## http://researchcommons.waikato.ac.nz/

### Research Commons at the University of Waikato

### **Copyright Statement:**

The digital copy of this thesis is protected by the Copyright Act 1994 (New Zealand).

The thesis may be consulted by you, provided you comply with the provisions of the Act and the following conditions of use:

- Any use you make of these documents or images must be for research or private study purposes only, and you may not make them available to any other person.
- Authors control the copyright of their thesis. You will recognise the author's right
  to be identified as the author of the thesis, and due acknowledgement will be
  made to the author where appropriate.
- You will obtain the author's permission before publishing any material from the thesis.

THE EFFECTS OF PSYCHIATRIC STATUS, SEX, AND CONCEPTS RATED ON SEMANTIC DIFFERENTIAL

RESPONSE STYLE

A thesis presented in the Department of Psychology
University of Waikato

In partial fulfillment of the requirements for the Degree of Bachelor of Philosophy

by

PETER NEVILLE PRIEST

OCTOBER 1969

#### ERRATA

(1) Page 31, Table III: The t value across sex for normals (last column) should read 2.65 instead of 2.66.

In the same table the SO for male psychotics should be 13.60, not 2.81

- (2) Page 40: In regard to Hypothesis 3, the data in Table V were misinterpreted while personal concepts proved to be the most sensitive discriminators between male psychotics and male normals, and male and female normals, these concepts were checked significantly less extremely than impersonal concepts. This upsets the conclusion on page 44 that ERS may be evoked by specific concepts representing certain key (personal) objects in the subject's environment.
- (3) Pages 42 and 43: References to Table VI should read Table VII.

### ACKNOWLEDGEMENTS

The author would like to express his appreciation to Mr. B.S. Parsonson, thesis supervisor, for his constant interest, guidance, encouragement and criticism during this study. Thanks are also due to Mr. P.N. Hamid for his assistance, particularly in the sphere of statistical analysis.

The writer appreciated the willingness and enthusiasm of Dr. Henry R. Bennett, Medical Superintendent of Tokanui Psychiatric Hospital, and his nursing staff for this research to be carried out.

My mother is deserving of gratitude for her typing of this thesis.

Finally, the author would like to express his deep thanks to the patients who took part in this investigation. Without them this study would not have taken place and the writer is totally indebted to them.

# TABLE OF CONTENTS

CHAPTER 1		
INTRODU	CTION AND PURPOSE OF THE STUDY	
(1)	The Semantic Differential:	
	(a) Its nature	
	(b) Its uses	-
(2)	Response Styles and Personality	
	Attributes	8
(3)	Explanations of Response Styles	17
(4)	Extreme Response Style and	
	Psychiatric Groups	18
CHAPTER 2		
THE PRE	SENT STUDY	21
(1)	Form of the Semantic Differential	
	used in Present Study	21
(2)	Types of Concepts	24
(3)	Hypotheses	25
CHAPTER 3		
METHOD		26
(1)	Subjects	20

(2)	Controls	26		
(3)	Instructions	29		
CHAPTER 4				
RESULTS		30		
(1)	Hypotheses 1 and 2	30		
(2)	Hypothesis 3	32		
CHAPTER 5				
DISCUSS	ION	38		
(1)	Hypothesis 1	38		
(2)	Hypothesis 2	39		
(3)	Hypothesis 3	40		
(4)	An Unexpected Finding	40		
(5)	Recommendations for Further			
	Research	45		
REFERENCES				
APPENDIX				

### CHAPTER ONE

INTRODUCTION AND PURPOSE OF THE STUDY

The psychological literature contains evidence that the Semantic Differential (SD) (Osgood, Suci and Tannenbaum, 1957) is capable of differentiating psychiatric groups from normal controls on the basis of checking style. There were three specific aims of this present study. The first was to gain further confirmation of the ability of the SD to distinguish psychiatric patients from normal subjects. The second was to see whether the sex of the subject affected his checking style and thirdly, the writer wished to see whether the actual concepts used with the SD affected response tendency. However, before these three hypotheses are discussed in detail an introduction to the SD and a review of the important literature on the instrument are in order.

THE SEMANTIC DIFFERENTIAL - Its nature

The SD was developed by Osgood (1952) who subsequently revised it with two associates (Osgood, et al., 1957). It is intended primarily as an instrument for measuring meaning; it is a standardised and quantified method for measuring the connotations of any given concept for the individual. It consists of a concept at the top of the page and beneath it an array

of seven point rating scales arranged horizontally. The rating scales have at each end of them dichotomous adjectives like fast - slow, or strong - weak. The concept is rated by checking against a position on the scale for each pair of dichotomous adjectives (see example below).

### LOVE

Good	: X:	:::	::	::	Bad
Weak	:			: X:	Strong

## THE SEMANTIC DIFFERENTIAL - Its uses

The use of the SD has extended far beyond that envisaged by Osgood, et al. (1957) as just a measurement of meaning. Helper and Garfield (1965) for example, have administered as SD to American Indian adolescent boarding school students and white adolescents attending a community high school to study acculturation in the American Indian. The subjects were called upon to rate concepts representing values regarded as distinctive in the two groups. Test scores of academic achievement were taken as an independent measure of acculturation within the Indian sample. Differences were observed

between the two groups for certain concepts and the same differences were also present between high - and low - achieving Indians. These latter differences put high - achieving Indians closer to European norms than low achievers. Helper and Garfield (1965) say .... "with appropriate precautions against response bias, the semantic differential appears potentially useful in studying acculturation and attitudes toward ethnic group membership (p. 817)."

Barrett and Otis (1967) gave an SD form to eightyeight counselees with educational and vocational
problems prior to the commencement of counseling and
then at its termination. Differences in ratings
were found especially on concepts relating to self and
the problem. Similar results with counselees were
found by McGreevy and Daane (1967). Concepts which
changed over time were ADJUSTMENT, ALONE, VOCATION,
and MOUTH, that is, concepts pertaining to selfreference.

Earle (1967) set out to study in a sample of English-speaking Cantonese students the phenomenon known as "bilingual semantic merging". Students were categorised into groups according to the extent of assumed similarity between several of their own beliefs

and those of a sample of the endogenous language community, and the second language community. Those students who values reflected more the second language community (English) gained D scores between Chinese and English translations which were significantly lower than those subjects whose values correlated more highly with the native language community.

The SD has been used, unsuccessfully, as an index of suicidal tendencies. Blau, Farberow and Grayson (1967) using psychiatric patients set out to test eleven hypotheses which included the notions that persons who were suicidally disposed would have a poorer selfconcept, lower opinion of their families and greater reliance on external agencies like alcohol. Money and life would not possess high valencies and death would be seen as more attractive for suicidal than nonsuicidal psychiatric patients. From these hypotheses Blau et al. (1967) drew concepts like the following: MYSELF, MY FAMILY, THE PERSON DEAREST TO ME and others. Three supposedly neutral concepts were included. No significant differences between the ratings of these concepts by the suicidals and those of the non-suicidal individuals were found.

Hebron (1968) has used the SD, somewhat obscurely,

to test the predictive validity of the Maudsley Personality Inventory (MPI). She administered the MPI five months prior to an SD assessment of twenty-four undergraduates. She claimed that the four factors found by Osgood, et al. (1957), of potency, activity, and stability are important for the extroversion - introversion continuum and evaluation for the neuroticism dimension. In addition, she stated that mean differences in ratings and correlation for selfevaluation, although less striking, tend to support the usual finding that self-esteem is lower in people who are not adequately adjusted.

Nathanson (1967) examined parent - son relationships in schizophrenia. Three groups of male subjects
(poor premorbid, good premorbid schizophrenics and nonpsychiatric medical patients as controls) rated on
scales representing evaluation, potency, and activity
three different stimulus conditions. The first consisted of verbal statements referring to a scolding,
rejecting, affectionate, and loving mother and father
situation. The second consisted of similar social
situations depicted on ten cards. In these two conditions subjects were required to rate the parents.
The final condition was identical to the second only

the subjects were required to rate the son in the situation. Poor premorbid patients rated the scolding and rejecting parental figures as significantly more potent and active than did the normal subjects. controls rated the affectionate and loving parents as more potent and active than did the poor premorbid subjects. On the word condition the poor premorbids tended not to differentiate between the scolding and rejecting parents. On the other hand, the controls made the clearest discriminations. Again, poor premorbid schizophrenics made the least distinctions between the positively and negatively emotionally toned parental figures and the normal subjects discriminated most clearly. No differences between poor and good premorbid schizophrenics were found and no one group was outstanding in its ratings on the condition requiring subjects to rate the son in the pictured social situations.

The above studies are illustrative of the more unusual, if not ingenious uses of the SD. Many have followed the more orthodox advocation of Osgood et al. (1967) that the SD can be used as a measure of attitude. Jaffe (1967) attempted to ascertain whether amount of contact with persons portrayed as mentally - handicapped

would influence an individual's attitude toward such people. Using high school seniors he found no significant difference in ratings on the SD evaluative factor. Hartley (1968) conducted a social sensitivity training programme with a group who had completed a SD form prior to the commencement of the programme. A post-training SD was administered and the results showed that individuals saw a diminishing of the "distance" between themselves and the rest of the group. They also saw themselves as being more similar to the group than on the first occasion.

Blizard (1968), in endeavouring to measure public attitudes to the mentally-ill, gave an SD to a sample of two hundred and thirty-six persons. They were called upon to rate concepts relevant to psychiatric illness. The results tended to reveal an increasing awareness of types of mental illness in the New Zealand urban community.

Several studies have appeared reporting research into basic propositions underlying the rationale of the SD and these are worthy of mention by way of conclusion of this section. Mordkoff (1965) tested the assumption that ... "the nominally opposite adjective - pair scales which comprise the Semantic Differential possess one of the properties attributed to them in

the model proposed by Osgood (1962) to account for the operations of semantic differentiation (p. 691)." He gave forty-three undergraduates an SD form with scales representing the three factors (Osgood, et al. (1957). The subjects were asked to rate twelve adjective pairs (the concepts) like COLOURFUL-COLOURLESS, IMPORTANT-UNIMPORTANT. The null hypothesis was that the mean rating of the nominally opposite adjectives would be zero. Eleven of the twelve adjective-pairs were found to deviate significantly from functional antonymy at the .01 level or better, supporting the use of the SD.

Recently Worthy (1969) has suggested that neutral checking can be indicative of a response style. Seventy-four subjects rated eighteen concepts (e.g. animals, objects, parts of clothing, and parts of the body) on six potency loaded scales of the SD. Correlation of mid-point and extreme scores indicated that for subjects who check "extremely" there is also a tendency to make neutral responses.

### RESPONSE STYLES AND PERSONALITY ATTRIBUTES

Adorno, Frenkel-Brunswik, Levinson and Sanford (1950) used in their research into Anti-Semitism several scales they had devised themselves. Their F scale in particular has been criticized for its susceptibility to

"acquiescence response style" because all the statements were worded in such a way that a person who fulfilled the criteria for the so-called "authoritarian personality" would respond affirmatively to every statement. Many say criticism of this is unwarranted as "acquiescence response style" is itself a manifestation of the "authoritarian personality". This has yet to be proved. Berg (1961) in speaking of biases says they are relatively stable, occur in diverse situations, and in both important and unimportant areas of behaviour. He adds that, by means of statistical analysis of deviant responses, different groups or classes of individuals can be distinguished from others. Sherif and Hovland (1961) report finding patterns of response in attitude scaling. Osgood, et al. (1957) have observed consistent response modes in the SD.

So the question has to be asked; can response style be regarded as a personality variable? Hamilton (1968) states that before it can be regarded as such it has to be demonstrated to be both general and stable. He goes on to say that response style, or more specifically, Extreme Response Style (ERS) has been proven reliable on test - retest and split - half conditions, thus fulfilling the "generality" criterion. Summarizing between

test ERS correlations on a variety of tests, Hamilton (1968) reports that they range from .28 to .88. Positive ERS and negative ERS, that is, the tendency to check one end of the rating scale as well as the other, has yielded correlations between .12 and .89. However, Hamilton points to two biasing factors. The first he mentions is the amount of content in the stimulus items; the second, the similarity of item format in the tests being correlated. Yet he adds, "In spite of these and other contaminating influences, the findings reported .... indicate a substantial degree of cross - test consistency (p. 195)". In addition, Hamilton points out that both positive and negative ERS have been found to exist. The correlations are not large, but are positive and significant.

One of the methods for studying ERS and personality attributes is the comparison of ERS propensities in different criterion groups. Studies of this type will be reviewed.

#### ANXIETY

Osgood, et al. (1957) have supplied evidence that ERS can be produced by increased general anxiety. However, Kerrick's (1954) findings contradict this as she observed ERS in high but not in low intelligence subjects.

She noted that with college students anxiety made high intelligence subjects less able to discriminate and in low intelligence subjects better able to discriminate. Brod, Kernoff and Terwilliger (1964) investigated what they call "discrimination" which is best defined as the opposite of response bias, and its relation to Scholastic Aptitude Test scores, anxiety (as measured by the Taylor Manifest Anxiety Scale (MAS) and lie scores. They reported a positive correlation between anxiety and discrimination (but no significant negative correlation between anxiety and response bias). No correlation between aptitude and discrimination was found although the M.M.P.I. Lie score and response bias was found to be positively correlated. Mueller (1966) sought to examine the relationship between anxiety and "inferred identification". The concepts MY FATHER, MY MOTHER, and ME were administered to two criterion groups consisting of one hundred and sixty males and one hundred and forty-one females selected on the basis of quartile variations on the MAS. The general finding was that low-anxiety subjects were less variable in their responses and they portrayed themselves and their parents as more active, potent and more positively than high-anxiety subjects. MY FATHER - ME was the factor representing

evaluation that distinguished the two criterion groups.

In conclusion, Hamilton's (1968) remarks concerning reports of a relationship between anxiety and ERS are important. He points out that such a relationship where it has been found, is probably due more to intelligence level than actual anxiety. Neuringer (1963) claimed that intelligence was not overtly interferring in regard to anxiety. However, as Hamilton (1968) says, it has been found (e.g. Kerrick, 1954) that high I.Q. high anxiety subjects tended to display more ERS than low I.Q. - high anxiety subjects. Furthermore, Marks (1965) has stated that the studies carried out by Bopp (1955), Osgood, et al. (1957), Neuringer (1963), Arthur (1963) represent work done on diverse diagnostic groups and it is probable that all had "higher general anxiety levels" which could explain their scale checking styles. So, the nature of the relationship between anxiety and ERS is thus far unknown.

SEX

Hamilton (1968) states there is a sex difference in degree of ERS. Although there is some equivocation it seems that females tend to check the extremes of the scales more than males. A recent study by Parsonson (in press) supports these results. Testing three groups - normal, neurotics and psychotics of both sexes he found female

patients (both neurotic and psychotic) tended to check more extremely than their male counterparts. No such difference was observed between normal males and females.

INTELLIGENCE

As has been mentioned, intelligence level does seem to have a bearing on ERS. The general rule appears to be that the lower the I.Q. the more ERS. Neuringer, (1963) failed to find any relationship between checking style and intellectual level as measured by the Information subtest of the Wecksler-Bellevue Intelligence Scale, Form 1. However, he stated, "It is strongly felt here that failure to find such a relationship may be due to the error of considering intelligence as a unified entity and thus accepting single intelligence scores as reflecting that entity (p. 280)". Concomitant with the relation between intelligence and ERS is the finding that persons from lower occupational strata display more ERS than those from higher occupational groups.

ERS also tends to be exhibited by young children and the aged more than the intervening age range. ERS seems to diminish during adolescence. Light, Zax, and Gardiner (1965) focused on ERS in relation to children in three age - school grade levels, sex and intellectual level. The subjects were divided up into four groups:

high I.Q. males, high I.Q. females, low I.Q. males and low I.Q. females. The children rated ten Rorschach inkblots and, consistent with the abovementioned trend, brighter and older subjects exhibited significantly less ERS. However, no significant sex differences were found. These results the authors construe as support for the developmental theories of Piaget, Werner, and Lewin who propound that cognitive functioning progresses from homogeneity to heterogeneity and that cognitive structures become more differentiated. With regard to the elderly Welford (1961) has shown that older people tend to have problem - solving methods which are qualitatively different to those of younger persons. It is not unreasonable to assume then, that the criteria they use for checking on something like the SD are different in kind to those used by younger persons. There are some who assert that the elderly return to the relative homogeneity in their cognitive structures that they possessed in their childhood. This may explain the greater ERS found in the very young and the old. Neuringer (1963) states that the intensity of SD ratings appears to be related to neuropsychiatric status. Interestingly enough, he also says .. "The effects of emotional disturbance on perception of intensity diversity may be related to the neurotic's need

to organise his world in a simple manner, making it more manageable. In this sense, lack of intensity diversification may be related to the same dynamics that produce rigidity in perception and thinking (p. 280)". The present author considers that "the neurotic's need to organise his world in a simple manner" may be coterminous with, if not identical to, a switch from the heterogeneity to homogeneity normally associated with the cognitive functioning of the aged.

An important caveat must be added to the findings regarding ERS differences as a function of intelligence, occupational status and age. Parsonson (personal communication) has suggested that ERS on the SD in particular may not reflect individual differences in age, socioeconomic level, psychiatric status, etc so much as a misunderstanding of the test instructions. It is logical to reason that lesser intelligent, younger (or older), lesser educated, less well adjusted people may experience difficulty in comprehending the rather complicated and slightly vague instructions compiled by Osgood, et al. (1957). (An attempt has been made to eliminate this variable in the present study).

The author would definitely dispute with Hamilton (1968) that such attributes like sex, occupational status,

and age can be called "personality variables". They are demographic and sociological variables. Admittedly, they are antecedents of behaviours and this leads into an area which will be dealt with in more detail later, namely, that to some extent ERS tells one as much about the stimulus that the subject is called upon to rate as it does about the subject doing the rating.

#### CONCEPTS

No real attempt has been made to delineate which type of concept, if any, is the most sensitive discriminator between psychiatric groups and normals. Luria (1959) noted that the personal concepts (e.g. ME) tended to be the most effective differentiators between the neurotic therapy group and normals. Similarly, Marks (1965) and Walkey and Boshier (1969) found personal concepts to be sensitive in relation to ERS. (1968) regards stimulus content as one factor which can bias the reliability of ERS so it was felt the effectiveness of types of concepts as discriminators should be investigated. Parsonson's (1965) finding that deluded and non-deluded psychiatric patients could be differentiated on the basis of their ratings of their symptoms shows that certain objects, either material or abstract. can hold different meanings for different people.

#### EXPLANATIONS OF RESPONSE STYLE

Arthur and Freemantle (1966) have endeavoured to provide a cognitive explanation for ERS. They state "that normal Ss who respond with extreme responses on the semantic differential do so because of a greater availability of (a) intense responses which they (b) do not inhibit (p. 399)". They also state that verbal responses common in the population are more intense and are more available and so on a word association test one would predict that respondents who display ERS would also give responses that were relatively common or have greater associative commonality. Their study yielded a product - moment correlation, coefficient of .34 which although small is taken by the authors to support their hypothesis. Gibbins (1968) has hypothesized that there are two independent response styles in action in the SD. These are firstly, a tendency to use the neutral category with consistent frequency and secondly, a tendency to make evaluations in a particular direction. To test these hypotheses he administered a battery of tests including the Agreement Response Scale, the Extremity Response Style, Estimation Questionnaire, the MMPI and many others to a sample of female college students. He interpreted his findings as support for the notion that

the consistent neutral checking was influenced by ERS and that "generalization" is not a single but several response styles. The content of the stimulus material determines which "style" is in operation. Using the State of Happiness and Optimism of General Outlook scale he found that the evaluative response set is related to the subject's optimism in outlook.

### EXTREME RESPONSE STYLE AND PSYCHIATRIC GROUPS

Arthur (1966) incorrectly infers that Osgood, et al. (1957) have claimed that psychiatric patients could not be typified by polar or dichotomous judgements on the SD. However, Osgood, et al. (1957) did report a study by Bopp (1955) who found that although a greater percentage of schizophrenics (41%) exhibited ERS when compared with normals (36%) the difference was not statistically significant. Luria (1959) used the SD as a measure of improvement in neurotic patients undergoing psychotherapy and found that neurotics were characterized by less ERS than normal controls although the difference was not statistically significant. This is the only reported instance of a complete reversal of what has become a fairly consistent trend. However, her report is marred by the lack of tests of significance on response tendency data and Arthur (1965) says, ... "it is not

likely that university clients are neurotic in the same way as hospitalized neurotics. The set to respond to extreme positions could be more marked for the more psycho-neurotic disturbances. Moreover clients in therapy with psychologists may adopt special attitudes to psychological tests." Arthur (1965) also says that Luria's (1959) sample of college sophomores also tended to check more extremely than might be expected, so it is possible that in her study Luria's (1959) concepts or instructions were such as to encourage extreme ratings in the students but not in the sample of clients.

Neuringer (1961, 1963) administered a SD form, in the first study to suicidal persons, and in the second to neuro-psychiatric patients and found that these two groups tended to use the extreme position more than normals. Zax, Gardiner, and Lowy (1964) compared ratings by three groups (male schizophrenics, maladjusted female undergraduates and children hospitalized for emotional disorder, each with matched controls) on ten Rorschach cards and, in the case of the children, the Blacky Test. They found that the maladjusted groups checked the extremities of the SD more than the normals. Marks (1965) reported that psychopaths were differentiated from normals but not from obsessionals on the basis of ERS.

Arthur (1966) presented the results of two studies which showed that response bias could be used as an index of the severity of psychiatric disorder. ERS was reported to have occurred more frequently in psychotics than neurotics. Parsonson (1969) has taken issue with Arthur over whether ERS can be used as an indicator of the degree of maladjustment. In his investigation Parsonson (1969) replicated Arthur's finding in that ERS differentiated normals from psychiatric patients in an absolute fashion but did not find that psychotics tended to check the extremities of the SD scales significantly more frequently than neurotics. Walkey and Boshier (1969) found nonpsychopathic delinquents and psychopathic delinquents, when taken together, checked the extremes more frequently than normals.

## CHAPTER TWO

THE PRESENT STUDY

# FORM OF SEMANTIC DIFFERENTIAL USED IN PRESENT STUDY

The SD form used in the present study consisted of eight scales (see table 1, page 22).

TABLE I

EXAMPLE OF A PAGE FROM THE SEMANTIC DIFFERENTIAL USED

IN THE PRESENT STUDY

	ME							
	Very	Quite	Slightly	or Both	Slightly	Quite	Very	
good	:	_:		_:_	_:_	:	:	_: bad
personal	:	_:	-:	_:_	_:_	_:	<u>:</u>	_:public
unimportant	:		_:	_:_	_:_	_:	-:	_:important
passive	:	_:	_:	_:_	;	_:	_:	_:active
strong	:	_:	_:_	_:_	_:_	_:	_:	_:weak
beautiful	:	_:	_:_	_:_	_:_	_:	_:	_:ugly
steady	:	-:	_:		_:_	_:	_:	_:changeable
heavy					_:	:	<u>:</u>	_:light

Two represented the evaluation factor derived by Osgood, et al. (1957); these were good - bad and beautiful - ugly. Two were supposedly representative of the potency factor; strong - weak and heavy - light. The scale important - unimportant was taken from Osgood, Ware and Morris' (1961) investigation where they delineated a factor called "successfulness". Another factor found in that study, "predictability", was represented in the present study by the scale steady - changeable.

Personal - public was included because it seemed applicable to psychiatric symptoms. Parsonson (personal communication) has reported that this last scale proved to be an effective differentiator of psychotic patients from neurotics.

There was one marked departure in the present study from the usual form of presentation of the SD. Parsonson (personal communication) has said that it is possible that the results frequently obtained with the SD may be due to a misunderstanding of the rating procedure. To eliminate this as a variable the seven categories of the rating scale were labelled with their meanings or "intensities" (see table 1).

#### TYPES OF CONCEPTS

Four categories of concepts were used. The four classes were termed intense - personal, nonintense - personal, intense - impersonal and nonintense - impersonal. The "intense" component means the concept was intended to have fairly strong emotional connotations (i.e. usually capable of conjuring up either positive or negative feelings). The "personal" aspect indicates that the concept was meant to have application specifically for the respondent (i.e. "ownership" of the characteristic). The twelve concepts originally selected were;

- (1) intense personal: ME, MY MOTHER, MY ILLNESS.
- (2) Intense impersonal: WAR, SIN, SEX.
- (3) non-intense personal: MY HAT, MY COAT, MY SHOES.
- (4) non-intense impersonal: WOOD, CARDBOARD, STATUE.

The twelve concepts were randomly arranged in a list and this was presented, along with the four concept category titles, to a small sample (thirteen) of university library staff who were asked to place each of the concepts into one of the four categories. There was fairly good agreement on all the concepts; the majority were placed into the above categories. However, SIN and SEX were, unexpectedly, seen by the majority as intense -

personal concepts rather than intense - impersonal so these were substituted by ABORTION and ATOMIC BOMB.

### HYPOTHESES

The three hypotheses to be investigated may be stated formally thus;

HYPOTHESIS 1: That psychotic patients will check more extremely (display more ERS) on the SD than will the normal controls.

HYPOTHESIS 2: That there will be a sex difference in checking styles on the part of the psychotics.

HYPOTHESIS 3: That there will be concepts which will significantly differentiate psychotics and normals on extreme responding.

### CHAPTER 3

METHOD

SUBJECTS

Twenty-one psychiatric patients, eleven male and ten female, were tested. All subjects were classifiable as "functional psychotics", being diagnosed in the main, as schizophrenics although there were several vague classifications such as "depressive psychosis" and "affective psychosis". Owing to vagaries in current nosologies it was decided not to use the separate psychotic subtypes. The male normal sample comprised ten psychiatric nurses. The female sample consisted of eight psychiatric nurses and two suburban housewives. CONTROLS

Age, intelligence and length of education were all controlled for both psychiatric patients and normals. An age range of twenty to fifty-five was upheld.

Intelligence was measured on the Mill - Hill Vocabulary

Test (Senior Form 11, Set B). This test was regarded as the most applicable because of its verbal content; this bearing close relationship to the actual experimental task. Only subjects with I.Q's. between 80 - 120 were included. Data on age and years of education were gained by the experimenter in a personal interview with

the subject. t - tests were applied to each of these variables and as can be seen from table II on page 28, no significant differences were found between normals and psychiatric subjects (p<.05).

TABLE II

MEANS AND STANDARD DEVIATIONS FOR AGE, I.Q. (MILL-HILL RAW SCORE), AND YEARS OF EDUCATION FOR MALE AND FEMALE NORMALS, AND PSYCHOTICS\*

GROUP	AGE Mean S.D.		I.(		LENGTH OF EDUCATION Mean S.D.		
Normal Males (N=10)	34.64	10.20	61.40	8.22	10.65	1.49	
Normal Females (N=10)	33.63	9.49	60.60	6.54	10.65	1.83	
Psychotic Males (N=11)	35.92	11.72	63.64	10.95	11.27	2.09	
Psychotic Females (N=10)	41.47	8.57	59.60	7.41	10.18	1.50	

<sup>\*</sup> No statistically significant differences (t - test)
were found either between males or females or across
psychiatric status, with respect to these variables
(p<.05).

#### INSTRUCTIONS

As with the SD itself there was a departure from the usual instruction format used by Osgood, et al. (1957). There were the usual examples employing each checking position but these were labelled with their intensities i.e. "very", "quite", "slightly", and so on. Also each example of a checking position actually had a concept (not those used in the experimental task) above it. Each subject was given a cyclostyled sheet of these instructions and the experimenter read through these with the subject who was required to "check" the form in the manner appropriate to the concept they were judging (see appendix 1). If there was any doubt about the procedure the experimenter reiterated part of the instructions as the situation required. The subject then continued with the SD

### CHAPTER 4.

RESULTS

TREATMENT OF DATA

The raw data was analyzed in the manner described by Parsonson (1969). The number of checkings in each category (1 to 7) were summated and these "scores" were recorded for each concept in the series. These "scores" were then grouped into scale positions: "extreme" (categories 1 and 7); "intermediate" (categories 2, 3, 5 and 6) and "neutral" (category 4).

#### HYPOTHESES 1 AND 2

patients will check the extremes more frequently than will normal controls, and that there will be a sex difference between psychotics in checking styles t - tests were conducted on the summations of the extreme scale position "scores". The results appear in table III on page 31. There was a significant difference between normal and psychotic males (p<0.02) on extreme checking (the latter group checking more extremely). There was also a significant difference between normal males and normal females (p<0.01) with the normal females checking more extremely.

TABLE III

# MEANS AND STANDARD DEVIATIONS OF EXTREME SCORES OF ALL GROUPS AND THE t-VALUES COMPARING THEIR DIFFERENCES ACROSS PSYCHIATRIC STATUS AND SEX

	Scale Position	Group	Male M	s SD	t (across psychiatr status)	Fema.	les SD	t (across psychiatri status)	t (across c sex)
I	Ext no mo	Normal	21.30	9.81	2 1.14	32.90	9.75	1 72	2.66**
	Extreme	Psychotic	33.91	2.81	2.41*	42.40	20.53	1.32	1.13

\*p<0.02; \*\*p<0.01 (one-tailed)

### HYPOTHESIS 3

The testing of hypothesis 3 involved determining which concepts gave rise to significant differences in checking style between psychotics and normals.

t - tests were computed between these two groups for each sex on each concept. Table IV on page 33 contains the results.

TABLE IV

MEANS AND STANDARD DEVIATIONS OF EXTREME SCORES ON INDIVIDUAL CONCEPTS OF ALL GROUPS

AND THE \*L-TESTS COMPARING THEIR DIFFERENCES ACROSS PSYCHIATRIC STATUS AND SEX

CONCEPT	GROUP	M	ALES	t (across psychiatri status)		MALES SD	t (across psychiatri status)	t (across c sex)
ME	normal psychotic	0.80	1.31	0.99	1.10	0.99	2.59**	0.57 2.27*
MY MOTHER	normal psychotic	1.40	1.65	1.94*	3.20	1.55	0.512	2.52*
MY ILLNESS	normal psychotic	0.50	0.97	2.67**	1.80	0.63	1.34	3.55*** 0.68
WAR	normal psychotic	4.40 5.36	2.32 2.25	0.97	5.20	1.99	0.23	0.83
ABORTION	normal psychotic	2.80	1.87	0.90	2.70	0.67	1.73*	0.16
ATOMIC BOMB	normal psychotic	4.90	1.80	0.48	5.20 5.50	1.99	0.34	0.35
MY HAT	normal psychotic	0.80	1.23	1.95*	2.00	1.76	0.28	1.77*
MY COAT	normal psychotic	0.70	0.82	2.45*	1.90 2.90	2.42	0.94	1.48

TABLE IV (continued)

CONCEPT	GROUP	М	MALES	t (across psychiatri status)		FEMALES SD	t (across psychiati status)	t (across ric sex)
MY SHOES	normal psychotic	1.30	1.64	1.10	2.60	1.35 1.65	0.29	1.94*
WOOD	normal psychotic	1.70	2.16 2.12	1.29	3.30 3.90	2.16 2.69	0.55	1.65
CARDBOARD	normal psychotic	0.80	1.14	2.82**	1.30	1.16 2.58	1.90*	0.97
STATUE	normal psychotic	1.20 2.36	1.62 2.06	1.43	2.50 3.70	1.58 2.54	1.27	1.82* 1.33

\* p < .05; \*\* p < .02; \*\*\* p < .01. (one-tailed)

From these results it seemed that personal concepts (both intense and nonintense) were the most sensitive discriminators of male psychotics and male normals and male normals and female normals. Also it was considered that the four concept subtypes were unmanageable and perhaps too ill-defined. Thus the concepts were collapsed into two groups, "personal" and "impersonal" and t - tests were conducted on these groups. The results appear in table V on page 35.

MEANS AND STANDARD DEVIATIONS OF EXTREME SCORES ON PERSONAL AND IMPERSONAL CONCEPTS

(INTENSE AND NONINTENSE COMBINED) OF ALL GROUPS AND THE t-VALUES COMPARING THEIR

DIFFERENCES ACROSS PSYCHIATRIC STATUS AND SEX

TABLE V

CONCEPT	GROUP	м.	LES SD	t (across psychiatric status)		ALES	t (across psychiatric status)	t (across sex)
PERSONAL (intense and nonintense)	Normals Psychotic	5.50 72.64	4.77 6.67	6.19	12.60 16.10	5.78 10.98	0.89	3.00* 0.88
IMPERSONAL (intense and nonintense)	Psychotic	15.80 s 20.36	6.12 9.08	1.34	20.20	6.00	1.31	1.62

<sup>\*</sup> p < .01 (one-tailed)

As can be seen from table V, personal concepts differentiated male normals and psychotics (p<.01) and male normals and female normals (p<.01) whereas impersonal concepts made no such discriminations.

From the above results one further very important conclusion can be drawn; that there is practically no difference in the checking styles of male psychotics. female psychotics, and female normals. There is only one concept (ME) which differentiated female normals from female psychotics and only two (MY MOTHER and MY ILLNESS) which distinguished male psychotics from female psychotics (see table IV). The lack of differentiation between these groups is reflected in subsequent statistical treatment (see table V). To further substantiate the lack of difference between male psychotics and female normals t - tests were computed on the two concept types across both sex and psychiatric status, i.e. male normals were compared with female psychotics and male psychotics with female normals. The results are contained in table VI below. Female psychotics checked significantly more extremely than male normals on both personal (p<0.01) and impersonal concepts (p<0.01). No such differences were found between male psychotics and female normals.

TABLE VI

MEANS AND STANDARD DEVIATIONS OF EXTREME SCORES ON PERSONAL AND IMPERSONAL CONCEPTS

(INTENSE AND NONINTENSE COMBINED) AND THE t-VALUES COMPARING THEIR DIFFERENCES

BETWEEN MALE NORMALS AND FEMALE PSYCHOTICS AND MALE PSYCHOTICS AND FE
MALE NORMALS.

CONCEPT TYPE	PSYCHIATRIC STATUS	MA M	LES SD	PSYCHIATRIC STATUS	FEMA:	LES SD	t
PERSONAL (intense and nonintense)	Normals Psychotics	5.50 12.64	4.77 6.67	Psychotics Normals	16.10 12.60	10.98 5.78	280**
IMPERSONAL (intense and nonintense)	Normals Psychotics	15.80 29.36	6.12 9.08	Psychotics Normals	25.20 20.20	10.49	2.45* 0.05

<sup>\*</sup> p<0.02; \*\* p<0.01 (one-tailed)

## CHAPTER 5

#### DISCUSSION

HYPOTHESIS 1. The data partially support hypothesis 1 in that male psychotics checked the extremes significantly more than male controls (see table III on page 31). However, this was not the case with females. The difference in ERS between male normals and psychiatric patients is in accord with the findings of Arthur (1966), Zax et al. (1964), Neuringer (1961, 1963) and Parsonson (1969) all of whom report a difference in checking style not only between male groups but female samples as well. These results also counter Bopp's (1955) data and Luria's (1959) conclusion that abnormal groups are not characterized by ERS on the SD.

Parsonson (1969) has postulated that, "the type of judgement processes demanded by the semantic differential is affected by emotional maladjustment, in that abnormal individuals have a reduced capacity for making discriminative judgements ..... Normal Ss, on the other hand, spread their judgements more evenly over the range of possible response categories (p. 574)". The present writer contends that this statement, in view of the present results, seems to ignore the intrinsic importance of the concept rated and, of course, the object it

represents. Arthur (1966) shows similar disregard for the significance of concepts. He remarks "that response bias is a reliable person characteristic (p. 103)". However, the present study seems to indicate that ERS is not "reliable" in the sense that it will be observed in psychiatric patients regardless of concepts used.

HYPOTHESIS 2. Parsonson (in press), after finding significant differences between male and female psychiatric groups noted that the sex of the rater was an important variable in examining ERS in psychiatric populations but not in normal samples. The present results (see table III) did not confirm hypothesis 2: that there would be a significant difference between male and female psychotics. Unexpectedly, a sex difference in checking style was observed between male and female controls. So, contrary to Parsonson's (in press) finding, sex difference does appear to be an important variable in the scale - checking styles of normal subjects in this present study. The small sample size and the difference in concepts used must be kept in mind. Hamilton (1968) in his summary of ERS research reports equivocal findings but in only one study out of eighteen did males rate significantly more extremely than females. So it appears that when sex differences do occur it is more

probable that females will display more ERS than males. This paradigm receives support from the present study.

HYPOTHESIS 3. This hypothesis that there will be a particular type of concept which the psychotic patients will rate more extremely is supported. Table V shows the delineation of the concepts into two homogeneous groups and one sees that, as a group, personal concepts (e.g. MY ILLNESS. MY COAT) were the most sensitive discriminators between male psychotics and male normals as well as between male and female normals. The writer will offer an explanation of the prevalence of extreme checking in these groups in the next section. AN UNEXPECTED FINDING

As mentioned in chapter four there seems to be little difference in the checking styles of male psychotics, female psychotics, and female normals. Further, three out of five concepts which differentiated male psychotics and male normals also distinguished male normals from female psychotics. The writer deduced that there is a similarity in the attitudes or at least expression of attitudes among these groups. This may involve sex roll learning. Myers and Roberts (1958) have pointed out that American male schizophrenics come, in the main, from homes which are, as far as the male schizophrenic

is concerned, mother - dominated. There are crosscultural exceptions to this: Opler (1957) found that the homes of Italian male schizophrenics tended to be patriachically - dominated. However, if the families of male schizophrenics in New Zealand follow the American pattern of mother prominence, one might predict that the male schizophrenic learns predominantly "feminine" attitudes toward "personal" objects in the environment. Myers and Roberts (1958) mention that the families of female schizophrenics tended to be patriachically - oriented. So, why did the female psychotics check similar to male normals? The answer would seem to be that the personal concepts used by the present author were predominantly feminine - orientated i.e. they tended to favour female attitudinization. test this out twenty-four male and twenty-five female university students rated the twelve concepts on a seven-point rating scale representing a "men - women" importance continuum i.e. scale position 1 was taken to mean very important for men, a check position 7 means very important for women. The number of ratings in positions 1, 2 and 3 and 5, 6 and 7 were added and chisquare tests across sex conducted to test for agreement on concepts. Mean ratings were then computed to see

whether in fact the personal concepts had been rated as being more important for women. The results appear in Table VI on page 43.

TABLE VI

MEAN RATINGS ON CONCEPTS ( A RATING LESS THAN 4 INDICATES GREATER IMPORTANT FOR MEN, A RATING GREATER THAN 4 INDICATES GREATER IMPORTANCE FOR WOMEN).

CONCEPT	MEAN RATING	CHI-SQUARE FOR TEST FOR AGREEMENT ON RATINGS
ME	3.49	1.76
MY MOTHER	4.51	2.92
MY ILLNESS	5.02	0.74
WAR	2.59	8.20*
ABORTION	5.59	0.54
ATOMIC BOMB	3.61	0.40
MY HAT	4.80	3.10
MY COAT	4.61	3.19
MY SHOES	4.67	8.90*
WOOD	3.22	0.51
CARDBOARD	3.94	0.13
STATUE	3.98	2.48

<sup>\*</sup> p<0.05 1 df.; (one-tailed)

There was disagreement on only two concepts, WAR and MY HAT (p<0.05). So the hypothesis that the personal concepts which distinguished male normals from male psychotics, female psychotics and female normals would be seen as more important for women is born out by these results. All but one of the personal concepts (ME) were rated as being more important for women.

How does one explain the processes which might bring all this about? Parsonson (in press) has suggested that ERS may represent "judgemental conservatism" or constriction which may, in turn, be at first more characteristic of females. "The overall results of (Parsonson's) study indicate that, whilst extreme responses may be more characteristic of females, severely disturbed males may also display a pattern of increasing judgemental conservatism." Such an explanation may be applied to the present findings with the caveat that such conservatism may be elicited by a specific type of concept. This concept type probably represents certain key objects in the individual's environment.

Utilizing a perceptual judgement task Wallach and Caron (1959) found that girls were more conservative than boys, tending to constrict the scope of their judgements.

Just the reverse was the case for boys, who made more discriminative categorizations. Lynn (1962), and Sherman (1967) have postulated an interacting nexus between sex role identification and sex differences in visual perception studies of cue-dependency like that reported by Wallach and Caron (1959). Sherman and Smith (1967) have provided partial support for Lynn's (1962) hypothesis.

The general findings of the present study suggest that ERS in psychiatrically - disturbed individuals may signify a shift towards greater cue-dependency. This would explain the trend toward emphasized female judgemental conservatism displayed by both psychotic males and females.

#### RECOMMENDATIONS FOR FURTHER RESEARCH

Hamilton (1968) has suggested that when ERS is being used as a test of hypotheses some other independent measure of the variable involved is highly desirable. Substantiation of greater judgemental conservatism among psychotic males and females is needed. Further studies using the SD and say, a perceptual judgement task similar to that of Wallach and Caron (1959) may provide further evidence. Along with this should go the delineation of those concepts which elicit this judgemental

conservatism. These hypotheses may be researched by say, exposing visual stimuli tachistoscopically and then lengthening the exposure interval to see what effect different levels of complexity of information has on cue-dependency and judgemental conservatism.

Along with this could go the presentation of an SD form including a description supplied with each concept. The amount of relevant information given in each descriptive passage could be varied.

#### REFERENCES

- ADORNO, T.W., FRENKEL-BRUNSWIK, ELSE, LEVINSON, D.J. and SANFORD, R.D. (1950) The Authoritarian Personality. New York: Harper.
- ARTHUR, A.Z. (1963) <u>Delusions: A Theoretical</u>,

  <u>Methodological and Experimental Study</u>.

  Unpublished doctoral thesis: University of London.
- ARTHUR, A.Z. (1965) Response Bias in the Semantic Differential. Unpublished Paper.
- ARTHUR, A.Z. (1966) Response Bias in the Semantic Differential. Brit. J. soc. clin. Psychol., 5, 103 107.
- ARTHUR, A.Z. and FREEMANTLE, ANNA (1966) Extreme
  Response Bias and Associative Commonality.

  Psychon. Sci., 6, 399.
- BARRETT, G.V. and OTIS, J.L. (1967) The Semantic

  Differential as a Measure of Changes in Meaning
  in Educational and Vocational Counseling.

  Psychol. Rep., 20, 335 338.
- BERG, I.A. (1961) Measuring Deviant Behaviour by

  Means of Deviant Response Sets.

  In I.A. Berg, and B.M. Bass, (Eds).

  Conformity and Deviation. New York: Harper

and Brothers, 1961.

- BLAU, K.P., FARBEROW, N.L. and GRAYSON, H.M. (1967)

  The Semantic Differential as an Indicator of

  Suicidal Behaviour and Tendencies. <u>Psychol</u>.

  Rep., 21, 609 612.
- BLIZARD, P.J. (1968) Public Images of the Mentally
  Ill in New Zealand. N.Z. Med. J., 68
  297 303.
- BOPP, JOAN (1955) A Quantitative Semantic Analysis of Word Association in Schizophrenia. Unpublished doctoral dissertation, University of Illinois.

In C.E. Osgood, G.J. Suci, and P.H. Tannenbaum,

The Measurement of Meaning. Urbana, Ill.:

University of Illinois Press, 1957.

- BROD, DIANE, KERNOFF, PHYLLIS, and TERWILLIGER, R.F. (1964)

  Anxiety and Semantic Differential Responses.

  J. abnorm soc. Psychol., 68, 570 574
- EARLE, MARGARET J. (1967) Bilingual Semantic Merging and aspect of Acculturation. J. pers. soc.

  Psychol., 6, 304 312.
- GIBBINS, K. (1968) Response Sets and the Semantic Differential. Brit. J. soc. clin. Psychol. 7, 253 263.

- HAMILTON, D.L. (1968) Personality Attributes associated with Extreme Response Style. <u>Psychol. Bull.</u>, 69, 192 203.
- HARTLEY, JANE A. (1968) A Semantic Differential Scale for assessing Group Process Changes. J. clin.

  Psychol., 24, 74.
- HEBRON, MIRIAM E. (1968) A Note on the Predictive

  Validity of the MPI as tested by a Semantic

  Differential Technique. Brit. J. Psychol.,

  59, 473 474.
- HELPER, M. and GARFIELD, S.L. (1965) Use of the Semantic Differential to study Acculturation in American Indian Adolescents. J. pers. soc. Psychol., 2, 817 822.
- JAFFE, J. (1967) Attitudes and Interpersonal Contact:

  Relationships between Contact with the Mentally

  Retarded and Dimensions of Attitude. <u>J.</u>

  counsel. Psychol, 14, 482 484.
- KERRICK, JEAN S. (1954) The Effects of Intelligence and Manifest Anxiety on Attitude Change through Communication, unpublished doctoral dissertation. University of Illinois.
  - In C.E. Osgood, G.J. Suci, and P.H. Tannenbaum, <u>The Measurement of Meaning</u>. Urbana, Ill: University

- of Illinois Press, 1957.
- KERRICK, JEAN S. (1969) Dimensions in the Judgement of Illness. Genet. Psychol. Monogt, 79, 191 209.
- LIGHT, CAROLE L., ZAX, M., and GARDINER, D.H. (1965).

  Relationship of Age, Sex, and Intelligence Level
  to Extreme Response Style. J. pers. soc.

  Psychol., 2, 907 909.
- LURIA, ZELLA (1959) A Semantic Analysis of a Normal and a Neurotic Therapy Group. J. abnorm. soc.

  Psychol., 58, 216 220
- LYNN, D.B. (1962) Sex-role and Parental Identification.

  Child Develpm., 33, 555 564.
- MARKS, I.M. (1964) <u>Patterns of Meaning in Psychiatric</u>
  Patients. London: Oxford University Press.
- McGREEVY, C.P., AND DAANE, C.J. (1967) Changes in Semantic Differential Meaning that accompany Counseling. J. counsel. Psychol, 14, 526 534.
- MORDKOFF, A.M. (1965) Functional versus Nominal Autonomy in Semantic Differential Scales.

  Psychol Rep., 16, 691 692.
- MUELLER, W.J. (1966) Anxiety level, Inferred Identification and Response Tendencies on a Semantic Differential. J. consult. Psychol, 13.

- MYERS, J.K., and ROBERTS, B. (1958) Family and Class

  Dynamics in Mental Illness. New York: John

  Wiley.
- NATHANSON, I.A. (1967) A Semantic Differential

  Analysis of Parent Son Relationships in

  Schizophrenia. J. abnorm. Psychol., 72

  277 281.
- NEURINGER, C. (1961) Dichotomous Evaluations in Suicidal Individuals. J. consult. Psych., 25, 445 449.
- NEURINGER, C. (1963) Effect of Intellectual Level and Neuro-psychiatric Status on the Diversity of Intensity of Semantic Differential Ratings.

  J. consult. Psychol., 27, 280.
- OPLER, M. (1957) Schizophrenia and Culture. <u>Sci</u>.

  Amer., August, 1957.
- OSGOOD, C.E. (1952) The nature and Measurement of Meaning. Psychol. Bull., 49, 197 237.
- OSGOOD, C.E. SUCI, G.J., and TANNENBAUM, P.H. (1957)

  The Measurement of Meaning. Urbana, Ill.:

  University of Illinois Press.
- OSGOOD, C.E., WARE, E.E., and MORRIS, C. (1961)

  Analysis of the Connotative Meaning of a

  Variety of Human Values as Expressed by

- American College Students. J. abnorm. soc. Psychol., 62, 62 73.
- PARSONSON, B.S. (1965) Differentiation of Psychiatric Groups by

  means of Subjective Meaning of Symptoms. Unpublished

  Master's thesis, University of Canterbury.
- PARSONSON, B.S. (1969) Extreme Response Tendencies on A Semantic Differential. Psychol. Rep., 24, 571 574.
- PARSONSON, B.S. (in press) Sex Differences in the Extreme Response

  Tendencies of Psychiatric Patients: A Function of Sex
  Role Identification?
- SHERIF, M., and HOVLAND, C.I. (1961) Social Judgement Contrast and Assimilation. Vol. IV Yale Studies
  in Attitude and Communication. New Haven: Yale
  University Press.
- SHERMAN, J.A. (1967) Sex Differences in Cue-Dependency and Aspects of Intellectual Functioning. Psychol. Rev., 74, 290 299
- SHERMAN, R.C., and SMITH, F. (1967) Sex Differences in Cue-Dependency as a Function of Socialization Environment. Percept. Mot. Skills, 24, 599 - 602
- WALKEY, F., and BOSHIER, R., (1969) Semantic Differential

  Response Bias in Psychopathic, Delinquent and Normal

  Boys. Psychol. Rep., 24, 91 94
- WALLACH, M.A., and CARON, A.J. (1959) Attribute Criteriality and Sex-Linked Conservatism as Determinants of Psychological Similarity. J. Abnorm. Soc. Psychol., 59, 43 50.

- WELFORD, A.T. (1958) Ageing and Human Skill: A Report

  centred on Work by the Nuffield Unit for Research into

  Problems of Ageing. London: Oxford University

  Press.
- WORTHY, M. (1969) Note on Scoring Midpoint Responses in

  Extreme Response Style Scores. Psychol. Rep., 24,

  189 190.
- ZAX, M., GARDINER, D.H. and LOWY, D.G. (1964)

  Extreme Response Tendency as a Function of Emotional

  Adjustment. J. abnorm. soc. Psychol., 69, 654 657.

# APPENDIX.

INSTRUCTIONS FOR THE SEMANTIC
DIFFERENTIAL

The purpose of this test is to see what certain things mean to various people by having them judge them against descriptive adjectives. In taking this test please make your judgements according to what these things mean to you. On each page of this booklet you will find a different thing to be judged and beneath it a number of lines with adjectives to judge against. You are to judge the thing on each of the lines. Here is how you judge the lines.

If you feel that the thing at the top of the page is very like one end of the line, you should put your checkmark like this

#### Snail

	very	quite			r htly	g- quit	e ver	У	
slow	:	:	:	:	_:	_:	_:	_:	fast
				or					
			Roo	cket					
slow	:	:	:	:	_:	_:	_:	_:	fast
	If you	feel t	hat th	ne thi	ng is	quite	like d	one	end of
the li	ine (bu	it not	extrem	nely)	you sh	ould p	ut you	ır c	heck-
mark ]	Like th	nis:							

Car

very quite slig- neith-slig- quite very htly er or htly both						
strong::_: weak						
$\circ r$						
<u>Lead</u>						
strong: : : : : : weak.						
If the thing seems only slightly like one end as						
opposed to the other (but not really neutral), then you						
should check like this:						
Politician						
very quite slig- neith-slig- quite very htly er htly						
good ::: bad						
or						
White Lie						
good ::_ :: bad						
The end toward which you check, of course, depends						
on which of the two ends of the line seem better to						
describe the thing you're judging.						
If you think the thing you are judging to be neutral						

as regards the adjectives, or if the adjectives are completely irrelevant, not related to the thing, then you should put your check-mark in the middle:

#### Rhubarb

very quite slig- neith-slig- quite very htly er htly

Successful		Unsuccessful
::	::	::

#### Important

- 11. Be sure you check every line of each page of the booklet do not omit any.
- 2. Never put more than one check-mark on a single line.

  Work quickly through the test. Do not worry or

  puzzle over individual items, it is your first impressions,

  the immediate "feelings" about the items, that we want.

  On the other hand, please do not be careless because we

  want your true impressions.

UNIVERSITY OF WAIKATO