you. If it does, then write "yes" in the space next to the number on

your rating form that corresponds to the number on the slide. If the adjective does not describe you, then write "no" next to the number on your word rating form that corresponds to the number on the slide.

The slides, arranged in random order, were presented for fifteen seconds each for the next twelve minutes. Subjects were asked to place the completed word rating form under their desks. Next, subjects were shown the twenty-four slide distractor task. Each of these slides was presented for fifteen seconds. This distractor task was chosen in order to minimize the effect of retroactive inhibition on memory. After the distractor task, the subjects were asked to write down as many of the adjectives that they had seen on the original slide presentation as they could remember. They were told to write those adjectives on the blank peice of paper in their packets. After fifteen minutes the subjects were asked to turn in all of their materials. Subjects were then debriefed (see Appendix E).

The other two groups of participants were subjected to the same procedure, except that they answered the personality trait questionnaire after they had rated the slides, viewed the distractor slides, and completed the recall task. This reversal was done to counterbalance for order.

Results

Pearson product-moment correlations were computed between

the raw score on the traits of affiliation and endurance and the number of filler, endurance, and affiliation words recalled (see Table 2).

Insert Table 2 about here

All first order coefficients were tested for significance at the .05 level, and none of the six Pearson product-moment correlations were significant. In addition, partial correlations were computed for the raw score on each trait with the number of endurance and affiliation content-specific words recalled (see Table 3).

Insert Table 3 about here

The partial correlations were tested for significance at the .05 level, and none of the four partial correlations were significant. In light of the lack of significant correlations, a path analysis that was originally planned was deemed unnecessary.

Discussion

Barrow (1985) reported a significant positive correlation between subjects' raw scores on the trait of endurance and their recall of endurance-related words. In the present study, the correlation between the subjects' raw scores on the trait of endurance and their recall of adjectives related

to endurance approached significance. Barrow noted that only one correlation (out of ten) of his main hypothesis was significant. Therefore, if his finding was due to a Type 1 error, the present nonsignificant finding would be expected. Cantor and Mischel (1979) found that extraversion and introversion exist as self-schemata. In the present study the correlation between subjects' scores on a similar trait, affiliation, and their recall of affiliation-related adjectives was not significant.

The results of this study call into question the generalizability of the theory that personality traits serve as self-schemata in memory. The present study, with its 139 valid subjects, utilizes a powerful statistical approach. No significant relationship was detected between the traits and recall of adjectives relating to the traits. While it is possible that methodological flaws in the study contributed to the lack of significant results, it seems more likely that the results are due to an invalid theory. The present study provides evidence that the theory does not apply to the traits of endurance and affiliation.

The Personality Research Form (Jackson, 1967) is well suited to testing the schemata theory because it comes with a set of trait-defining adjectives, and because it was devised for testing non-clinical populations. However, the validity of the PRF is only moderate. It has not been established

that the personality dimensions measured by the PRF are constant across time and across situations. If these dimensions are situation or task specific then there is reason to believe that they are states, not traits.

Another possible problem is that a high degree of association existed between many of the adjectives used in this study. A subject who recalled the word "neat" could easily recall the words "tidy, clean, immaculate" due to the organizational process of clustering rather than to any schema. This clustering effect would be reflected by low correlations in the results. For example, a person who scored low on the trait of endurance would be able to recall many endurance related words because they were clustered together in memory through association.

There are several measures which could be taken in future research to test the theory that personality traits exist as self schemata in memory. Researchers should establish that the traits being measured are constant across time and across situation. Efforts should be made to ensure the neutral properties of the filler words. Perhaps the use of an instrument with higher validity than the PRF would yield significant results. The use of highly associated adjectives in future studies should be avoided. If, through these measures, higher correlations could be obtained, then it would be possible to use path analysis to analyze the results. If such an analysis

does not yield significant results, then this theory would be discreditted.

References

American Psychological Association. (1981). Ethical Principles of psychologists (revised). American Psychologist, 36, 633-638.

Barrow, V.L. (1985). Personality Traits: A Priori Self-Schemata in Memory. Unpublished master's thesis. University of Richmond, Richmond, VA.

Bower, G.H., & Gilligan, S.G. (1979). Remembering information related to one's self. Journal of Research in Personality, 13, 420-432.

Cantor, W. & Mischel, W. (1977). Traits as prototypes: Effects on recognition memory. Journal of Personality and Social Psychology, 35(1), 38-48.

Derry, P.A. & Kuiper, N.A. (1981). Schematic processing and self reference in clinical depression. Journal of Abnormal Psychology, 49(4), 286-297.

Ferguson, T.J., Rule, B.G., & Carlson, D. (1983). Memory of personally relevant information. Journal of Personality and Social Psychology, 44 (2), 251-261.

Ingram, R.E., Smith, T.W. & Brehm, S.S. (1983). Depression and information processing: Self-schemata and the encoding of self referent information. Journal of Personality and Social Psychology, 45(2), 412-420.

Jackson, D.N. (1967). A Manual for the Personality Research Form. Goshen, New York: Research Psychologists Press.

James, W. (1890). Principles of psychology. New York: Holt.

Kuiper, N.A., & Derry, P.A. (1982). Depressed and nondepressed content self reference in mild depressives. Journal of Personality, 50, 67-80.

Kuiper, N.A., & Rogers, T.B. (1979). Encoding of personal information: Self other differences. Journal of Personality and Social Psychology, 37(4), 499-514.

Lord, C.G. (1980). Schemas and images as memory aids: Two models of processing social information. Journal of Personality and Social Psychology, 38, 257-269.

Markus, H. (1977). Self schemata and processing information about the self. Journal of Personality and Social Psychology, 35, 63-78.

Rogers, T.B., Kuiper, N.A., & Kirker, W.S. (1977). Self-reference and the encoding of personal information. Journal of Personality and Social Psychology, 33(9), 677-688.

Rogers, T.B., Kuiper, N.A., & Rogers, P.J. (1979). Symbolic distance and congruity effects for paired comparison judgements of degree of self-reference. Journal of Research in Personality, 13, 433-449.

Table 1

Reliability and Validity of Endurance and Affiliation Scales of PRF-E in use with College Students.

	Validity				
Trait	CA sample (N=40 & 51)			PA sample (N=202)	
	Behav.		Trait	Behav.	Self
Affiliation	.42 & .43		.80 & .75	.40	.56
Endurance	.44 & .52		.52 & .35	.27	.52

Reliability	
Trait	
Affiliation	.86
Endurance	.75

Table 2

Pearson Product-Moment Correlations for Scores on Endurance and Affiliation withScores on Three Categories of Trait-Defining Adjectives.

		Affiliaiton recall	Filler recall	Endurance recall
Trait				
Affiliation	r=	-0.0356	.0519	-0.0151
	p=	.399	.272	.430
Endurance	r=	-0.0952	.0800	.1365
	p=	.132	.175	.055

Table 3

Partial Correlations for Raw Score on Each Trait with the Number of Endurance and Affiliation Words Recalled, Controlling for Filler Words Recalled

		Affiliation recall	Endurance recall
Trait			
Affiliation	r=	-0.056	-0.452
	p=	.251	.299
Endurance	r=	-0.1321	..1123
	p=	.061	.095

Appendix A

CONSENT FORM

I, _____, voluntarily agree
print name

to participate in this experiment. I understand that I will be taking a series of tests that will pose no physical or paychological risk to me. Also, I understand that I may decline participation at any time and that all information concering my performance on the tests woll be kept confidential.

_____ _____
date signature

Appendix B

Name _____

DIRECTIONS: On the following pages you will find a series of statements which a person might use to describe himself. Read each statement and decide whether or not it describes you. If you agree with a statement or decide that it does describe you, circle TRUE (T). If you disagree with a statement or feel that it is not descriptive of you, circle FALSE (F). Answer every statement either true or false, even if you are not completely sure of your answer.

T F 1. I don't really have fun at large parties.

T F 2. My daily life includes many activities I dislike.

T F 3. I have attended school at some time during my life.

T F 4. Even when I am feeling quite ill, I will continue working if it is important.

T F 5. I am always prepared to do what is expected of me.

T F 6. If I run into great difficulties on a project, I usually stop work rather than try to solve them.

T F 7. Things with sugar in them usually taste sweet to me.

T F 8. Sometimes I have to make a real effort to be sociable.

T F 9. If people want a job done which requires patience, they ask me.

T F 10. I truly enjoy myself at social functions.

T F 11. I am willing to work longer at a project than are most people.

T F 12. I believe people tell lies any time it is to their advantage.

T F 13. My life is full of interesting activities.

T F 14. If someone gave me too much change I would tell him.

T F 15. I have never had any hair on my head.

T F 16. I don't spend much of my time talking with people I see every day.

T F 17. I try to be in the company of friends as much as possible.

T F 18. I rarely let anything keep me from an important job.

T F 19. I have traveled away from my home town.

T F 20. I would not be very good at a job which required me to meet people all day long.

T F 21. I have never felt sad.

T F 22. When I see someone I know from a distance, I don't go out of my way to say hello.

T F 23. I usually wear something warm when I go outside on a very cold day.

T F 24. I don't believe in sticking to something when there is little chance of success.

T F 25. I spend a lot of time visiting friends.

T F 26. I find it very difficult to concentrate.

T F 27. I am careful to plan for my distant goals.

T F 28. If I become tired I set my work aside until I am well rested.

T F 29. When I hit a snag in what I am doing, I don't stop until I find some way to get around it.

T F 30. When I get to a hard place in my work, I usually stop and go back to it later.

T F 31. Sometimes I see cars near my home.

T F 32. I did many very bad things as a child.

T F 33. I go out of my way to meet people.

T F 34. Often I would rather be alone than with a group of friends.

T F 35. I have spent hours looking for something I needed to complete a project.

T F 36. If I get tired of playing a game, I generally stop playing.

T F 37. If I want to know the answer to a question, I sometimes look for it for days.

T F 38. I have never bought anything in a store.

T F 39. I have never ridden in an automobile.

T F 40. Many things make me feel uneasy.

T F 41. My friendships are many.

T F 42. I am glad I grew up the way I did.

T F 43. I am never able to do things as well as I should.

T F 44. I have never brushed or cleaned my teeth.

T F 45. I could easily count from one to twenty-four.

T F 46. I am quite independent of the people I know.

T F 47. Sometimes I feel hungry or thirsty.

T F 48. I often question whether life is worthwhile.

T F 49. I try to get at least some sleep every night.

T F 50. I am quite able to make correct decisions on difficult questions.

T F 51. I will continue working on a problem even with a severe headache.

T F 52. I make all my own clothes and shoes.

T F 53. I get along with people at parties quite well.

T F 54. I have never talked to anyone by telephone.

T F 55. I seldom put out extra effort to make friends.

T F 56. When other people give up working on a problem, I usually quit too.

T F 57. I am one of the lucky people who could talk with my parents about my problems.

T F 58. I don't have the staying power to do work that must be very accurate.

T F 59. People consider me to be quite friendly.

T F 60. I choose hobbies that I can share with other people.

T F 61. I would be willing to do something a little unfair to get something that was important to me.

T F 62. I don't have the energy to do some of the things I would like.

T F 63. I trust my friends completely.

T F 64. I can run a mile in less than four minutes.

Appendix C

1. CHUMMY
2. STURDY
3. CORDIAL
4. ZEALOUS
5. LOYAL
6. PROMPT
7. RELENTLESS
8. DISCIPLINED
9. SCHEDULED
10. AFFECTIONATE
11. COOPERATIVE
12. CONSTANT
13. DURABLE
14. UNYIELDING
15. METHODICAL
16. ENERGETIC
17. WELL ORDERED
18. UNFALTERING
19. ORDERLY
20. TIDY
21. ORGANIZED
22. ENDURING
23. AMIABLE
24. SYSTEMATIC
25. SPECIFIC
26. STEADFAST
27. GOOD WILLED
28. HOSPITABLE
29. NEIGHBORLY
30. CLEAN
31. WARM
32. DELIBERATE
33. VIGOROUS
34. DEPENDABLE
35. PERSEVERING
36. FRIENDLY
37. AFFABLE
38. PERSISTENT
39. CONSISTENT
40. LASTING
41. NEAT
42. GOOD NATURED
43. SOCIABLE
44. IMMACULATE
45. GENIAL
46. PLANFUL
47. TIRELESS
48. GREGARIOUS

Appendix D

WORD RATING FORM

Name _____

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____
21. _____
22. _____
23. _____
24. _____
25. _____
26. _____
27. _____
28. _____
29. _____
30. _____
31. _____
32. _____
33. _____
34. _____
35. _____
36. _____
37. _____
38. _____
39. _____
40. _____
41. _____
42. _____
43. _____
44. _____
45. _____
46. _____
47. _____
48. _____

Appendix E

Debriefing Procedure

The following areas were covered in the debriefing of the subjects at the completion of the experiment:

1.) The hypothesis of the study, and the variables that were being tested were revealed.

2.) The picture slides were used as a distractor task and were not part of the variables studied.

3.) The experimenter's name and phone number was given in case of any need for further information.

4.) Appreciation was extended to subjects for their participation in the experiment.