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SEX DIFFERENCES IN EXTREME RESPONSE STYLE

THESIS

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## SEX DIFFERENCES IN EXTREME RESPONSE STYLE

Unique and consistent patterns of responding to objective test items are called response styles. Response styles were initially viewed as contaminating variables having undesirable effects on the reliability and validity of tests, which should be controlled or eliminated from the test variance (Cronbach, 1946, 1950; Helmstadter, 1957). Some investigators, however, have suggested the possibility of exploring the use of response styles as indicators of certain personality characteristics (Lorge, 1937; Jackson and Messick, 1958; Wiggins, 1962). Three response styles have been thoroughly studied in this respect: acquiescence (Bass, 1955; Couch and Keniston, 1960), deviation (Berg, 1957, 1959), and social desirability (Edwards, 1953, 1957; Crowne and Marlow, 1964). A fourth response style--the extreme response style--has received somewhat less attention (Parsonson, 1969a, 1969b; Norman, 1969; Priest, 1971) and is the topic of the present study.

The extreme response style is often found in tests which employ items requiring the subject to respond along an intensity dimension, such as strongly agree, moderately agree, moderately disagree, strongly disagree. In such situations, some persons have a tendency to use the extreme alternatives while, others tend to employ the middle categories.

with greater frequency. The tendency to use the extreme categories is defined as "extreme response style."

Most studies which have attempted to view response styles in the broader context of general personality theory have used standard objective personality inventories, particularly the MMPI (Peabody, 1962; Norman, 1969). The true-false or agree-disagree format used in these tests quite naturally lends itself to ready demonstration of controlled experimentation with a variety of response styles. Norman (1969) has pointed out, however, that this approach to the study of personality could make profitable use of additional test instruments, both standardized and experimental, and that broader and more comprehensive conclusions about the nature and meaning of response sets could be developed. Norman favors using the semantic differential as a measure of response style.

In their now famous monograph, Osgood, Suci, and Tannenbaum (1957) discuss the issue of scale-checking styles on the semantic differential. Parsonson (1969a) has broken down the seven-point scale of the semantic differential into three zones: "extreme" (scale positions 1 and 7), "neutral" (position 4), and "intermediate" (positions 2, 3, 5, and 6). Osgood, et al., cite a number of interesting studies suggesting that various scale-checking styles can differentiate normals and schizophrenics (Bopp, 1955) and high- and low-IQ high school students (Kerrick,

1954). Parsonson (1969a, 1969b) and Priest (1971) used a semantic differential to differentiate normals, neurotics, and psychotics by extreme response styles. Zax, Gardiner, and Lowry (1964) used a semantic differential and discovered "maladjusted" subjects tended to use the extreme categories more than intermediate categories when rating projective materials. The semantic differential has also been employed as a test for other personality attributes linked to the extreme response style (Mogar, 1960; Arthur, 1966; Neuringer, 1961). The semantic differential, then appears to be the instrument of choice by many investigators in the area of response style differentiation.

If the tendency to endorse extreme categories is a manifestation of or associated with certain personality attributes, then extreme response style scores must be shown to have consistency and generality. The evidence of the consistency and generality of this tendency is, in general, quite satisfactory. This is true whether one is considering test stability, internal consistency, or generality between tests.

Studies evaluating the stability of extreme response tendency over time are few, but they all produced highly similar results. Arthur (1966), testing a semantic differential at a four-week interval, found a reliability coefficient of 0.79 after four days, Zuckerman et al., (1958), using the Parental Attitude Research Instrument, found after two weeks a coefficient of 0.89 and Berg (1953), using two measures,

the Perceptual Reaction Test and the Word Reaction Test, found after fifteen days a coefficient of 0.78 and 0.94 respectively for each test. The reliability of extreme response style scores, then, seems to be quite consistent at least up to four weeks.

Data on the internal consistency of extreme response style measures, using split-half reliabilities, have been reported by Peabody (1962), Forehand (1962), Klein (1963) and Soueif (1958). In general, their findings suggest that extreme response style measures have a considerable degree of internal consistency.

Several studies have used two measures of extreme response style. Berg (1953) used the Perceptual Reaction Test and the Word Reaction Test; Forehand (1962) used the Perceptual Reaction Test and an activities checklist; Arthur (1966) used two forms of a semantic differential; and Bregelmann (1959b) used the Personal Friends Questionnaire and a word checklist. Thus, these studies afford estimates of the extent to which extreme response style generalizes from one test to another. For instance, Berg (1953) found reliability coefficients between the two tests mentioned above to be 0.53 and 0.77 respectively and Arthur (1966) found coefficients of reliability of 0.88 and 0.72 on his parallel forms of a semantic differential. A number of potentially biasing variables are present in any study of this type, and probably account for much of the variability

of the findings. Hamilton (1968) has pointed out two such variables which appear to be foremost. First, the amount of content in the stimulus items themselves could account for some of the variance and, secondly, the similarity of item format in the test being correlated. In spite of these contaminating influences, the findings mentioned above indicate a substantial degree of cross-test consistency.

The evidence that extreme response styles scores are reliable and consistent suggests that this response tendency is linked to personality variables. But if so then which ones? Norman (1969) states ". . . that response extremity can be viewed as a function of the meaningfulness of the material to be rated and the rating categories themselves [p. 409]." He further states that the more salient or meaningful the material the more chance there is for extreme responses to take place. This proposition is supported by two pieces of research. First, Mitsos (1961) had subjects rate semantic differential scales most personally meaningful and found polarization was greater on these scales than on any others. Secondly, Cromwell and Caldwell (1962) found greater extreme responding on subject's own dimensions, taken from the subjects own Role Construct Repertory Test (Kelly, 1955) than on dimensions taken from the RCRT's of others. O'Donovan (1965) comments on findings such as those above and his own by stating ". . . that response to meaningful stimuli will tend toward the extreme (polarize),



while response to meaningless stimuli will tend toward the indifferent (dipolarized) [p. 365]." Therefore, from what has been said about meaningfulness as it relates to extreme response style it can be said that the less ambiguous a stimulus becomes to the subject, the more chance extreme response style will show as a variable.

A number of studies which have dealt with extreme response style have found that there was a difference in the response styles exhibited by sex. Berg and Collier (1953) found women to be more extreme than men in their reactions to the Perceptual Reaction Test. The judgments consisted of evaluations (like much, like slightly, dislike slightly, dislike much) of sixty abstract geometrical designs. Soueif (1958) found the same trend among groups of students he tested using the Personal Friends Questionnaire. Borgatta and Glass (1961) found a similar sex difference among populations of college students and prisoners in stating the degree of agreement or disagreement with a series of value judgments. Females were found to make more extreme responses on the semantic differential used by Priest (1971) in his study of neurotics and normal subjects. Non-significant results have been found in the samples of the studies by Brengelmann (1960a, 1960b), utilizing the Personal Friend Questionnaire; normal children in the study by Light, Zax, and Gardiner (1965); and by Parsonson (1969b) in his study of psychiatric patients with a semantic

differential. Only one case has been reported in which males made significantly more extreme response than females (Brenkelmann, 1959b). Parsonson (1969b) in his extreme response style study made the comment ". . . that further research into sex differences in scale-checking style on the SD (Semantic Differential) is desirable [p. 827]." And quoting Priest (1971), ". . . sex difference does appear to be an important variable in the scale-checking styles of normal subjects [p. 11]." It seems, therefore, that sex is a variable of considerable weight in the determination of response styles.

The main objective of this investigation was to study the influence of sex on extreme response style as measured by a semantic differential. The previous studies led to a general hypothesis formulated as follows. Normal males and females differ from each other with regard to their mean extreme response style scores with females having the greater extreme response scores on the semantic differential.

## METHOD

### Subjects

The subjects were 55 undergraduate students enrolled in psychology courses at North Texas State University-- 30 males and 25 females. The average age for the subjects was 22.56 years--21.56 for females and 23.40 for males-- with a standard deviation of 2.13 for females and 2.36 for males.

### Instruments

A semantic differential consisting of four concepts (My Ideal Mate, College Student, College Graduate, and Me As I Am Now), utilizing thirty scales (see Appendix A), was used as the measure of extreme response style. These specific concepts were chosen as being most relevant and meaningful to this population of subjects by a questionnaire given in a pilot study (see Appendix B) to college students. These four concepts were judged most meaningful by 100 per cent of the pilot study subjects. The thirty scales were taken from the studies by Kuusinen (1969), Mitsos (1961), and Osgood, Ware, and Morris (1961). The scales were shown by these studies to be high on the factor (i.e., evaluation, potency, or activity) ascribed to each with regard to unambiguity of meaning (see Appendix C). Ten scales were chosen as high on the evaluation factor, ten as high on the potency factor, and ten as high on the activity factor, thus giving a total of thirty different scales in all. These factors were identified by Osgood, et al., (1957), and have been shown to be a highly general and invariant reference system which describes the affective or connotative aspects of meaning of verbal and certain other kinds of concepts (Kuusinen, 1969).

### Procedure

The study involved the use of a 2 X 3 X 4 design involving two groups (males and females), three types of

scale factors (evaluation, potency, and activity), and four different concepts (My Ideal Mate, College Student, Me As I Am Now, and College Graduate) with repeated measures over concepts and scale factors. The subjects were administered the semantic differential at two group meetings. The instructions were read aloud to the subjects as they read along silently. The instructions followed those suggested by Osgood, et al., (1957) and Pervin (1967). The instructions were given as follows:

The purpose of this questionnaire is to measure the meanings of certain things to various people by having them judge them against a series of descriptive scales. A concept will be given to you followed by thirty scales. You are to rate the concept on each of these scales, in order. The scales have seven numbers on them with an adjective on each side. You are to decide which adjective most fits the concept you are rating and then how strongly you would apply this adjective to the concept. Indicate your rating by circling one number along the scale. The closer a number is to either end of the scale the more strongly you feel that the adjective at that end is the one that most describes the meaning of that concept for you.

Please remember you can circle any number, one through seven, and be sure to clearly circle a number for each scale for every concept--do not omit any. Only circle one number on a single scale. Make each item a separate and independent judgement. Work at a fairly high rate of speed. Do not worry or puzzle over individual items. It is your first impressions, the immediate "feelings" about the items that is wanted. On the other hand, please do not be careless because your true impressions are wanted. Are there questions?

Care was taken to insure that all subjects had a clear idea of the task before they marked their answer sheets. Any questions were answered before the test began with the

Experimenter paraphrasing that part of the instructions dealing with the question. The semantic differential was then scored by summing the responses in categories 1 and 7 (the most extreme categories) to achieve one extreme score per subject for each scale on each concept. An analysis of variance was then computed for between subjects (males verses females) and within subjects variances.

### RESULTS

In the present experiment, only two main effects reached significance--Concepts (B), ( $F=42.20$ ,  $p<0.01$ ) and Scales (C), ( $F=21.60$ ,  $p<0.01$ ). Sex (A), as a variable, failed to even approximate significance. The summary of the analysis of variance on both within subjects and between subjects can be seen in Table I.

TABLE I  
SUMMARY OF ANALYSIS OF VARIANCE BETWEEN SUBJECTS  
AND WITHIN SUBJECTS

Source of variation	df	MS	F
<u>Between subjects</u>			
Sex (A)	1	0.12	
error (a)	53	15.45	
<u>Within subjects</u>			
Concepts (B)	3	208.17	42.20*
AB	6	8.29	1.68
error (b)	159	4.93	
Scales (C)	2	33.51	21.60*
AC	2	0.60	0.38
error (c)	106	1.55	
BC	6	4.87	6.21*
ABC	6	1.43	1.83
error (bc)	318	0.78	

There was no significant interaction between Sex and Concepts (AB) or Sex and Scales (AC), nor was a significant triple interaction between Sex, Concepts, and Scales (ABC) seen. However, there was a significant interaction found between Concepts and Scales (BC), ( $F=6.21$ ,  $p<0.01$ ).

### DISCUSSION

The results of the present experiment provided some evidence contradictory to the findings of Priest (1971) that females tend to display extreme response style significantly more often than males on a semantic differential. In light of the results the hypothesis presented earlier in this study must be rejected. Males and females appear not to differ in their extreme response styles on a semantic differential. These results would also partially contradict the findings of Soueif (1958), Berg and Collier (1953) and Bergatto and Glass (1961) who used other tests of extreme response style other than the semantic differential and found a difference in responding between sexes. However, the findings do lend support for the results found by Parsonson (1969b) in his study utilizing a semantic differential as well as those by Brengelmann (1960a, 1960b) and Light, Zax, and Gardiner (1965).

What, then, appears to be taking place? First, even though meaningfulness was high, the Concepts rated may not have been ego-involving enough for the subjects to respond to

extremely enough to make a difference. Secondly, both Concepts (B) and Scales (C) appear to be independent of Sex (A), there being no significant interactions between them. Thirdly, the interaction between Concepts and Scales (BC) means that the Scales chosen on each Concept are dependent on the Concept to which they are applied (and vice versa). This interaction can be seen in Figure 1.

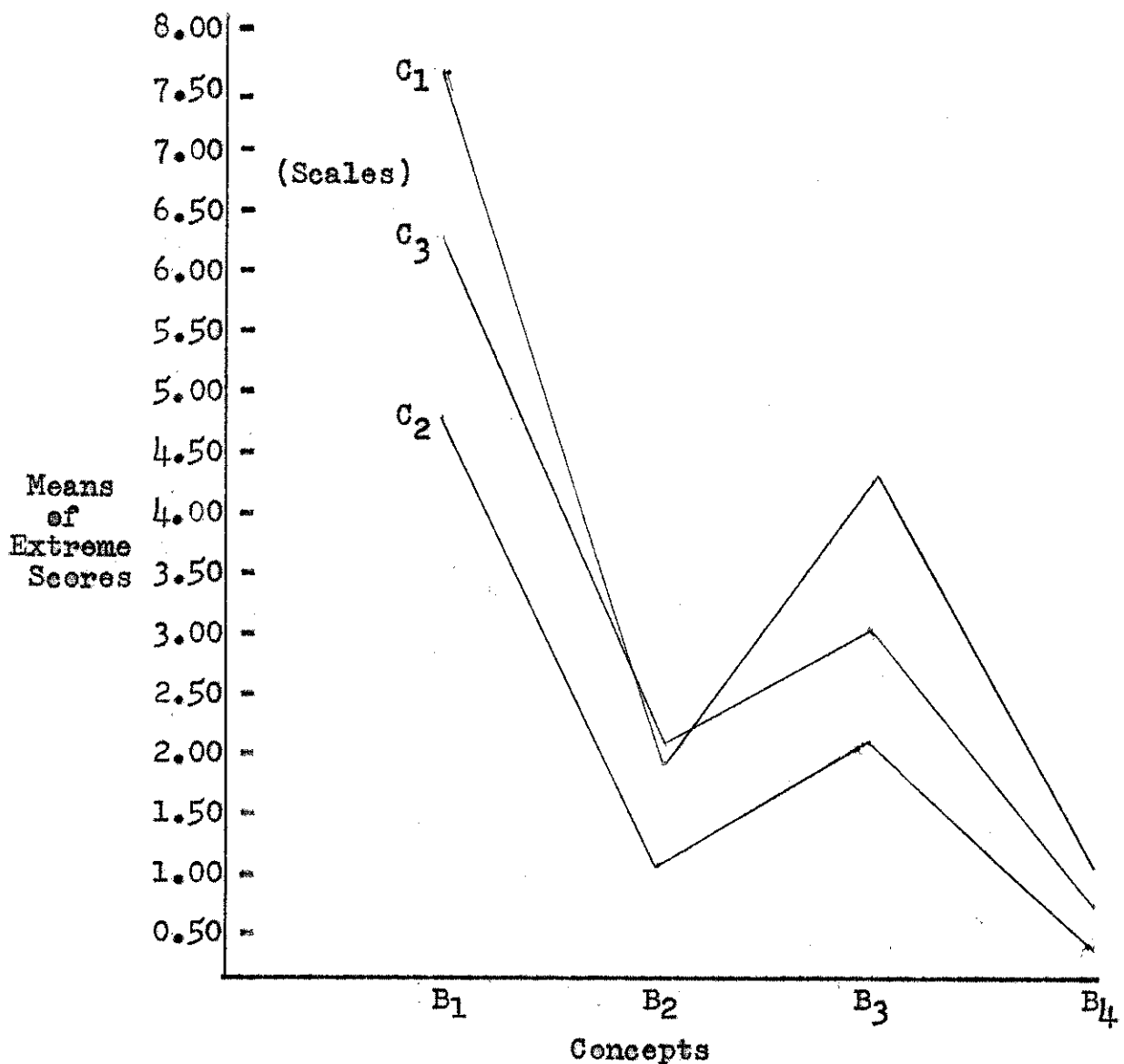


Fig. 1--Interaction of Scales and Concepts

The foregoing study of extreme response style suggests a limited potential usefulness of it as an indicator of personality attributes, especially sex differences. However, the study does suggest that further investigation of this topic may be fruitful, in which case several methodological criticisms can be considered from the preceding experiment.

Two methodological variables are likely to account for some of the findings of this study. The most important of these is the degree of ambiguity in the extreme response measure. Hamilton (1968) has taken the position that response styles have maximal opportunity to operate when stimulus content is absent. In contrast to this, the present study had concepts with very high stimulus content. Although content probably cannot be entirely eliminated, "pure" response style measures can be approximated through attempts to control and minimize content influences. Berg's Perceptual Reaction Test, for example, was developed with just this purpose in mind. The semantic differential used in the present study was, of course, loaded with content variance, and happened to call for responses on a Likert-type scale. With such tests it cannot be determined to what extent extreme responses represent stylistic tendencies of individual or a subject's response to meaningful item content. Block (1965) has presented an extensive analysis of the problems associated with separating stylistic and



content effects in acquiescence research. Similar problems exist when scales which have a substantial amount of content variance are employed as extreme response measures. No satisfactory method exists by which the confounded effects of content and style can be distinguished in such questionnaires. Hence, the use of content-free scales as extreme response indices may be of primary importance. Moreover, although there have been some reports of the role of stimulus ambiguity on response styles (Banta, 1961), there is a need for further investigation of this topic and its relevance to the measurement of extreme response style.

A second methodological variable has been the method of deriving extreme response style measures from the Likert-type scales. The simplest and most common method has been to count the number of responses in the extreme category at each end of the continuum, as was done in the present experiment. Other measures have also been used. Peak, et al. (1960), developed a "bimodality index." Using a nine-point scale, they defined the bimodality index as the average number of responses in Categories 1, 2, 8, and 9 minus the mean number of responses in the intermediate categories. Others (Mogar, 1960; Neuringer, 1961; Peabody, 1962) have measured extremity in terms of deviation from the midpoint of the scale. Whether these differences in extremity measures are important or have any relationship with results is unknown, and a comparative study of various measures would be worthwhile.

In conclusion, what is needed most in this area of research seems to be an integrated research program, guided by a testable theoretical network, relating extreme response style to personality attributes. Such a research program should use both experimental and correlational approaches. Such a broad approach may yield a better understanding of the personality functioning underlying the extreme response style.

APPENDIX

## APPENDIX A

### MEANINGFULNESS SURVEY

The purpose of this questionnaire is to measure the meanings of certain things to various people by having them judge them against a series of descriptive scales. A concept will be given to you followed by thirty scales. You are to rate the concept on each of these scales, in order. The scales have seven numbers on them with an adjective on each side. You are to decide which adjective most fits the concept you are rating and then how strongly you would apply this adjective to the concept. Indicate your rating by circling one number along the scale. The closer a number is to either end of the scale, the more strongly you feel that the adjective at that end is the one that most describes the meaning of that concept for you.

Please, remember you can circle any number one through seven and be sure to clearly circle a number for each scale for every concept--do not omit any. Only circle one number on a single scale. Make each item a separate and independent judgement. Work at a fairly high rate of speed. Do not worry or puzzle over individual items. It is your first impressions, the immediate "feelings" about the items that is wanted. On the other hand, please do not be careless because your true impressions are wanted. Are there any questions?

YOUR SEX: FEMALE MALE

YOUR AGE: \_\_\_\_\_

## APPENDIX A (Continued)

MY IDEAL MATE

The concept we are now asking you to rate is an ideal mate as you would like them to be. We are interested in your view of an ideal mate. Please, be sure you keep this concept of an ideal mate for yourself in mind while making your ratings.

important	1	2	3	4	5	6	7	unimportant
successful	1	2	3	4	5	6	7	unsuccessful
beautiful	1	2	3	4	5	6	7	ugly
masculine	1	2	3	4	5	6	7	feminine
strong	1	2	3	4	5	6	7	weak
powerful	1	2	3	4	5	6	7	powerless
active	1	2	3	4	5	6	7	passive
excitable	1	2	3	4	5	6	7	calm
honest	1	2	3	4	5	6	7	dishonest
fair	1	2	3	4	5	6	7	unfair
nice	1	2	3	4	5	6	7	awful
deep	1	2	3	4	5	6	7	shallow
sharp	1	2	3	4	5	6	7	dull
hot	1	2	3	4	5	6	7	cold
flexible	1	2	3	4	5	6	7	rigid
moral	1	2	3	4	5	6	7	immoral
courageous	1	2	3	4	5	6	7	timid
cruel	1	2	3	4	5	6	7	gentle
insecure	1	2	3	4	5	6	7	self-confident

## APPENDIX A (Continued)

knowing	1	2	3	4	5	6	7	unknowing
stupid	1	2	3	4	5	6	7	wise
simple	1	2	3	4	5	6	7	sophisticated
diligent	1	2	3	4	5	6	7	lazy
reputable	1	2	3	4	5	6	7	disreputable
inventive	1	2	3	4	5	6	7	uninventive
rational	1	2	3	4	5	6	7	irrational
solitary	1	2	3	4	5	6	7	sociable
selfish	1	2	3	4	5	6	7	unselfish
logical	1	2	3	4	5	6	7	intuitive

COLLEGE GRADUATE

The concept we are now asking you to rate is the role of college graduate. By college graduate we mean a person who has received a Bachelor's degree from a college or university. We are interested in how you view those people who have received a degree. Please, make sure that you keep this concept of college graduate in mind while making your ratings.

important	1	2	3	4	5	6	7	unimportant
successful	1	2	3	4	5	6	7	unsuccessful
beautiful	1	2	3	4	5	6	7	ugly
masculine	1	2	3	4	5	6	7	feminine
strong	1	2	3	4	5	6	7	weak
powerful	1	2	3	4	5	6	7	powerless
active	1	2	3	4	5	6	7	passive

## APPENDIX A (Continued)

excitable	1	2	3	4	5	6	7	calm
honest	1	2	3	4	5	6	7	dishonest
fair	1	2	3	4	5	6	7	unfair
nice	1	2	3	4	5	6	7	awful
deep	1	2	3	4	5	6	7	shallow
sharp	1	2	3	4	5	6	7	dull
hot	1	2	3	4	5	6	7	cold
flexible	1	2	3	4	5	6	7	rigid
moral	1	2	3	4	5	6	7	immoral
courageous	1	2	3	4	5	6	7	timid
cruel	1	2	3	4	5	6	7	gentle
insecure	1	2	3	4	5	6	7	self-confident
knowing	1	2	3	4	5	6	7	unknowing
stupid	1	2	3	4	5	6	7	wise
simple	1	2	3	4	5	6	7	sophisticated
diligent	1	2	3	4	5	6	7	lazy
reputable	1	2	3	4	5	6	7	disreputable
inventive	1	2	3	4	5	6	7	uninventive
rational	1	2	3	4	5	6	7	irrational
solitary	1	2	3	4	5	6	7	sociable
selfish	1	2	3	4	5	6	7	unselfish
logical	1	2	3	4	5	6	7	intuitive

## APPENDIX A (Continued)

COLLEGE STUDENTS

The concept we are now asking you to rate is the role of the student. By role of student we mean the personality, academic aspirations, extracurricular activities, and formal and informal attitudes of the undergraduate students at a college or university. We are interested in how you view the students attending a university or college. Please, make sure that you keep this concept in mind while making your ratings.

important	1	2	3	4	5	6	7	unimportant
successful	1	2	3	4	5	6	7	unsuccessful
beautiful	1	2	3	4	5	6	7	ugly
masculine	1	2	3	4	5	6	7	feminine
strong	1	2	3	4	5	6	7	weak
powerful	1	2	3	4	5	6	7	powerless
active	1	2	3	4	5	6	7	passive
excitable	1	2	3	4	5	6	7	calm
honest	1	2	3	4	5	6	7	dishonest
fair	1	2	3	4	5	6	7	unfair
nice	1	2	3	4	5	6	7	awful
deep	1	2	3	4	5	6	7	shallow
sharp	1	2	3	4	5	6	7	dull
hot	1	2	3	4	5	6	7	cold
flexible	1	2	3	4	5	6	7	rigid



## APPENDIX A (Continued)

moral	1	2	3	4	5	6	7	immoral
courageous	1	2	3	4	5	6	7	timid
cruel	1	2	3	4	5	6	7	gentle
insecure	1	2	3	4	5	6	7	self-confident
knowing	1	2	3	4	5	6	7	unknowing
stupid	1	2	3	4	5	6	7	wise
simple	1	2	3	4	5	6	7	sophisticated
diligent	1	2	3	4	5	6	7	lazy
reputable	1	2	3	4	5	6	7	disreputable
inventive	1	2	3	4	5	6	7	uninventive
rational	1	2	3	4	5	6	7	irrational
solitary	1	2	3	4	5	6	7	sociable
selfish	1	2	3	4	5	6	7	unselfish
logical	1	2	3	4	5	6	7	intuitive

ME AS I AM NOW

The concept we are now asking you to rate is your self as you are right now. We are interested in how you view yourself. Please, be sure you keep this concept of yourself as you are right now in mind while making your ratings.

important	1	2	3	4	5	6	7	unimportant
successful	1	2	3	4	5	6	7	unsuccessful
beautiful	1	2	3	4	5	6	7	ugly
masculine	1	2	3	4	5	6	7	feminine
strong	1	2	3	4	5	6	7	weak

## APPENDIX A (Continued)

powerful	1	2	3	4	5	6	7	powerless
active	1	2	3	4	5	6	7	passive
excitable	1	2	3	4	5	6	7	calm
honest	1	2	3	4	5	6	7	dishonest
fair	1	2	3	4	5	6	7	unfair
nice	1	2	3	4	5	6	7	awful
deep	1	2	3	4	5	6	7	shallow
sharp	1	2	3	4	5	6	7	dull
hot	1	2	3	4	5	6	7	cold
flexible	1	2	3	4	5	6	7	rigid
moral	1	2	3	4	5	6	7	immoral
courageous	1	2	3	4	5	6	7	timid
cruel	1	2	3	4	5	6	7	gentle
insecure	1	2	3	4	5	6	7	self-confident
knowing	1	2	3	4	5	6	7	unknowing
stupid	1	2	3	4	5	6	7	wise
simple	1	2	3	4	5	6	7	sophisticated
diligent	1	2	3	4	5	6	7	lazy
reputable	1	2	3	4	5	6	7	disreputable
inventive	1	2	3	4	5	6	7	uninventive
rational	1	2	3	4	5	6	7	irrational
solitary	1	2	3	4	5	6	7	sociable
selfish	1	2	3	4	5	6	7	unselfish
logical	1	2	3	4	5	6	7	intuitive

## APPENDIX B

### MEANINGFULNESS SURVEY

INSTRUCTIONS: You are being asked to give your impressions of the meaningfulness of the following items to your life as you live it each day. Place an X mark after the word (Meaningful, Neutral or Meaningless) which best describes the item which it follows. Please do not spend too much time thinking over each item as it is your first impression which is most important. Try to use the neutral category as little as possible and do not skip any of the items. Are there any questions?

1. Cardboard:                    Meaningful\_\_ Neutral\_\_ Meaningless\_\_
2. Higher education is not necessarily a guarantee of higher virtue:                    Meaningful\_\_ Neutral\_\_ Meaningless\_\_
3. The Family Census of 1946: Meaningful\_\_ Neutral\_\_  
Meaningless\_\_
4. Statue:                    Meaningful\_\_ Neutral\_\_ Meaningless\_\_
5. New Zealand's Water Rights Law: Meaningful\_\_ Neutral\_\_  
Meaningless\_\_
6. Ph.D's in Sociology will never be corrupted by Power:  
Meaningful\_\_ Neutral\_\_ Meaningless\_\_
7. My Ideal Mate:                    Meaningful\_\_ Neutral\_\_ Meaningless\_\_

## APPENDIX B (Continued)

8. Sarcode: Meaningful\_\_ Neutral\_\_ Meaningless\_\_
9. Abnormally Normal People: Meaningful\_\_ Neutral\_\_  
Meaningless\_\_
10. College Student: Meaningful\_\_ Neutral\_\_ Meaningless\_\_
11. Me As I Am Now: Meaningful\_\_ Neutral\_\_ Meaningless\_\_
12. Letificant: Meaningful\_\_ Neutral\_\_ Meaningless\_\_
13. Society's Blotting Paper: Meaningful\_\_ Neutral\_\_  
Meaningless\_\_
14. College Graduate: Meaningful\_\_ Neutral\_\_ Meaningless\_\_
15. The Biological Enemy of Freedom: Meaningful\_\_ Neutral\_\_  
Meaningless\_\_

APPENDIX C

SCALES FOR SEMANTIC DIFFERENTIAL

Factor

Evaluative	important 1 2 3 4 5 6 7 unimportant
E	successful - unsuccessful
E	beautiful - ugly
Potency	masculine - feminine
P	strong - weak
P	powerful - powerless
Activity	active - passive
A	excitable - calm
E	honest - dishonest
E	fair - unfair
E	nice - awful
P	deep - shallow
P	rugged - delicate
A	sharp - dull
A	hot - cold
A	flexible - rigid
E	moral - immoral
P	courageous - timid
A	cruel - gentle
P	insecure - self-confident
A	knowing - unknowing

## APPENDIX C (Continued)

Factor

E	stupid - wise
P	sophisticated - simple
A	diligent - lazy
E	reputable - disreputable
P	uninventive - inventive
A	rational - irrational
E	solitary - sociable
P	selfish - unselfish
A	logical - intuitive

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