USE OF THESES

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AN ANALYSIS OF SELF CONSTRUCTS AND SELF VARIABLES

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Being a report of an investigation submitted as a partial requirement for the degree of Master of Arts in Psychology at The Australian National University 1965
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## Contents

<table>
<thead>
<tr>
<th>Introduction</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Derivation and Statement of Thesis</td>
<td>1</td>
</tr>
<tr>
<td><strong>Chapter 1: The History of the Self</strong></td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>6</td>
</tr>
<tr>
<td>The Earliest Constructs of Self</td>
<td>7</td>
</tr>
<tr>
<td>Seventeenth Century Revisions</td>
<td>9</td>
</tr>
<tr>
<td>The Sceptics: Hume and Condillac</td>
<td>10</td>
</tr>
<tr>
<td>The Self As Subject and Object: the Kantian division</td>
<td>12</td>
</tr>
<tr>
<td>Psychology, Physiology and Phrenology</td>
<td>13</td>
</tr>
<tr>
<td>Problems of Nineteenth Century Self Constructs</td>
<td>15</td>
</tr>
<tr>
<td>William James: Evidence for identity</td>
<td>18</td>
</tr>
<tr>
<td>Philosophical Speculations at the Close of the Nineteenth Century</td>
<td>20</td>
</tr>
<tr>
<td>Early Twentieth Century Philosophy</td>
<td>22</td>
</tr>
<tr>
<td>The Self Theory of Mary Calkins</td>
<td>24</td>
</tr>
<tr>
<td>Self Constructs in the Textbooks</td>
<td>28</td>
</tr>
<tr>
<td>Contributions of Social Psychologists</td>
<td>30</td>
</tr>
<tr>
<td>The Early Phenomenologists</td>
<td>32</td>
</tr>
<tr>
<td>Empirical Analysis of the Self up to 1935</td>
<td>33</td>
</tr>
<tr>
<td>Historians' Reflections on the Self</td>
<td>35</td>
</tr>
<tr>
<td>An Analysis of the Parent Self Constructs</td>
<td>37</td>
</tr>
</tbody>
</table>
### Chapter 2: The Self in Personality Theory

- **Introduction** 43
- Classical Psychoanalytic Constructs of Ego and Self 43
- The Psychoanalytic Dissenters 49
- Self Theories Related to Psychoanalysis 53
- G.W. Allport: the proprium 58
- Gardner Murphy: a social self 59
- R.B. Cattell: empirical analysis of the self 61
- Other Empirical Analyses 65
- Organismic Theorists: Goldstein, Angyal, Maslow 67
- Phenomenology and the Self Constructs 68
- The Self Theory of Carl Rogers 71
- Developmental Psychology and the Growth of the Self 75
- Theories of Learning, Perception and Motivation 79
- Some Self Constructs of Social Psychologists 80
- An Analysis of Contemporary Self Constructs 85

### Chapter 3: Empirical Evidence Concerning Self Variables

- **Introduction** 90
- Self-Recognition 92
- Changes in the Self Concept 94
- Relationships between Self Variables and Personality Variables 97
<table>
<thead>
<tr>
<th>Chapter 4: Measurement of Self Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
</tr>
<tr>
<td>Problems of Validity and Reliability</td>
</tr>
<tr>
<td>Intervening Variables in Self Measurement</td>
</tr>
<tr>
<td>A Framework for the Evaluation of Measures</td>
</tr>
<tr>
<td>Experiment I: The Value of a Self Measure with Face Validity</td>
</tr>
<tr>
<td>Some Instruments for Description of the Self-Concept</td>
</tr>
<tr>
<td>Experiment II: Sex Differences in Such a Descriptive Instrument</td>
</tr>
<tr>
<td>Measures of Self-Acceptance</td>
</tr>
<tr>
<td>Experiment III: The Influence of Social Desirability on such a Measure of Self-Acceptance</td>
</tr>
<tr>
<td>Experiment IV: The Reliability and Validity of a Phenomenological Measure of Self-Acceptance</td>
</tr>
</tbody>
</table>
Experiment V: Agreement between Common Measures of Self-Acceptance 182

Experiment VI: The Structure of the Ideo-Q-Sort as a Measure of Self-Acceptance 196

Conclusions: Contradictory demonstrations and unconfirmed hypotheses 201

Chapter 5: The Self in Abnormal Psychology 203

Introduction 204

Abnormal Physical States and the Self 206

Psychiatric Diagnoses 211

Self Variables and Undifferentiated Psychiatric Disorders 212

The Self in Schizophrenia 216

The Self in the Neuroses 220

The Self in Delinquency 225

Experiment VII: The Ideo-Q-Sort as a Discriminator of Psychiatric Patients 230

Counselling and Psychotherapy: Self changes as criteria of success 236

The Self-Concept of the Therapist 244

The Self in Basic Encounters 246

Experiment VIII: The Ideo-Q-Sort as a Measure of Change in Self Variables 249

Conclusions: More contradictory demonstrations and unconfirmed hypotheses 255
Tables

1. A Content Analysis of Self Theories (400 B.C. - 1935 A.D.) 39
2. A Content Analysis of Self Theories (1935-1965) 87
3. Values of Coefficients relating Self Measures (Experiment I) 142
4. Reliability Values reported for the I.A.V. (Bills, 1958) 160
5. Intercorrelations of I.A.V. Scales (Bills, 1958) 161
6. Evidence of the Relationships of the I.A.V. with other Similar Tests 162
7. Relationship of I.A.V. Measures with Social Desirability Estimates (Spilka, 1961) 165
8. A Comparison of the Two Samples of I.A.V. Scores (Bills, 1958 and Experiment III) 168
9. Relationship of Scores on the I.A.V. and the Marlowe - Crowne Social Desirability Scale (Experiment III) 169
10. Test - Retest Reliability Estimates for Two Measures by the Abstract Apparatus (Experiment IV) 178
11. Concurrent and Construct Validity Estimates of the Overlap Measure of the Abstract Apparatus (Experiment IV) 181
<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Matrix of Intercorrelations of Ten Self-Acceptance Measures (Experiment V)</td>
<td>193</td>
</tr>
<tr>
<td>13. Intercorrelations of the Two 16PF Measures and the Ideo-Q-Sort (Experiment VI)</td>
<td>199</td>
</tr>
</tbody>
</table>
DERIVATION AND STATEMENT OF THESIS
The notion of self, with its accompaniments of recognition of self and others, is one of biological significance. No animal is solitary throughout its life cycle. It must meet with another member of the same species in order to reproduce and must be able to distinguish its enemies in order to attack or avoid them. Some form of recognition of other members of the species, race or social group of which the animal is member is necessary for the survival of that group, and survival of the individual is dependent on the accuracy of the estimation of his own defence potential. An evaluative self-concept involving attitudes to others is then a biological necessity.

The means for recognition are best developed in the primates who make primitive use of language, consisting of nine meaningful sounds in the howling monkey or of movements of facial musculature in the oldworld monkey. Such signs are used to express rage, surprise or pleasure. Through observance of these forms of behaviour the feelings of the monkey towards others may be inferred and, by his subsequent behaviour, the concept he has of himself in relation to these others. The next step in the evolutionary hierarchy is man. It follows that a notion of self should have significance for psychology. Human behaviour suggests that the individual forms some estimate of and attitudes towards his own capacities,
interests and the concepts others have of him, through his interaction with the environment. His speech patterns indicate that he is aware of his individual identity. The more complex nature of man, however, makes the examination of self-recognition and self-attitudes in man more difficult.

If a notion of self is instrumental in the description and control of human behaviour, then it is of particular interest to workers in the field of abnormal psychology. Extensive use of the notion in this field was intended in this presentation, in the form of discrimination between various groups of abnormals by certain measures of self variables. It was predicted, for example, that the self-concepts of delinquents would prove to be distinctive and might cast light on the problems of delinquent behaviour. Attempts to test this hypothesis, however, were met by insurmountable difficulties in defining the area of study and selecting appropriate measures. An investigation aimed at establishing the status of the self in psychology appeared to be pre-requisite. This presentation, then, is concerned with the meaning of the notion of self, theoretically and empirically. A search for a common element within and between these two approaches is made.

Throughout the presentation a certain form of expression is used to enable the reader to assess the theoretical or
empirical value of the notion under discussion. The term 'self construct' is used to represent a notion which is chiefly theoretical in origin and employment. In other words, it is a hypothetical construct which is thought of as existing and giving rise to measureable phenomena which are not necessarily those which suggested the self construct. 'Self variables' have the more rigorous meaning of having been empirically established to represent the relationship between the control conditions and dependent variables in a certain experiment. 'Self variables', generally, may have one of two meanings. They may refer to the phenomena which the individual recognises as his own (self-concept) or to his attitudes towards these phenomena (self-assessment).

When such definitions are made clear, the thesis may be stated:

That the validity of a construct or variable of self as determined by, or as a determinant of, human behaviour has not been established by psychologists.

The presentation in support of the thesis is in four parts, the first of which is concerned with the major self constructs from that of Plato up to those of contemporary psychological theorists. The constructs are described and compared by content analysis. Secondly, a brief survey of
the conclusions of the experiments concerning the self is given. These conclusions lend some support to the theories of self and apparently indicate the existence of some self variable or variables which influence the behaviour of the individual. Thirdly, an examination of the measuring instruments underlying these conclusions is made by discussion and experiment. This section is concerned with whether, operationally speaking, there is a self. The results are difficult to interpret and there is no agreement among conclusions. Finally, a similar doubtful status of the notion of self is revealed in the field of abnormal psychology.
CHAPTER I

A HISTORY OF THE SELF
The attempt to study the antecedents of the meaning implicit in the various uses of the term 'self' by contemporary psychologists in theory and measurement is a task which has been avoided by historians to date. Examination of a range of the general psychology-psychiatry-philosophy history texts gives merely a sketch of one or two of the main trends. This state of academic under-achievement is, in part, a function of a scarcity of source material and the complexity of the material available; yet it remains remarkable in the light of the increasing amount of research time occupied by psychologists in examination of the self.

This increase in research time is reflected clearly in a survey of publications listed in the complete set of the Psychological Index and in the Psychological Abstracts to date. In no year, in its publication from 1894 to 1935, does the Index list more than five works under the heading of 'Self'. The placement of this heading itself is interesting: 'Self-consciousness' appeared in the early volumes in the category of 'Consciousness' which changed in 1900 to 'Cognition'; in 1910 'Self' was included under 'Attitudes and Intellectual Activities'; while from 1915 'Self' was found in the section labelled 'Social Functions of the Individual'. Just as these changes mirror the opening up of fields in psychology so they mirror the dominant interests of those psychologists evolving concepts of self.
Topics pertaining to the 'Self' listed in the Psychological Abstracts (1927- ), on the other hand, show little change over the years. A random sample includes 'self-acceptance', 'self-assessment', 'self-concept', 'self-attitude', 'self-consciousness', 'self-esteem', 'self-image', 'self-perception', and 'self-rating'. Examination of the Abstracts indicates the increase in the number of research publications under the above headings. Commencing at the half-century (1950) the incidence of publications listed has doubled three times in ten years. (For visual presentation of the growth of the incidence of publications concerning the 'Self' see Figure I of the Appendix).

It is appropriate, therefore, to explore the history of the construct of self, although the material examined may not always be dignified by the label of psychology. Contributions from the related areas of philosophy and psychiatry are considered for their influence on Western thought and, therefore, on the Western psychologist. A strictly chronological assessment of contributions appears to be the most fruitful method up to the twentieth century, when the increase in the number of publications enforces examination in terms of themes.

It should be noted that there are two associated trends in the development of the concept of self omitted in this
history. Much of the nineteenth century German contemplation of 'das Ich' is ignored because its implications are felt to be mainly philosophical. The only direct psychological offspring of this movement, psychoanalysis, is not examined in detail here but treated in another context of the self in contemporary theories of personality.

The Earliest Constructs of Self

Since man first saw his neighbour he has been conscious of himself. The concept of self, however, was rarely recorded in literature. In fact, the literature of classical Greece provided one of the first records of a similar concept in the 'soul' of Plato. The 'soul', as described in the Phaedo (Trans. Church, 1951), as the initiator of activity, conscious, lifegiving and immaterial, appeared as the prototype of the centre of the self psychology devised by Mary Calkins. She denied the similarity (Calkins, 1917); but the case against her is strong (Case et al., 1918). Aristotle, following his master in the third century B.C., has been described as 'the first to make a systematic enquiry into the nature of the ego' (Altschule, 1957, p.24).

Then followed a gap in the date line broken only by the speculations of Plotinus (c. 200 A.D.), noted by philosophers as the first discussant of the concept of self (Calkins, 1917). It was St Augustine (354-430), however, who provided the
first glimpse of introspection into a personal self:

... in that vast court of memory. For there are present with me, heaven, earth, sea, and whatever I could think on therein, besides what I have forgotten. There also I meet with myself, and recall myself, and when, where, and what I have done, and under what feelings.

(Trans. Pusey, 1939, p.211).

Although not then accessible to the Western world, the literature of classical Indian philosophy, for example the Upanishads, Sāṅkhya - Yoga and Advaita Vedānta, contained extensive discussions of the possibilities of gaining more knowledge of the self or ātmavidyā (Organ, 1964).

Seventeenth Century Revisions

This question of self-knowledge remained a rhetorical one for the few thinkers who raised their heads above the bog of religious and philosophical dogma which stifled creative thought during the Middle Ages. It was the rapidly changing Europe of the seventeenth century which provided the stimulating background for the search for certainty reflected in the thought of Descartes, Hobbes and Locke.

Writers studying the contributions made by Rene Descartes to the construct of self have made much of the equation which he postulated between soul and self (Calkins, 1917; Kehr, 1916). Kehr stressed the constructs he inherited from St Augustine, for example the explanation of will for both men necessitates the self. This construct is common to many
later authors, as is the centrality of the self in systems of cognition and consciousness, implicit in his examinations of the aphorism 'cognito ergo sum' (I think, therefore I am). To let Descartes speak for himself:

... I recognized that I was a substance whose essence or nature is to be conscious ... Thus this self, that is to say the soul, by which I am what I am, is entirely distinct from the body and is even more easily known.

(Trans. Anscombe & Geach, 1962, p. 50).

Across the Channel Hobbes, in his *Leviathan* (1951), was propounding an ethical code based on self-interest. G.W. Allport (1954) hailed this doctrine as a herald of social psychology, which 'foreshadows modern doctrines of self-esteem ... and self-regard as pivotal motives' (1954, p. 14). Hobbes disagreed with some of Descartes' notions as did Locke. Critics, for example Frondizi (1953) and Altschule (1957), agree that these later writers place more emphasis on the material of sensory experience. John Locke conceived of man as 'a thinking, intelligent being, that has reason and reflection, and can consider self as itself'; then he added, '... it is always as to our present sensations and perceptions; and by this everyone is to himself that which he calls self' (Locke, 1960, p. 188). *An essay concerning human understanding*, first published in 1688, expanded this personal identity dependent on sense data to dependency on two concomitants of this data: consciousness and memory.
'The self is not determined by identity or diversity of substance, which it cannot be sure of, but only by identity of consciousness' (Locke, 1960, p.196). 'Continued existence makes identity' (1960, p.200). This description of self foreshadowed that of William James (1890).

The Sceptics

British writers continued this examination of personal identity into the eighteenth century. The sceptic Hume carried the argument of sense-based identity through to a logical conclusion:

For my part, when I enter most intimately into what I call myself, I always stumble on some particular perception or other, of heat or cold, light or shade, love or hatred, pain or pleasure. I never can catch myself at any time without a perception, and never can observe anything but the perception. When my perceptions are removed for any time as by sound sleep; so long am I insensible of myself, and may truly be said not to exist.

(1928, p.252).

This elusiveness of the empirical ego, as expressed in A treatise on human nature in 1740, remains an unsolved problem of measurement. Hume's reduction of the self created some gaps in the logical framework of his philosophy (Wilson, 1926); yet his system is estimated free of the grosser inadequacies of that of Bishop Berkeley (1684-1753), one of which is the difficulty in accounting for the self (Reeves, 1958; Russell, 1945).
To recross the Channel yet remain in the religious orders, Abbe de Condillac appeared as a philosopher working within this trend of sensory empiricism. Ryding (1955) maintained that his notion of self was not only the sum of man's perceptions but included the band which holds them together. This approach is reminiscent of the earlier inclusion of memory. The influence of Locke is noticeable. 'What we understand by this word "I" seems to be only possible in a being who notices that in the present moment he is no longer what he has been'. (1930, p.43). From this reasoning Condillac concluded that his famous statue, without a sense of smell, and with no memory, would have no self-concept.

The Self as Subject and Object

The Critique of pure reason of Kant, first published in 1781, made a welcome contribution to self theory in conceptualization rather than content, thus fulfilling the classical Germanic tradition. He introduced the distinction between the self as subject and object (Alexander, 1911). The aspect of self treated by Locke and Hume Kant saw as a unity attained through synthesis: the empirical self. He also saw, however, the self as an agent: the pure ego.

This distinction, while clarifying the aims and functions of philosophical speculation to this date, also pointed the
way to what may well be an insuperable barrier to any useful contribution by self psychology. Empirical psychologies may extend our knowledge of human behaviour. Within this framework, phenomenology, through response-response designs, may sketch some picture of the empirical self of the individual (to follow the above terminology). The pure ego, however, is defined only in terms of deductive psychologies, the premises of which are too often inadequately validated.

The Kantian tradition carried on into the nineteenth century in Germany in the writings of Hegel (1770-1831) and Schopenhauer (1788-1860). Hegel, following the epistemology of Kant, undertook to show that the universe of knowledge is so constituted that no concept concerning it, being abstract, is adequate to explain its nature (Phenomenology of mind, first published in 1810). This being so, he found self-consciousness to be the highest form of knowledge. Schopenhauer, on the other hand, followed the Kantian division of selves:

Selfishness contains ... a knower and a known ... the knower himself, as such, cannot be known ... As the known in self-consciousness we find exclusively the will ... all striving, wishing, shunning, hoping, fearing, loving, hating.

(Schopenhauer, 1948, p.412).

This emphasis on will as the content of the self makes an interesting comparison with the descriptions by St Augustine and Descartes of that phenomenon in which the self is simply a necessary activating constituent.
Psychology, Physiology and Phrenology

Maine de Biran is the first of the writers considered who might properly be described as a psychologist, albeit a mystic rather than a positivist by present day standards and not regarded as a materialist by the standards of his own day. The self was the central pivot of his psychology. This self had not the substance of that of Descartes, nor was it simply the subject or object of Kant. He saw it as the self which causes and is aware that it causes bodily movements, which creates language in order to handle ideas in accordance with its own interests, which endures and recognizes itself in memory, which cultivates itself morally at the same time as intellectually by reflectively liberating itself from dependence on sense objects (Hinrichs, 1953).

Maine de Biran was also responsible for the first attempted description of the development of self-awareness in infancy and childhood, the distinction between self and not-self as defined within their own frameworks of the twentieth century by Piaget (1959) and Sullivan (1955).

A treatment of the history of this psychological construct without some mention of the British associationists would be unthinkable; for they too had their comments to make on the self (Sen, 1933). John Stuart Mill (1806-1873) would appear to afford an appropriate example. His account of cognition, emotion and conation in terms of association is indeed credible until his attempt to deal with the subject
of these activities. In *A system of logic ratiocinative* and inductive he wrote:

There is something I call Myself, or, by another form of expression, my mind, which I consider as distinct from these sensations, thoughts, etc.; a something which I conceive to be not the thoughts, but the being that has the thoughts, and which I can conceive as existing for ever in a state of quiescence, without any thoughts at all. But what this being is, though it is myself, I have no knowledge, other than the series of its states of consciousness. 

(1904, p.40).

After such psychological speculation a sample of early nineteenth century physiological psychology, however macabre, comes as a breath of fresh air. Cabanis, famous for his study of the after-effects of decapitation by guillotine, endeavoured to give a description of the physiology and anatomy of the self in his *Rapports du physique et du moral de l'homme* in 1802. The historian, Brett, translated his concept, 'le moi central', as 'an epitome of all the separate centres which the nervous system creates. The apparent signs of life which might be exhibited by the decapitated body are then explained as activities of neural ganglia which are relatively independent of the brain or central ego' (1953, p.459). The essence of self, then, appears to be the physical substrate of consciousness. This concept of Cabanis is one for which the physiologists have not the means as yet to indicate acceptance or rejection.

The physical representation of the self was also the subject of study of those arch-materialists, the phrenologists.
Krech, in his article on the cortical localization of function in *Psychology in the making* (ed. Postman, 1962), presented a delightful description of the organ of self-esteem by Spurzeim in an English publication of 1815:

Gall first found this organ in a beggar: in examining the head of this person, he observed in the midst of the upper posterior part of the head an elevation which he had not before observed in so high a degree: he asked him the cause of his mendicity; and the beggar accused his pride as the cause of his mental state... We have a great number of proofs as to this organ, and can establish its existence. Proud persons, and those who, alienated by pride, imagine themselves to be emperors, kings, ministers, generals, etc. possess it in a high degree. (1962, p.39).

The system of sarcognomy of Buchanan, a later extension of this answer to a typologist's prayer, which included the entire body, also localized the organ of self-esteem. The annotated figures reproduced from *Roots of modern psychiatry* (Altschule, 1957) testify to this: self-esteem apparently resided in the left shoulder, visible in the young lady facing away from the reader. (See Figure 2 of the Appendix).

For all the laughter with which the modern psychologist may greet the phrenologists and their kind, for all the derision which the logic of their method deserves, their work does represent several important developments in the concept of self during the nineteenth century. Firstly, that self-esteem was considered to be a sufficiently important personality trait for analysis by phrenologists, who were
18

essentially practical people, reflects contemporary thought in a wider scope than some of the more esoteric philosophical meditations. Secondly, some of the phrenological methods of investigation, such as the examination of the beggar, show the hallmarks of later speculations, (for example, McDougall, 1908). Thirdly, the examination of the 'alienated', observation of the malfunction of normal processes to aid in description of these processes, is a technique used in many recent attempts to isolate the self-concept (for example, Rice, 1954; Zucker, 1962).

Problems of Nineteenth Century Self Constructs

Since there was a lull in the mid-nineteenth century in the publication of contributions to the theory of self, with the possible exception of that of G.H. Lewes which might be better classified as a contribution to general personality theory (Cardno, 1962), it is appropriate to pause here to examine some of the questions which the literature reviewed so far poses. May the concept of self be regarded as an antecedent of psychology? Is the self an essential concept in psychology? Is the self, indeed, a tenable concept for psychology? Partial answers, at least, may be given at this stage, before consideration of the great days of the self psychologies (1890-1930).
Several problems, however, present themselves. The soul concept of Plato and Aristotle has been presented as a pseudo self: but what of the semi-mystical aura of this concept, that indefinable something which distinguishes men from machines? Can psychologists accommodate this individuating aspect of the self without regressing to a 'little man in the machine' level of explanation? Perception, memory and consciousness witnessed through introspection have all been cited as necessary concomitants of the self: but psychologists have experienced grave difficulties of criterion selection in attempts to validate the evidence of introspection. Can these difficulties be overcome? The distinction between knower and known does not solve this problem. The temptation to give up and share the thought with David Hume that it is impossible to observe, much less define, the self, is very great. Yet, strange as it may seem, it is the phrenologists who provide a few small rays of hope at this period in history: it is they who pointed to the attitude to self as a significant aspect of man and (note the response of the beggar) a significant determinant of man's behaviour.

In sum, then, here are the answers to those searching questions, given in the light of commentaries relating to the self published prior to 1890. If psychology be defined
as the study of human behaviour, the construct of self may be regarded as one of its antecedants. The answer to the second question depends on that given to the third, concerning the tenability of the construct. This is, indeed, in doubt within a strictly empirical study of behaviour. An emphasis on measurement is a framework which does not easily include the notion of self.

**William James**

Theories of personal identity have been described as falling into three categories: those concerned with relational phenomena, of which Hobbes' is the earliest example soon to be followed by those of many social psychologists; a search for the pure ego or element of consciousness, of which the sceptical treatise of Hume is the prime example; and the type of theory put forward by William James in which somatic data is shown to provide a basis for the sense of personal identity (Price-Williams, 1957).

William James' great textbook of psychology appeared on this scene of doubt in 1890. His treatment of habit, the stream of thought, the consciousness of self, attention, memory, the emotions and will: each of these in its own right would have formed a useful contribution to psychology. His unique contribution for his time, however, was the scope of *The principles of psychology*, encompassing almost every
aspect of human behaviour. His refutation of Hume's scruples is an encouraging sign concerning the fate of the concept of self in psychology.

Capek (1953) has pointed out that James was opposed to the dissolving of the self into the immaterial, as, for example, the abstract concept of Hegel. Nor was he prepared to consign it to the neurological rag-bag of some of the materialists. He was prepared, however, to define it. 'In its widest possible sense ... a man's Self is the sum total of all that he can call his ...' (1890, p.291). He went on to deal with the constituents of the self, the feelings and emotions they arouse and the actions to which they give rise.

The empirical self, or Me, is made up of three constituents: the material self, or body, clothes and possessions; the social self or the opinions and knowledge a man's fellows have of him; and the spiritual self, or inner being of abilities and traits. These are presided over by the personal unity of the pure ego, the I. 'In each kind of self ... men distinguish between the immediate and actual, and the remote and potential ...' (1890, p.315). Of the emotions these selves arouse James wrote: 'My own body and what ministers to its needs are thus the primitive object, instinctively determined, of my egoistic interests. Other objects may become interesting derivatively through association with any
of these things ...' (1890, p.324). This is his self-regarding emotion. For the parallel actions James distinguished two main goals: self-seeking and self-estimation.

In reference to the topic of personal identity, the *Principles* provided one of the most concise accounts of the history of the construct available at the time of publication. The original contribution of James to this notion, reflecting his formulations of the stream of consciousness and attention was based on this foundation.

The sense of our own personal identity, then, is exactly like any one of our other perceptions of sameness among phenomena. It is a conclusion grounded either on the resemblance in a fundamental respect, or on the continuity before the mind, of the phenomena compared.

(1890, p.334).

The originality of this contribution lies not in the newness of the concepts; dependence of identity on memory was a speculation of the fifth century and the mechanics of this memory were the well-known principles of association, similarity and contiguity of stimuli. It lies rather in James' expression of this unity within the thinking, feeling, willing being of his psychology.

*Philosophical Speculations at the Close of the Nineteenth Century*

Other publications of this period tended, in the main, to stray to inconclusive speculations based on bizarre hypothetical
experiences of the self (for example, Ladd, 1895; Baker, 1897). One philosopher, however, made an important contribution to the theory of personal identity or self-consciousness. He was Josiah Royce, who published a series of papers in the Psychological Review and the Philosophical Review (1895a; 1895b). In these papers he emphasized the importance for the development of identity in the individual of the interplay of self-consciousness and social-consciousness, '... each helped and each limited the other, since each exists only in contrast with the other, get organized and developed in the endless giving and taking of social communications...' (Royce, 1895a, p.485). Royce's contribution of the relativity of the self-concept, dependent on communication, was best expressed in this excerpt:

... I am conscious of myself ... as in relation to some real or ideal fellow, and apart from my consciousness of my fellows I have only secondary and derived states and habits of self-consciousness.

(1895a, p.468)

What did the writers of the twentieth century make of the material so far presented? Psychology was established by the year 1900 as a distinct frame of reference for thought on the subject of man, if not as a science. How were these advocates of the new study and its methods to deal with the backlog of speculations surrounding the construct of self? The answers to this problem were almost as varied as were the
personalities of the writers with time and talent to devote to it, although they may be grouped in certain ways. In view of this, the history will no longer be pursued chronologically but in terms of the trends followed by the writers up to 1935. This time limit for the history is arbitrary but convenient, based as it is on the cessation of publication of the Psychological Index in that year and the consideration that the thirty years dating to the present may be appropriately described as the time-span of modern psychology.

Early Twentieth Century Philosophy

The remainder of the history, then, is concerned with the construct of self as developed in differing responses to the pre-twentieth century traditions. The writers are considered in these general categories: those who contributed one or two speculative articles; the authors of comprehensive psychological textbooks; the experimenters and measurers; the social psychologists; and the phenomenologists. The formulations of several individual psychologists, for example, that of Mary Calkins, are examined in detail.

Many of the articles published as referring to the self during the early decades of this century were written within the framework of philosophy, their contents contributing to the areas of epistemology, logic and ethics (e.g. Perry, 1910;
Wright, 1920; Brightman, 1934). Similar articles are included in the Bibliography for the sake of completeness. Others were written in the no man's land between philosophy and psychology, particularly those dealing with self as the agent of will (Stoops, 1901; Lovejoy, 1907; Boodin, 1912). Some writers were content simply to examine the arguments for and against the study of self in psychology, generally deciding in its favour (MacDougall, 1916; Wentscher, 1927; Brotherton, 1935). Others, perhaps some aiming to cash in on the lucrative possibilities of the popular self psychology, produced books to help improve the self and to indicate the means to 'do it yourself' therapy. This development occurred towards the end of the period under consideration, yet most of these books are now out of print. Self direction and adjustment (Fenton, 1926) and The omnipotent self: A study in self-deception and self-cure (Bousfield, 1923) serve as examples of which more may be found in the Bibliography.

Few of these works may be said to have influenced the course of psychological thought. There are many manuscripts, however, which have done so; those of Eduard Claparede, for example. Claparede (1911, 1924) took identity as a fact of observation, and he went on to examine the localization of 'le moi' in individuals. This procedure has been followed successfully, witness the experiment of Horowitz (1935) to
determine the localizations of self in students and children.

The contribution of Claparede was not an extension of the work of others, as was that of Tawney (1902) who endeavoured to clarify the concept of consciousness as related to self. These two constructs had been examined and conjured with until they resembled the proverbial chicken and egg. Tawney distinguished two varieties of consciousness:

Self-consciousness in the first sense includes the empirical qualities of the body itself, together with a sense of externality to everything else within the range of perception and memory. Reflective self-consciousness is based upon the recognition that the self belongs in classes with other selves, that it is in a sense one with them, and that its experiences, therefore, possess a significance for them, and theirs for it.

(1902, p. 596).

This paragraph sounds very like a description of the activities of the pure ego and the empirical ego of Emmanuel Kant, or the 'I' and the 'me' of William James. A further distinction along these lines was attempted by Hughes using the terms self and ego, which by 1906 were both in general use and even then the cause of some confusion:

By self I would indicate always an idea present in the self-consciousness of any individual; by ego, the individual who is or can be self-conscious, who has or may have the sense of self and not-self.

(1906b, p. 289).

This formulation was amplified by Cunningham who equated consciousness of self with the 'contrast between the self
and its other ... the other ... being the entire content of consciousness.' (1911, p.534).

Definitions of consciousness of self with no definition of self create an unfortunate impression of early twentieth century psychology. For some attempts at definition were made. This one, a product of the prevalent instinct theory of behaviour, is particularly interesting:

The self ... is the psychic correspondent of a complex instinctive system which throbs as a unit, but which is not differentiated by the excessive or emphatic partial activity of any part of the complex system; it is the mass of 'feeling' so called by many; it is that part of the moment's conscious experience which we are warranted in describing as the field of inattention.

(Marshall, 1901, p.112).

This throbbing, pulsating mass of inattention was a much more dynamic self than had hitherto been expressed.

It is interesting to note at this stage that at least one anthropological study of the self-concept had been carried out. Todd (1916) investigated the idea of self in primitive races such as the Kafirs, the Maoris, and the Eskimos, and discovered that for these people it included the name of the individual, his shadow, and his property. He claimed that the concept of self may be subject to consciousness of the group self; and, observing that in the primitive individual the self-concept was not modifiable, he also claimed that it was not modifiable in the Englishman until after the Industrial Revolution.
The Self Theory of Mary Calkins

To present a survey of the speculative articles concerning the self without first presenting something of the theory of the most enthusiastic self psychologist of the earlier decades of this century, may have been somewhat misleading. The publications of Mary Calkins were numerous, indeed it might be said that she never missed a chance to advertise the importance of the self within a study of man (1918). Many of the concepts examined above may have been in part the result of communications with Miss Calkins.

Calkins' earliest contribution, *The persistent problems of philosophy*, was first published in 1907. This consists of a history of philosophical treatments of the problems of the self, and is merely preparatory to *A first book in psychology* published in 1909. This textbook covered the topics usual for a general survey of that time but the treatment of each was carefully tailored to fit in the jacket of self psychology. Calkins' description of this jacket was as follows:

Psychology has been defined as science of the self-being-conscious; and we rightly therefore ask for a further description, even if only a preliminary description of the self. The conscious of each one of us is not a reality which is merely inferred to exist: it is immediately experienced as possessed of at least four fundamental characters. The self as immediately experienced is (1) relatively persistent... (2) complex... (3) a unique, an irreplaceable self... and (4) related to objects which are either personal or impersonal. (1911, pp.2-3).
c. A conscious individual in union with an organized body.

d. The individual regarded as a progressively organized system of mental functions and processes.

e. The subject of consciousness (or experiencer) accompanying any complex of mental processes attentively experienced.

f. A specific complex or integration of content in which the body as object of consciousness is fundamental.

(1918, p.93).

These, then, were the definitions of self, six of them, as listed at the end of the second decade of this century. They suggest an examination of the general textbooks available in that period, excluding the rather biased work of Calkins reviewed above. She recognized the Introduction to psychology of Yerkes (1911) as a sample of self psychology (Calkins, 1912): it was only a few years later that he produced his Outline of a study of the self (1914). Yet the better known texts of Stout (1898), Ward (1918), and Woodworth (1921), too, made their contributions to self psychology.

Self Constructs in the Textbooks

In the introductory chapter of the Manual of psychology, Stout asked 'what is this mind (or self) which owns consciousness in distinction from the consciousness which it owns?' (1932, p.14). Stout is not generally known as a self psychologist, but he does appear to have visualized psychology as a science of selves. He stressed the social factor in the
formation of the self-concept. This excerpt describes the individual:

He is continually comparing others with himself, noting the points of agreement and difference. Every advance in his knowledge of them is also an advance in his knowledge of self. (1932, p. 583).

Hughes (1906b) included Stout in his list of writers to be considered before formulating a concept of self.

Neither is James Ward known primarily as a self psychologist; yet in his recent history Hearnshaw wrote: 'the active, unitary self, or subject, was the keystone of Ward's psychology' (1964, p. 136). Ward distinguished between the Kantian pure and empirical egos (Laird, 1926); the me, to use the terminology of William James, being made up of the sensitive and apperceptive self, the imagining and desiring self, and the thinking and willing self. '[It is] ... the I - not me - that, as feeling and acting, is essential to any experience, whilst the me is essential only to some' (1933, p. 379).

In contrast, Woodworth's Psychology indexed no mention of self (1928) yet Anderson could write in the Australasian Journal of Psychology and Philosophy of 1928 '... in textbooks of psychology it is customary to find a chapter devoted to 'The Self' ... By self, we discover is intended the mind, or it may be the soul' (1928, p. 93).
Of the social psychologists to be considered, J.M. Baldwin was the first of this period. He emphasized the social determinants of self (1897) as Stout did in the year following. It was George Herbert Mead, however, who provided the major contribution to the sociological conceptualization of self. Mead saw the self as the result of a social process, an outcome of a long evolutionary process which must be approached empirically. For him, the self comprised both the I, the spontaneous principle of action and impulse, and the me, the attitudes of others organized and taken over by the self. 'The self, as that which can be an object to itself, is essentially a social structure and arises in social experience' (1934, p.140). In more detail:

Any self is a social self, but it is restricted to the group whose roles it assumes, and it will never abandon this self until it finds itself entering into the larger society and maintaining itself there. (1925, p.276)

This object self is part of the reflexive self, and the whole is distinguished by the characteristic of self-consciousness. The predominantly cognitive and social self construct of Mead exerted a strong influence on later work not only of social psychologists and sociologists but also personality theorists.

The approach of William McDougall was, in many ways, similar, though his claim to be known as a social psychologist
is somewhat more in doubt. Certainly his contribution to the development of the construct of self in psychology is of major importance (Martin, 1927). His system was based on the principles of instincts and sentiments in man, the sentiments being non-inherent, organized collections of 'emotional dispositions centered about the idea of some object' (1928, p.137). At the pinnacle of the pyramid of these sentiments came the self-regarding sentiment, which developed as 'essentially a social process, one that is dependent throughout upon the complex interactions between the individual and the organized society to which he belongs' (1928, pp.150-51). 'There are two principle varieties of the self-regarding sentiment, which we may distinguish by the names of 'pride" and "self-respect''. (1928, p.165), both involving positive and negative self-feeling. McDougall's diagram of the structure of the character of John Doe (1928, p.440) illustrates the centrality of the self in his theory of personality. Here, too, was the fulfilment of the promise of Hobbes of the prime motive in social psychology.

The Early Phenomenologists

A different trend in psychology which, like social psychology, contributed something to the modern constructs of self was one deriving from themes found in the works of the classical introspectionists, Brentano, Ebbinghaus, and
Külpe; that is, phenomenology. (Boring, 1953). Husserl is known as the writer who founded this approach as it influences psychology today (Farber, 1943; Ames, 1955). In his Ideas (1913) and Cartesian meditations (1929) he portrayed the ego as transcendent, certain and beyond question. In the fourth meditation he stressed the transcendental ego as 'inseparable from the individual's process of life, the centre of identity, and made up of every act and percept' (1960, p.65).

The phenomenological approach had great appeal for the Gestaltists, whom Howie (1945) has credited with one of the most fruitful approaches to the self. Lundholm (1946) claimed that Köhler 'equated the experienced self and the body-percept, scrapping entirely that other acting but non-perceived self' (1946, p.129). The whole of the self plus environment was the world of the individual, according to this summary of the Gestalt point of view:

Self may be regarded as an assimilative system that feeds and grows on its experiences, which in turn are determined by the whole of which it is a part. This makes intelligible the effect of environment on the formation of character and personality.

(Josey, 1935, p.54).

This excerpt reflects the view of self which Koffka took in his Principles of Gestalt psychology published in 1935.
Empirical Analysis of the Self up to 1935

The theory of self in psychology by 1935 might be expressed as suggesting the conclusion that there is evidence for an active, functioning, conscious self, distinct from the bodily organism but closely related to it (Allen, 1935). The main problems for psychologists appeared to fall into three main categories: the nature of the self, its relation to the organism, and its relation to the environment (Moore, 1933). Psychology, however, is an empirical science; so what of the activities of the experimenters and measurers up to 1935?

Probably the first empirical attack on the problem of self was that of E.B. Titchener (1911) in an attempt to validate the self theory of Mary Calkins. Titchener found three ways in which the self might become conscious: a class of mental processes may carry self-meaning, the self may be felt in body sensations, or it may be inherent in all conscious experience. He asked his students to introspect for any trace of consciousness of self; and from their answers, which did not fall into the above three categories, he concluded that psychology may not be defined as 'the science of the self as conscious' (Calkins, 1911).

This type of experiment was very different in method from the modern tests of hypotheses concerning the self.
One of the most favoured techniques today is that of self-rating, probably first applied by J. McKeen Cattell in his studies of American men of science (1906-1938). One of the early experiments along these lines is worth reporting in detail: that of Cogan, Conklin and Hollingworth (1915). They took a group of 25 female subjects known to each other and asked them to rank themselves and the other members of the group on each of nine traits at intervals of from two weeks to a month. The trait names are an interesting reflection of the times: neatness, intelligence, humour, conceit, beauty, vulgarity, snobbishness, refinement and sociability. A battery of tests was given and other data collected and compared. Conclusions drawn from the experiment included that errors of self-estimation were greater than of friends' judgements, that with possession of desirable traits judgements of those traits were good but with non-desirable traits results were the reverse, and that scores on intelligence tests and self-estimates tended to agree. Here was the beginning of the collection of evidence rather than speculation on the structure of the concept of self.

Many similar studies followed during this period; in Germany, for example, the self-concept of the delinquent child was examined (Stern, 1922), and the accuracy of self-judgements was evaluated (Meili, 1930). In Japan, Kubo
gauged self-concepts through adjective check-lists. In the United States, experiments in self-estimation showed the first signs of becoming as popular as they are today (Hoffman, 1923; Shen, 1925; Jackson, 1929; Simpson, 1933). The work of Baumgartner, measuring self-respect (1935) and of Bernreuter (1933) on self-sufficiency, both add to the impression of the considerable amount of study being put into empirical analysis of the self by the year 1935.

**Historians' Reflections on the Self**

One question concerning the history of the self remains. To what extent do the recognized historians of psychological thought portray this development? The answer to this question is somewhat disappointing.

Of the historian psychologists, Boring in his *History of experimental psychology* (1929) mentions only the soul of Descartes, Peters' edition of *Brett's history of psychology* (1953) only that of St Augustine. Hearnshaw (1964), examining the work of British psychologists, comments on James Ward only; and it remains to Murphy (1950) to describe in some way the notions of self of Hume, Maine de Biran, James, Adler and Piaget. The survey of the historical background of social psychology in the *Handbook of social psychology* (1954) is the most complete examination of the
self within its context. Histories of psychiatry are no more illuminating. Roback (1961) does not mention self. The history by Hall (1944) is chiefly interesting for the survey of the names of psychologists which appeared in the psychiatric textbooks in the United States between 1861 and 1942. Of the psychologists whose contributions to the construct of self are reviewed above a large proportion feature in that list (1944, p.449).

An Analysis of the Parent Self Constructs

A summary of the early self constructs which preceded and influenced current theories of the self would entail selection on such rigorous principles as to be altogether misleading. For this reason, although a diagram representing the interaction of the early self theorists has been drawn up against a chronological background it is relegated to a place in the Appendix (Figure 3). The preferred method of analysis is one through which the essence of each notion is represented and compared. Such a procedure requires the setting up of a set of categories into which the individual ideas may be classified. The seven definitions which English and English (1958) provide for the word 'self' serve well as these categories, since they represent current technical use of the word and embody important distinctions made by psychologists such as that between self as subject and object.
<table>
<thead>
<tr>
<th>Me &amp; Mine</th>
<th>Whole Being</th>
<th>Agent</th>
<th>Personality</th>
<th>Centre of Psychology</th>
<th>Self-Concept</th>
<th>Self-Sentiment</th>
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Table I. A Content Analysis of Self Theories (400 B.C. to 1935 A.D.)
The self construct posed by a specific theorist is assessed from his writings and the summary of them contained here. The assessment is directed at the establishment of a unitary concept as proposed by each author which is categorised as being predominantly concerned with the phenomena referred to in one of the definitions of English and English. The definitions are described below with the labels of their distinguishing phenomena shown in brackets:

1. That which a person calls his own (Me and Mine)
2. The total living being (Whole Being)
3. The part of the person which carries out the psychological acts (Agent)
4. The characteristics which distinguish the individual (Personality)
5. That which is observed by the person to be the centre of his psychological processes, including both the subject and the object (Centre of Psychology)
6. The ideas, feelings and strivings that are recognised by the individual as his own (Self-Concept)
7. That which is not only the object of appropriate experience but the feelings and strivings organised about that object (Self-Sentiment).

The resulting categorisation is shown in Table I.

In summary it appears that the majority of the early writers on the topic of self were concerned either with what the individual defined as part of and belonging to himself, the self as pure subject or the self as both subject and
object. The object self was described to a lesser extent as were the feeling which the individual might hold towards himself. One little known philosopher-psychologist used the term self to refer to the whole being, while Stout was unique in equating the term with the present day use of the term of personality.
CHAPTER 2

THE SELF IN PERSONALITY THEORY
There is a considerable body of current opinion which agrees that the appreciation of the self, theoretically and empirically, is necessary as a basis for the understanding of human behaviour. Hilgard (1949), Brandt (1957), Hebb (1960) and Holt (1962) have been the most influential protagonists of this view. Lowe (1961) has suggested that the term 'self' refers to an artefact created by psychologists to explain experience. Since this definition would equally well apply to the more recent term 'personality' an examination of the self constructs evolved by theorists of this field is indicated.

Classical Psychoanalytic Constructs of Ego and Self

The first section of this analysis of self in personality theory must contain the picking up of the threads of the history of the construct. The contributions of Freud and his followers and critics, though taking root in the soil of nineteenth century thought, are best examined as the contemporary theories of behaviour they are. The self psychologist Mary Calkins claimed psychoanalysis as a self psychology (Calkins & Gamble, 1930), being the science of the conscious being (or self) and the unconscious (the dissociated self) in relation to the physical and social environment. Psychoanalysis to Calkins, however, comprised the works of Freud, Jung and Adler, almost exclusively.
Psychoanalytic contributions to the construct of self are found to fall within the following schema. At the pinnacle of a metaphorical pyramid lies the prime innovator, Sigmund Freud, giving rise to a series of orthodox followers such as Fenichel and Rado, writing a little closer to the present day. These, in turn, stimulated many minor psychoanalysts grappling recently with problems of ego-strength, self-esteem and identity. On another face of the pyramid are found those psychoanalysts who have developed and emphasized one particular aspect of Freud's system: the ego-psychologists (Hartmann, Kris, Loewenstein and Rapaport) concerned with the rational processes in man, thinking, perception and adaptation; the social psychiatrists (Adler, Horney, Fromm and Sullivan) concerned with the relationships between the individual and his inter-personal environment; and the mystics, comprising Jung and his followers analysing the collective and individual unconscious in the process of individuation. Independent psychologists, who nevertheless owed much to Freud, lie on the third face of the pyramid. On this face significant contributions to the construct of self have been made by Hadfield, Anderson and Symonds.

At the outset, it appears impossible to agree with Calkins that Freud was the instigator of a self-psychology. It would seem that she arbitrarily equated the terms ego and
self, ignoring their differing connotations. Munroe (1955) has maintained that this claim is a repudiation of the basic libido theory while allowing that the conceptualizations about the self devised by later psychoanalysts stem from the original concept of ego. This ego grows out of the original primary narcissism of the infant (Freud, 1925).

Under the influence of the real external world which surrounds us, one portion of the id has undergone a special development. From what was originally a cortical layer, provided with organs for receiving stimuli and with an apparatus for protection against excessive stimulation, a special organization has arisen which henceforth acts as an intermediary between the id and the external world. This region of our mental life has been given the name of ego. (Freud, 1949, p.15).

Essentially, then, the ego is 'a coherent organization of mental processes' (1927, p.15), rather than the biological unit or the unique object of introspection prominent in later theories. Consciousness of ego actions is customarily taken to be minimal. Ego might, indeed, be regarded as referring to a set of processes rather than an entity.

Franz Alexander (1944) has traced the development of the ego up to 1933 and attempted to treat this problem of the consciousness of ego functions. He concluded that because the ego is so close to the individual, although he is aware of it at all times he is not conscious of its actions (1948). This statement may have intuitive merit, but does little to
clarify the conceptual problem involved. Of more merit is
the contribution of Rado (1928) who postulated a concept
entailing a feeling of self as a whole being, later labelled
self-esteem (Benedek, 1961). Fenichel, another orthodox
Freudian, made use of this concept (1937, 1954), describing
how the anxiety experienced by very young children in
relation to feeding, cuddling and so on is the first determin-
ant of the level of their self-esteem.

Of the minor writers de Groot (1947), also, accepted
the notion of self-esteem which he maintained is observed
when there is a balance between the narcissistic and aggressive
cathexes of the ego. Dorsey (1951) and von Fiesoldt (1960)
each stressed the influence of self-consciousness on
behaviour, the latter especially stressing the somatic basis
of the empirical ego or objective self and its dependence
on memory. Here is the shadow of some of the earlier philo-
sophical speculations on the nature of the self in contrast
to the measurements of behaviour related to the self such as
those of Frenkel-Brunswik (1939; 1941) on self-reports.
The work of Nunberg (1931; 1948) and Gottesman (1959) on ego-
strength follows this line of empirical validation of psycho-
analytic ego-concepts.

In the therapeutic practice of psychoanalysis some
concept of self is usually taken into account. Transference
is regarded as taking place in accordance with the self-concept of the individual (Gut, 1954). The feelings of uniqueness and identity have been examined by the case study method with indications that painful feelings of uniqueness lead to the building up of a strong defensive phantasy system to maintain ego-integrity (Shugart, 1962). A marked resemblance to an aspect of the Rogerian approach to personality and therapy is apparent. Themes familiar from the client-centred approach are also found in the recent psychoanalytic work on self-alienation (Wenkart, 1955; Spiegel, 1959; Rubins, 1961; Schachtel, 1961; Weiss, 1961). Normal early growth of self involves the formation of a self-concept out of experience and identification with self-consciousness to give identity. In seeking personal identity, people often focus on concepts which are alien to the true self. Self-alienation is the result of the neurotic process in which acceptance is withheld, the self rejected, and the ideal-self coveted. Stroh & Buick (1964), also among the orthodox, treated the personality growth of the child in terms of the development of self-consciousness. Such is the emphasis in psychoanalytic psychotherapy on both European and American continents today.

There is some concern over the confusion engendered by the parallel use of the terms self and ego among the
psychoanalysts (for example, Miller, Isaacs & Haggart, 1965). Solutions have ranged from the all embracing self-system of Kaywin (1957; 1959) which incorporates parts of the id, self-representations and the super-ego (super-self) to the theory that the ego is a structured set of interrelated motives centred about the awareness of the self (Chein, 1944). Jacobson, in her studies of the self and the object world (1954, 1964), provided one of the most useful defining solutions in making this distinction:

The meaning of the concepts self and self-representations in distinction from the ego, become lucid when we remember that the establishment of the system ego sets in with the discovery and growing distinction of the self and the object world. (1954, p.85).

Further, the concept of self was related to that of super-ego.

Whereas self-perception represents always an ego-function, the self-evaluation of an adult person is not exclusively a super-ego function. Founded on subjective inner experience and on objective perception by the ego of the physical and mental self, it is partly or even predominantly exercised by the super-ego, but it is also partly a critical ego function whose maturation weakens the power of the super-ego over the ego. (1954, p.123).

The self construct of Jacobson owed much to the notion of self-representation formulated by Hartmann as the psychological meaning of the bodily, social and spiritual identity of the individual within the ego system.
The Psychoanalytic Dissenters

The second face of the psychoanalytic pyramid is now in view. Nearest to the base (the most recent development) stand the ego-psychologists who have been avowedly concerned with self-evaluations within social contexts (Lichtenstein, 1965), Hartmann, Kris, and Loewenstein have been the most prominent renovators of Freud's construct of ego, maintaining that it must be defined by its functions of organization and control. Papers by Hartmann, especially, emphasized this construct (1950, 1959). For him the self comprised the id, ego and super-ego and exists prior to the differentiation of the ego. An interesting comparison of views can be made with those of another ego psychologist, Paul Federn, who 'reinstated the ego in its rightful place as the actual self-experiencing part of the bodily and mental aspects of personality' (Weiss, 1957, p.210). For Federn the self comprises the ego (subject) and self (object) (1952). He dealt with ego feeling rather than structure, and is considered to have formulated a dynamic phenomenological theory of behaviour combining the best aspects of the Freudian determinism with the phenomenological approach to observation and collection of data (Hinsley, 1962). Examination of a paper written by Federn in 1928 reveals that he anticipated the work of Sheerer (1949) and Stock (1949) by twenty years.
in his belief that the way an individual reacts to himself determines to some extent his reactions to other persons, one of the main tenets of client-centered personality theory.

On the same surface of the pyramid lie the social psychiatrists; interested not in ego concepts based on Freud's theory but in the importance of interpersonal relationships within the psychoanalytic framework, and owing much of their approach to the early disagreements of Alfred Adler. Adler, himself, did not follow through some aspects of his theory which logically would have led to a central position for the notion of self-esteem. He emphasized only a creative self obscurely defined. Closest to him in spirit was Fromm, who, writing in 1939, put forward the plea that what was wrong with the world was that there was too much selfishness and not enough self-love, a similar interpretation to that of Federn yet in terms of society and culture rather than the individual.

Karen Horney, also, was interested in cultural and interpersonal factors determining behaviour. Her psychoanalytic theory emphasized the ego functions rather than libidinal development. Another of her quarrels with Freud concerned the self directly. While Freud maintained that self-esteem has its roots in narcissism, Horney claimed that self-esteem and self-aggrandizement are mutually exclusive, the latter arising
out of narcissism (Horney, 1947). Her central concept of basic anxiety was a type of self-awareness. In neurosis the real self becomes lost in an effort to preserve the unrealistic, exaggerated, ideal image of the self (Horney, 1945). Self-acceptance is lacking. Psychologists (Munroe, 1955; Vollmerhausen, 1961) have agreed that the idealized image of the self is one of Horney's most important contributions to psychoanalytic theory. The alienation from the core self which occurs in neurosis and the acceptance which is achieved through therapy has been described by one of her followers (Wenkartz, 1955) as taking part on three levels: concerning the self as part of the universe, as a member of the human organization and as the self within oneself.

Harry Stack Sullivan used some construct entitled self as the central pivot of his psychotherapeutic theory. Yet as Thompson (1956) has pointed out, it is not clear whether his self-esteem and his concept of self are identical. Ford and Urban (1963) had no doubts about this: the self-system, groups of anxiety avoidance behaviours, they maintained, is not to be confused with the personification of the self, identity. The development of this self-system was described at length in the papers making up The interpersonal theory of psychiatry. The child gradually differentiates himself from his environment into the categories of the good me (giving
satisfaction), the bad me (anxiety), and the not me (terror). The self is not the entire personality, which is ill-defined in comparison with the various aspects of the self. For Sullivan the self was the dynamism which integrates experience from birth. Green (1962), after tracing the antecedents of the Sullivanian notions of self back to James and Mead, subsumed all such notions under the one definition: '...the self is that aspect of man in his interaction with others which has the task of minimizing anxiety' (p. 280).

Sullivan's interest in the development of the individual was shared by E.H. Erikson who saw the self-image as a substructure of the ego (1950), but considered the concept of personal identity to be the most fruitful in this area.

At the time, then, it will appear to refer to a conscious sense of individual identity; at another to an unconscious striving for a continuity of personal character; at a third as a criterion for the silent doings of ego synthesis; and, finally, as a maintenance of an inner solidarity with a group's ideals and identity.

(Erickson, 1959, p. 102).

Psychologists working within the Jungian framework, too, have recently examined the development of the self in childhood (e.g. Fordham, M., 1947; 1951), giving a picture of the self functioning in the child so as to integrate the child's personality and ensuring development of the ego. Jung has been coupled with Freud as a writer who has only added to the ultimate problem of a psychological concept of self (Boss,
1960). Yet in *Psychological types* (1923) he made quite clear the distinction between self and ego as he saw it. He defined the ego as the subject of consciousness, whereas the self, which includes the ego, is the subject of one's total personality and involves unconscious as well as conscious tendencies. Realization of self is the goal of the individuation process of Jungian therapy (Adler, 1951) in which a new centre of personality emerges. This new centre is called the self. Frieda Fordham has pointed out in her Pelican introduction to Jungian psychology (1961), that Jung used this word in the Eastern manner so that it has overtones of the supreme oneness of being of Hindu thought.

From study of the publications of Jung a case may also be made for a definition of self as the central archetype (Hawkey, 1955) as well as the totality of the psyche as outlined above. Michael Fordham examined the two concepts in detail (1964), placing more emphasis on the latter and concluding that in Jungian psychology 'the self is conceived as not only a dynamic and stable structure but also as an integrating-deintegrating system' (1964, p.101).

**Self Theories related to Psychoanalysis**

The three independent psychologists making up the third face of the psychoanalytic pyramid are selected as representa-
tive for a variety of reasons. The first whose work is examined, Camilla Anderson, is chosen for the precise statement which she has made of her self theory of the dynamics of behaviour in one short paper published in 1952. The theory is best stated in her own terms. 'The pattern of life of every individual is a living out of his self image. (p.236) ... Each person has a physical self-image and a psychological self-image ... The self-image is composed of many parts, and each part is conceived of as having both anatomy and physiology' (p.228). In other words, the self-image has both structure and function. Anderson divided the self structure into id, ego, super-ego and ego-ideal. As to the development of the individual she said: 'The psychological self-image is ... formed early in life as a result of the succession of experiences of the child with significant people in his environment (p.232). Once the psychological self-image has been formed, behaviour loses its free or experimental nature (p.235). As long as the person can maintain his self-image intact and functioning according to anticipation he will be free from anxiety (p.237).'

Finally, she agreed with many personality theorists in this statement: 'The goal of all neurotic behaviour is self-image maintenance, the goal of all therapy is self-acceptance'. (p.244). This conceptual framework around the how and why
of personality which Anderson provided is one of the most succinct available to date.

The theory of behaviour which J.A. Hadfield presented in his *Psychology and morals* (1923) might well have a place in the above chapter on the history of the concept of self due to its date of publication and the obvious affinity of the theory with that of McDougall. The debt which Hadfield owed to psychoanalytic thought, however, ensures him a place on the third face of the hypothetical pyramid. That he was at great pains to account for two particular aspects of behaviour especially, the development of the individual and mental illness and therapy, reflects his similar frame of reference. Despite these affinities, it is strange that Mary Calkins never welcomed Hadfield to the brotherhood of self theorists to which he surely belonged.

Certainly a construct of self is central to the conceptual system of personality organization which he built up. The term organization, too, was a central one in his highly cognitive theory. 'The "organized self" may be defined as the organization of all the accepted sentiments and dispositions' (1923, p. 78); a sentiment being 'a psychological constellation acceptable to the individual and with which he consciously identifies himself' (p. 24), and dispositions differing 'from sentiments in that they are
unconsciously accepted' (p.25). All sentiments and dispositions lead to a common purpose and the function of this organization is will. Will was defined as the self in movement while character is the quality of the self. The development of the individual takes place in stages of organization of self:

(i) self-consciousness (3 to 4 years)
(ii) the development of will (childhood)
(iii) idealism (16 to 18 years)
(iv) character development (adulthood)

Arrest of this development leads to mental breakdown as does identification with the self-phantasy, which, unlike the self-image, is unconscious and not bound by reality. These constructs are reminiscent of the id - super-ego struggle; while the constructs of sentiments and dispositions are common to McDougall and Hadfield, although for the latter the self was not a sentiment but the total personality. He looked forward to the day of the holistic personality theorists (Angyal and Maslow) and to some extent Carl Rogers when he said: 'The craving of the self for completeness is shown in dreams, in neuroses, and in the conscious efforts towards self-realization'. (1923, p.75).

As a concluding representative of modifiers of psycho-analytic thought, Symonds is selected for his survey of contemporary theories of the ego and the self (1951).
Although adopting a primarily psychoanalytic point of view, Symonds brought together the sometimes confusing and conflicting theoretical constructs of psychoanalysis and phenomenology against the background of established empirical data. This results in an important treatment of the self and the ego, including comparisons of ego, super-ego and self, and the structure, functions and development of both phenomena. Commencing his survey, Symonds approached the confusion of the differing constructs of self by offering his own definitions:

Ego henceforth will be used to refer to that phase of personality which determines adjustment to the outside world in the interest of satisfying inner needs in those situations where choice and decision are involved.... The self, on the other hand, refers to the body and mind and to bodily and mental processes as they are observed and reacted to by the individual.  

(1951, p.4.)

Examination of the treatment of these two constructs clarifies this distinction: the ego is viewed as actor, adaptor, executor, knower, perceiver, thinker and will, while the self is discussed in terms of threat to it, change in it, as a value and as a goal to be realized. In other words, the self is the passive object of the active subject, the ego. This distinction has the merit of clarity but does not reflect current psychological nor, more narrowly, psychoanalytic use. More representative are the aspects of self which
Symonds maintained that different personality theorists emphasize the self as directly perceived, self as a concept, self as a set of values and self as a system of activities. This claim is borne out in the treatment of the theories below, the last-named aspect, for example, being dominant in the next construct examined.

**G.W. Allport: the proprium**

Both the notion of ego which Freud evolved, a rational, organizing yet passive agency, and the more active principle of the ego-psychologists appear to bear at least some relationship to the construct labelled Self by various authors. The framework of Bartocci (1945) serves to clarify at least one aspect of this relationship. Following the arguments of G.W. Allport (1943) he formulated this suggestion:

The hypothesis here suggested is that 'I' refers to a complex, unitary activity of sensing, remembering, imagining, perceiving, wanting, feeling and thinking. These activities are the dynamic unity referred to by the word self. This self is enduring and unique, and unifies diverse descriptions of the ego and clarifies the function of the ego in personality organization.

(1945, pp.91-2).

He emphasized that the self is both knower and known while the ego is never the latter, and defined the ego as the self’s evaluation of its activities in the life situation.

G.W. Allport, himself, used the terms ego and self interchangeably. Of the established personality theorists treated
in this chapter he is the only one, to date, who has attempted an honest, detailed response to the question: 'Is the concept of self necessary?', be this response still in the realm of theory. He postulated a construct which includes all the unique and personal aspects of the individual, the 'proprium', with its functions of bodily sense, self-identity, ego-enhancement, ego-extension, rational activity, self-image, and proper striving and knowing (1955, pp.41-54). He has traced the development of these functions in the child (1961, pp.110-138). His answer, then, was as follows:

...all psychological functions commonly ascribed to a self or ego must be admitted as data in the scientific study of personality. These functions are not, however, coextensive with personality as a whole. They are rather the special aspects of personality that have to do with warmth, with unity, with a sense of personal importance.... If the reader prefers, he may call them self-functions, and in this sense self may be said to be a necessary psychological concept. What is unnecessary and inadmissible is a self (or soul) that is said to perform acts, to solve problems, to steer conduct, in a trans-psychological manner, inaccessible to psychological analysis. (1955, p.55).

Allport made an important theoretical point. It is unfortunate that his theoretical acumen did not, apparently, enable him to generate hypotheses amenable to empirical verification.

**Gardner Murphy: a social self**

The bio-social theory of Gardner Murphy may be regarded as a psychology of personality based on the organization of
the self. Predominantly an eclectic theorist, Murphy, like
Freud, was in search of an explanatory concept of motivation.
The structure of personality was seen by him as a tension
system. Psychological constructs play an important part,
yet a psychological construct of self is in evidence:

The self is a thing perceived, and it is also a
thing conceived; in both senses it is constantly
responded to. A large part of behaviour that
constitutes personality is self-oriented behaviour.
(1947, p.479).

Murphy made a Piagetian distinction between self and not-
self. Self-awareness occurs through canalization on the
individual's own body. The origins of the self rest in the
psychoanalytically-named processes of identification and
projection. Murphy was also concerned with learning and
the influences of society on the individual. He stressed
the other side of the coin of interaction between self-
concept and concept of others to that emphasized by Federn
when he said: 'The individual is identified with the group
and accepts its structured patterns of values; hence the
type of self-portrait is largely defined by the subcultural
system of values'. (1947, p.754). Not only, runs the theoret-
ical assumption, does the opinion the individual has of
himself influence that which he has of the group, but the
way in which he sees the group and its values determines
the view he takes of himself.
Another psychologist whose contributions to the field of personality research must be considered in R.B. Cattell. The range of his interests is wide as is testified in the recent collection of his papers (1964) which include contributions to the areas of personality structure and theory, motivation, clinical psychology, social psychology and genetics. It is with the self in personality theory that we are concerned here however, so that it is the work of Cattell in personality description and motivation measurement which has relevance to this thesis. He has been concerned with the measurement of personality variables and their definition through measurement from the collection of life data, questionnaire data and objective tests. As well as the factors analyzed from this data (e.g. cyclothymia, ego strength, intelligence and surgency), he has examined motivation (attitudes, interests, dynamic structures, conflict and anxiety) by the same methods. He has recognized and attempted to control and measure the effects of personality changes through time-oscillation, fluctuation, learning and maturation.

Cattell defined personality according to several sets of terminology or within the framework of several distinct bodies of knowledge. Within the clinical framework, which
is common to the majority of personality theorists discussed, he wrote of personality as 'a more or less integrated set of originally discrete dynamic trends' (1950, p.221). Factorially, it is 'the dimensions of behavioural space for human beings' (1950, p.222). In sum, 'personality is that which determines behaviour in a defined situation' (1950, p.222). These trends or dimensions or determinants were derived from his experiments in factor analysis of questionnaire data which yielded a number of primary source traits, among which was U.I.(Q) 18 or Q₃: Self Sentiment Control.

Definition and naming of this factor has been, necessarily, the long and laborious process of question and empirically based answer. Cattell gave a progress report of his work (1957) which included these correlates. Of questionnaire items and responses which have high factor loadings (+ .60 and above) for Q₃, there are:

Which do you believe in more strongly?
(a) luck
(b) **insurance**

Do you think that you are less energetic than most people are at getting your work done? No

When a problem proves to be too hard, which do you do?
(a) try another problem
(b) try another approach to the same problem

It appears that environment has an 8-to-1 ratio to heredity
in determining scores. Background variables associated with this source trait include the subject admitting to being a healthy child and not very obedient to father (1 per cent level). In occupational analysis $Q_3$ is high in psychiatric technicians, policemen, mechanics, executives and electricians. In group dynamics $Q_3$ persons are outstanding for the total number of remarks made (1 per cent level) and correlation with receiving leadership positions is about + 0.4.

U.l. (Q) 18 is thus defined. This does not, however, make clear Cattell's position with regard to the construct of self in personality theory. The self-sentiment remained undefined. He was impressed by the hypothetical system of subsidiary attitudes and goal proposed by Murray (1937) and explored this lattice of needs by factor analysis. A set of factors described as ergs and sentiments resulted, forming a dynamic lattice.

Many of Cattell's early experiments were related to attitudes, which he defined as follows: 'an attitude is a vector, definable by direction as well as magnitude, and further by point of application (object) and stimulus situation' (1947, pp.221-2). This concept is very similar to that of sentiment in which he followed McDougall (1933): 'McDougall defined a sentiment as a compound of dynamic purposes centering on one object' (1947, p.227). R- and P-
techniques enabled Cattell to verify the existence of several ergs and sentiments (1952) among which was the self-sentiment.

Analogous to the self-regarding sentiment of McDougall although not presented as the pinnacle in a theoretical system of motivation components, the self-sentiment is:

... the factor and system of attitudes centered on the conceived, contemplated self and directed to maintaining its physical, social and moral integrity as a basis for other sentiment and ergic satisfactions. (1957, p.900).

In other words, the self-sentiment is a set of attitudes centred around the self for the survival of the self. The pattern of attitudes does not contain high correlates with the factor as reported from experiments to date; those of + 0.4 and above being:

I like to have good control over all of my mental processes - my memory, impulses, and general behaviour.

I want never to do anything that would damage my self-respect.

Clarifying experiments by Horn (1961), Cattell and Horn (in publication) and Gorsuch (in publication) are much needed.

The contribution of Cattell is not made to the construct of self as such but rather to concepts of attitude to self. The task which he set himself is the measurement and empirical definition of such variables, and measuring instruments he
has supplied. The Sixteen Personality Factor Questionnaire (16 P.F.) provides a score for U.I. (Q) 18, while aspects of the dynamic self-sentiment are measured by the Motivation Analysis Test (M.A.T.).

Other Empirical Analyses

S.M. Jourard may be considered as concurring with Cattell in the importance placed on empirical analysis of the self. He did not, however, derive some theoretical construct related to self from collected data, but searched such data for evidence to support his preconceived theory. This data he collected in a series of experiments designed to examine aspects of body image and cathexes (Secord & Jourard, 1953; Jourard & Remy, 1957), identification (Jourard & Remy, 1955; Jourard, 1957) and self-disclosure (Jourard, 1958; Jourard & Lasakow, 1958; Jourard & Landsman, 1960; Melikan, 1962).

The theory of adjustment which appears to lie behind these experiments owes much to the works of A.H. Maslow, Carl Rogers and Martin Buber. What amounts almost to plagiarism is particularly apparent when Jourard was writing for the layman (1964). By way of definition for psychologists he had this to say about the self:

The self-structure is a construction of the ego ... [which is the agent or source of all instrumental behaviour] ... It refers to the beliefs, perceptions, ideals, expectations, and demands which a person has
come to formulate with respect to his own

This self is made up of several components; the self-concept
(the beliefs the individual has concerning what kind of a
person he is), the self-ideal (beliefs about how he should
behave) and various public selves. In reference to the last-
named he quoted William James: '... a man has as many social
selves as there are individuals who recognize him...' (James,
1890, p.179).

Although Jourard has established some picture of the
determinants of self-disclosure he has made little contribu-
tion towards a systematic theory of the self which is both
explanatory and testable. Such was the theory proposed and
tested by Edelson and Jones (1954). Within their elaborate
theory of behaviour they defined the conceptual self-system
as 'that system of conceptions of himself and his relations
to his environment which the individual uses as hypotheses
for interacting with the environment so as to maintain
homeostasis by resolving his affective needs'. (1954, p.119).

This definition leads to a number of operational hypotheses.
The testing of one such hypothesis involved introducing
each subject to several role-playing situations, after each
of which they made Q-sorts of self-evaluative items. Factor
analysis of the resulting data justified acceptance of the
experimental hypothesis.
Organismic Theorists: Goldstein, Angyal, Maslow

The theories of personality examined so far have shown nothing of the influence of Gestalt thought on approaches to the behaviour of the individual. The significance of this influence may be observed in those theories described as organismic by Hall and Lindzey (1957), more specifically those of Goldstein, Maslow and Angyal. Essentially, man is studied as a whole and not part of a whole (the environment), and not in terms of some selected piece of behaviour (for example, perception) which forms a frame of reference for some so-called Gestaltists today. To the organismic personality theorists personality is to be considered as a whole even if it is disorganized as in schizophrenia.

Goldstein (1939) is credited with the publication of the first such holistic theory of personality. He postulated that there is only one chief motive for behaviour under which may be subsumed all the others. This motive he called self-actualization. Maslow, with early emphasis on self-esteem and self-evaluation in abnormal psychology (Maslow & Mittelmann, 1941), took up this concept of motivation as the creative trend in the behaviour of man. He was particularly concerned with the individual who may be described as self-actualizing (Maslow, 1954; 1959; 1962), more truly himself and 'closer to the core of his Being' (1959, p.62). Such
an individual has more efficient perceptions of reality and more comfortable relations with it, is more accepting of self and others, is creative, and has spontaneity and autonomy. Self-actualization, per se, was described by Maslow as being 'intrinsic growth of what is already in the organism, or more accurately of what is the organism itself ... self-actualization is growth motivated rather than deficiency motivated' (1954, p.183). In contrast, Angyal's system placed more emphasis on the interaction between the individual and the environment (the bio-sphere) which was described in terms of self-determination and self-surrender. As part of the bio-sphere exists a set of self-concepts called the symbolic self, which defines the subject – object relationship and which may or may not distort reality. 'The relative segregation of the symbolic self within the organism is perhaps the most vulnerable point of the human personality organization' (1941, p.121).

Phenomenology and the Self Constructs

The influence of Gestalt thought is also apparent in the phenomenological approach to personality which has been rapidly gaining in popularity (Lundin, 1964). The four phenomenologies described by Landsman (1958), the serial theory of awareness of Jones (1949) and the subjective and objective divisions of the extended and striving selves of
Lundholm (1940) all bear witness to this. The most useful collection of comments on these theories is the volume edited by Kuenzli, *The phenomenological problem* (1959), in which the theoretical postulate common to all the writers is that for each individual there is a phenomenal field, life space, reality world, universe of events or behavioural environment which completely determines the behaviour of that individual. Smith (1950), although making use of this frame of reference to distinguish between the terms self and ego as phenomenal and non-phenomenal sides of the same coin, raised critically some important points. These included the accusations that phenomenology ignores psychological facts such as the existence of unconscious determinants of behaviour and that its constructs are merely descriptive rather than explanatory. The defense which Snygg and Combs, perhaps the most ardent supporters of the phenomenological approach, put up (1950) is not impressive.

During the early development of their theory Combs was chiefly concerned with the use of phenomenological concepts in non-directive therapy (1946; 1947; 1948), while Snygg established the respectability of phenomenology as a system. Such a system is superior to the objective approach, he maintained, in that no translation of terms is necessary and the theory can lead to predictions about the individual
rather than about the group only (Snygg, 1941). It is true that it has generated several widely read text-books (Combs & Snygg, 1959; Combs, 1962) and much research (for example, Combs, Soper & Courson, 1963). Such a system does, of course, require some type of self construct forming part of the phenomenal field. 'The phenomenal self includes all those parts of the phenomenal field which the individual experiences as part or characteristic of himself' (Snygg & Combs, 1948, p.58). There is only one real need, actualization of the self, a learning to live effectively with the self-concept. 'In the personal economy of any individual, the concept of self seems to represent the individual's guide to behaviour' (Combs, 1949, p.31). There is concern, too, with the measurement of this self-concept, depending as it does on self-report. Combs and Soper (1957) listed the influences on self-report as follows:

(i) clarity of the subject's awareness
(ii) lack of adequate symbols for expression
(iii) social expectancy
(iv) co-operation from the subject
and (v) freedom from threat and personal adequacy.
These influences are illustrated amply below in the sections on measurement.
Such an emphasis on the empirical basis of theory construction within the phenomenological approach is all too unusual. The interests of Moustakas (1956; 1961), for example, contrast markedly here. Similar in its approach, however, is the hermeneutic theory of personality of Lecky (1951), unfortunately published posthumously. According to Lecky, all behaviour shows an inevitable striving towards self-consistency. He defined personality as 'a unified scheme of experience, an organization of values that are consistent with one another' (1951, p.160). 'According to the theory of self-consistency, we seek those experiences which support our values, and avoid, resist, or if necessary, forcibly reject those which are inconsistent with them'. (1951, p.169). Lecky showed himself to be aware of the dangers of an attempt within any one theoretical system to support both the doctrine of the unconscious and such a self-concept as is implied in the doctrine of self-consistency.

The Self Theory of Carl Rogers

The phenomenological basis for a theory of personality organization was used by Carl Rogers who has been much influenced by Snygg and Combs, amongst others, in his theory construction. Primarily, Rogers is a psychotherapist, but
naturally he found that some delineation of a construct of personality and personality functions is necessary to the formulation of general principles of therapy. The chief constructs in the resulting theory are the organism, the phenomenal field and the self which develops out of interaction between the organism and the environment. The most important learning process is the learning of the self. The organism strives perpetually to enhance itself; that is, the chief motive of Rogers' construction may be said to coincide with that of Goldstein, self-actualization. Even as recorded up to 1957 (Cartwright, 1957), the bibliography of research and theory construction related to so-called client-centered therapy which encompasses the work of Rogers and his followers is impressive. A selection of reports of such research collected into just one volume alone, (Rogers & Dymond, eds., 1954; see especially papers by Dymond, Gordon & Cartwright, Grummon & John, Rudikoff, Seeman, and Vargas concerning changes in the self) make up a useful contribution to an empirical basis for the construct of self. Several interesting statements of the personality theory underlying client-centered therapy are available (Shlien, 1961a; Gendlin, 1962), although the original postulates of Rogers concerning the self are examined here.

Rogers' most precise statement of personality organization (1951, pp.483-522) was delivered in a series of
propositions, the first seven of which were primarily phenomenological in character and referred to the behaving organism as outlined above. The remaining propositions introduced the construct of self and elaborated this theme to what is indeed a self psychology:

... VIII. A portion of the total perceptual field gradually becomes differentiated as the self...

... IX. As a result of interaction with the environment, and particularly as a result of evaluational interactions with others, the structure of the self is formed—an organized, fluid, but consistent conceptual pattern of perceptions of characteristics and relationships of the 'I' or the 'me' together with the values attached to these concepts...

... X. The values attached to experiences, and the values which are a part of the self-structure, in some instances, are values experienced directly by the organism, and in some instances are values introjected or taken over from others, but perceived in distorted fashion, as if they had been experienced directly...

... XI. As experiences occur in the life of the individual, they are either:

(a) symbolized, perceived and organized into some relationship to the self,

(b) ignored because there is perceived relationship to the self-structure,

(c) denied symbolization or given a distorted symbolization because the experience is inconsistent with the structure of the self...
... XII. Most of the ways of behaving which are adopted by the organism are those which are consistent with the concept of the self...

... XIII. Behaviour may, in some instances, be brought about by organic experiences and needs which have not been symbolized. Such behaviour may be inconsistent with the structure of the self, but in such instances the behaviour is not 'owned' by the self...

... XIV. Psychological maladjustment exists when the organism denies to awareness significant sensory and visceral experiences, which consequently are not symbolized and organized into the self-structure. When this situation exists, there is basic or potential psychological tension...

... XV. Psychological adjustment exists when the concept of the self is such that all the sensory and visceral experiences of the organism are or may be assimilated on a symbolic level into a consistent relationship with the concept of self...

... XVI. Any experience which is inconsistent with the organization or structure of self may be perceived as a threat, and the more of these perceptions there are, the more rigidly the self-structure is organized to maintain itself...

... XVII. Under certain conditions, involving primarily complete absence of any threat to the self-structure, experiences which are inconsistent with it may be perceived and examined, and the structure of the self revised to assimilate and include such experiences...

... XVIII. When the individual perceives and accepts into one consistent and integrated system all his sensory and visceral experiences, then he is necessarily more understanding of others and is more accepting of others as separate individuals...

... XIX. As the individual perceives and accepts into his self-structure more of his organic
experiences, he finds that he is replacing his present value system - based so largely upon introjections which have been distortedly symbolized - with a continuing valuing process...

This statement of the self theory of Rogers appears to hold through all the adjustments Rogers has made in his therapeutic technique. These adjustments may be traced in Rogers' major publications (1942; 1951; 1961). In the first of these, Counselling and psychotherapy, Rogers emphasized the importance of recognition and acceptance of self; in the second, Client-centered therapy, he described therapy in terms of self-perception, self-evaluation and self-actualization; while in his latest collection of papers, On becoming a person, direct experiencing of the self appeared to be the goal of the therapeutic process. In all this writing, however, Rogers found it necessary to provide a definition of self only once, claiming the term as equivalent to 'the awareness of being, of functioning' (1951, p.498). Similar definitions appear in the chapter Rogers contributed to Koch's volumes (1959).

Development Psychology and the Growth of the Self

An examination of the self has been made within a survey of current personality theories, ranging from the self as organizer of the psychoanalysts to the humanistic and experiential self of Carl Rogers. The framework has been
that of the adult personality, the question of the self in the growing child being left begging to some extent. The fate of the construct of self in developmental psychology awaits examination.

The personality theorists whose contributions are outlined above have not, of course, avoided the question of the self in the child entirely. In fact, the psychoanalysts for example, in keeping with their emphasis on the influence of early developmental experiences, have been at pains to postulate the appearance of a sense of self in very young children as observed by Ames (1952). Washburn (1961), in fact used test items oriented to the theories of Erikson, Freud, Fromm, Horney and Theodore Sarbin to ascertain the levels of self-conceptualization in high-school students. In this study he identified six patterns; the somatic - primitive self, the submissive - dependent self, the detached - independent self, the outer controlling self, the inner controlling self and the integrative - actualizing self.

Of the general developmental texts, most contain a section devoted to the growing self (for example, Gesell, Ilg & Ames, 1956) while others purport to examine the whole question of development with the self as the paramount construct (for example, Jersild, 1952; Gordon, 1959). Such discussions centre around the importance of self-estimates
in children's behaviour, how these self-estimates evolve and how adults can estimate and influence childrens' self-concepts.

Adolescence, these texts agree, comprises a period of general change in which change in the self-concept is no exception. This hypothesis has been substantiated by studies such as that of Smith & Lebo (1956). Rube postulated that the child's image of self is related to the growth of his body, and sees the day-dreaming which is prevalent in adolescence as 'the necessary process of re-organisation and re-evaluation of the image of one's self' (Rube, 1955, p.636). Nixon, from observation of some six hundred college students, postulated an organic developmental step in mid-adolescence (15 to 18 years) arising from the two crises of independence and self-discovery. This step he called 'the advent of self-cognition' (Nixon, 1961, p.20). His construct of self refers to a concrete substrate in contrast to the ego which is an abstraction: 'the self is the person's symbol of his own organism' (1961, p.29).

It is within the context of theory and research concerning adolescence that the construct named the ideal self is often examined. It may not be primarily a construct of personality theory but rather
a variable (imagined or otherwise) relatively amenable to measurement. Royce (1955b) suggested that the self-concept was assessed in relation to some ideal. It is true that the ideal self is a significant term for Carl Rogers, but only to the extent that it is helpful in the empirical verification of the hypotheses derived from his theory of the therapeutic process. It is also true that it is difficult to formulate a definition of the term which is purely operational. Studies of the development of the ideal self in children have tended to use identical procedures to gain appropriate measures: Havighust, Robinson & Dorr (1946) and Wheeler (1961) both set the essay topic 'the person I would like to be'. Responses tended to fall into the categories of parents, glamorous adults, attractive and visible young adults and composites, imaginary persons, these being the figures from the environment with whom the adolescent identifies. The publications of Havighust and MacDonald (1955), Glückel (1960), MacDonald and Gynther (1965) have illustrated similar trends within different cultures.

It appears that developmental psychologists have something to add to the construct of self. This is also true of psychologists working in other fields related to that of personality theory and measurement, namely the learning theorists, perceptionists and those concerned with the problems
of motivation. As is to be expected the majority of such theorists have found no place for a self construct; yet there is a minority to whom the self is important.

Theories of Learning, Perception and Motivation

In the field of learning, stimulus–response theories of behaviour have no need of, and do in fact carefully avoid any suggestions for the content of 'the little black box' which a self construct would necessarily be. Such a theory is that presented by Dollard and Miller (1950). Yet this and similar reinforcement learning theories are used to account for the genesis of the concept of self in the individual when the existence of such a concept is accepted. Helper (1955) postulated such a process and tested his hypothesis by comparing the self-concepts of children and their parents. Similarity of such concepts and rewards were associated in male subjects but not females, providing inadequate support for his theory.

Of the perceptionists it is chiefly those interested in person perception who have incorporated a construct of self into a general theory of perception. Macleod, for example, defined perception as '... the process whereby things, events and their qualities and relations become present to a self as here, now and real' (Macleod, 1960, p.233). It was, of course, Macleod who, earlier (1949), suggested that motives
might be defined as the interaction between the self and
the object.

A similar view of motivation has been taken more recently
by Harvey and Schroder (1963) who examined the cognitive
aspects of the self and motivation. It is their definition
of self which is of interest here. Self is described as
synonymous with 'an individual's totality of modes of order-
ing of his psychological universe, with one's concatenation
of more or less standardized cognitive tendencies or concept-
ual system(s)' (Harvey & Schroder, 1963, p.97).

Some Self Constructs of Social Psychologists

An attempt to divorce personality theorists from social
psychologists, as from learning and motivation theorists, is
likely to bear the hallmark of hair-splitting. The theory
of self which Sarbin advocates, for example, while involving
the construct of role (normally the prerogative of the social
psychologists) treats the self as one of the many cognitive
structures which may be inferred from behaviour. Sarbin's
theory, as expressed formally (1952) and as a generator of
tested hypotheses (Sarbin & Farberono, 1952; Sarbin, 1955),
is worthy of delineation for its uniqueness in this area as
a purely cognitive conceptualization of self.

The statement of the theory proper is preceded by some
seven postulates, concerning the interbehavioural field of
the human (presumably equivalent to the life space concept or the phenomenal field which includes the self-concept), a definition of the self and the conditions under which change in the self may take place. The self is the result of the responses of the organism to stimuli and is organized around substructures or empirical selves. Sarbin described in detail the development of these substructures, each one being the anlage of the next. In order of appearance they are:

(i) the somatic self, organized around responses to the somesthetic senses (age: up to one month);

(ii) the receptor - effector self, involving global reaction to tension (3 to 4 months);

(iii) the primitive construed self, at which stage the child differentiates between objects and persons (6 months);

(iv) the introjecting - extrojecting self, including a crude use of language and similar to the Piagetian processes of accommodation and assimilation (10 to 14 months);

(v) the social self, which emerges when the child can differentiate not only discrete acts of the people in the environment, but organized patterns of acts or roles (24 months).

In adulthood the social self is the dominant self-structure, although Sarbin postulated that in delinquents the primitive construed self or the introjecting - extrojecting self may be dominant. One point which should be clarified is the nomenclature of the theory. The term empirical as applied
to self does not have the connotations which the Kantian division between pure and empirical egos implies. Sarbin avoided this subject - object dichotomy carefully. He was, however, concerned that the reader be aware that each self derives from interaction with the interbehavioural field, and therein the meaning of the term lies.

Sarbin, the social psychologist, saw the self as derived through learning, rather than as the object learned, so that it is not innate but determined by the experience of the environment. Change in the substructures and therefore in the total self-structure occurs through maturation and learning, and is a function of the strength of the boundaries of the self and the ambiguity tolerance of that structure. Couched in these terms the theory appears to be both hard-headed and useful; however, the hypotheses which Sarbin put to the test do not appear to derive directly from the theory, and it is difficult to devise any which do. It may be more profitable to turn to the work of Lewin in regard to the self from whom Sarbin has borrowed several concepts.

The field theory of Kurt Lewin, on closer inspection however, does not appear to generate testable hypothesis. Viewing behaviour as a function of the field which exists at the time at which the behaviour occurs, Lewin postulated a construct which he named the life-space of the individual
which includes both the organism and the environment. The self is experienced as 'a region within the whole field' (Lewin, 1935). As a Gestaltist, he wished to 'identify the self with the whole of the psychical totality' (1935, p. 61), but observations suggest that part of this totality may be denied by an individual while portions of the so-called environment (for example, clothing or the mother) may be included in the self. The boundaries of the self are, Lewin hypothesised, much less firm in the child than they are in the adult. The modifications which Joidai (1955) made in the theory of Lewin lie chiefly in the delineation of the phenomenal self which he sees as having three phases, the bodily, conceptual and social phases, which correspond to those situations of the life-space.

The terms self and ego have frequently been made use of by social psychologists, including not only Sarbin and Lewin who do attempt definition but theorists like Hadley and Cantril (1949) whose interest in ego-involvement appears to survive difficulties of definition of self and ego. The self-concept is often seen as being centrally important, with socio-cultural referents. Dai (1952) saw it as developed in the primary group at the basis of a hierarchy of selves developed in different groups, and maintained that personality integration represents an integration of these primary and secondary selves.
Acceptance of this point of view raises the question of the relationship between self and roles, a question first raised by G.H. Mead. Moreno (1962) claimed that the self emerges from roles, and that even in psychodrama this situation is not reversed. Grace (1953), on the other hand, reviewed the various approaches made by social psychologists to the construct of self and assigned them to three categories: the 'groupist' tradition which defines the self-concept in terms of the individual's acceptance of and by others; the 'individualist' tradition with definition in terms of the acquisition of objects; and the 'situationist' tradition involving conformity with ritual. Grace rejected these approaches, including the role concept which may be incorporated in the last, and described the construct of self somewhat metaphysically as referring to the unique, human individuality.

That self is a necessary construct for social psychology appears obvious. To a psychologist, however, it is surprising that self is regarded as a key construct in sociology in which the behaviour of groups rather than individuals is studied. Such a construct it has been claimed to be, especially as derived from the theories of Mead, James and Baldwin (Gould & Kolb, 1964). Measurement of the self-concept is apparently of as much importance to sociologists
(Nass, 1961) as it was at the time of the study of Todd (1916). Lee (1950) found that for the Wintu Indians much of what is 'other' for us is identified as self. Such investigations are of course extremely dependent on language structure so that any results must be interpreted appropriately. Perhaps because of these difficulties it is a sociologist who has provided one of the clearest and most measurable definitions of self as:

... a person's idea of the conceptions that others have of him, as well as his own disposition towards these judgements. It is the person's awareness of himself as an active being, a subject and initiator of acts in a social context.

An Analysis of Contemporary Self Constructs

Certain aspects of the use of self constructs by psychological theorists deserve special attention. The philosophers and psychologists of past centuries made much of the distinction between the self as subject and object. Certainly the self as subject – the knowing self, the motivator, the experiencing self, the organiser and the subjective voice of society – is prominent in the self constructs of contemporary personality theorists. The self as object, too, is prominent in terms of a self-concept within each individual. As part of this construct of object-self appears the aspect of self-esteem as it was named by the phrenologists
or self-estimation as named by William James. This affective rather than cognitive aspect is described variously by Fenichel, Federn, Horney, Cattell and Rogers as self-esteem, self-attitude, self-evaluation and self-acceptance.

Other aspects of self constructs besides that of the division of subject - object are common to these contemporary constructs and the theories which were their ancestors. An analysis of types of contemporary self constructs, classified according to the definitions provided by English and English (1958) as were the ancestral constructs, is carried out. A summary of the results is shown in Table 2.

From the analysis it appears that the majority of contemporary personality theorists are concerned with the object recognised by the individual as well as with the object with the feelings and strivings pertaining to it. In other words, the self-concept and the self-sentiment are popular notions today. A few theorists make the central point of their psychology the self as distinguished from the environment, the self as total personality or the self which is the centre of the psychological processes. Jung, who as a creator of theories belonged to the earlier period, provided a lone construct of self as agent. Maslow, the Gestaltist holist, naturally referred to a self which is a whole being.
<table>
<thead>
<tr>
<th>Me &amp; Mine</th>
<th>Whole Being</th>
<th>Agent</th>
<th>Personality</th>
<th>Centre of Psychology</th>
<th>Self-Concept</th>
<th>Self-Sentiment</th>
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<tr>
<td>Sullivan</td>
<td>Jung</td>
<td>Jacobson Hartmann</td>
<td>Anderson Hadfield</td>
<td>Symonds</td>
<td>Cattell</td>
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<td>Allport</td>
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<td>Rogers</td>
<td>Federn Horney</td>
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<td>Lewin</td>
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<td>Harvey &amp; Schroder</td>
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Table 2. A Content Analysis of Self Theories (1935-1965)
The unique placing of the construct of Jung, whose theories although quite popular were generated much earlier, points up the differences between the historical antecedents and current self constructs. (See Table 1). While six of the earlier writers dealt with a self which was pure subject, only Jungians urge such a construct today. There has been an increase in the number of psychologists who use the term to refer to the personality of the individual and a decrease in its use to indicate 'what is mine'. The general trend of the change over time has been from the self as subject to the self as object. Such a trend appears to be a reflection of the increased emphasis on empirical verification of theories. A parallel analysis of the self variables examined by experimentalists has bearing on this hypothesis.

The results of this third analysis, based on the studies reported as empirical evidence concerning the self, do not require tabular representation. It is apparent that the type of variable, according to the English and English definitions, is determined by the avowed aim of the measure employed. The tests used in these studies, with the exception of those examining self-recognition and self-localisation, claim validity as measures of the ideas, feelings and strivings that are recognised by the individual as his own
(self concept) or the feelings and strivings organised around that object (self-sentiment). Self variables, then, are object - self, by the very necessity of operational definition. The examination of the contemporary self constructs indicates an affinity with the self variables to be examined.
CHAPTER 3

EMPIRICAL EVIDENCE CONCERNING SELF VARIABLES
An extensive variety of concomitants of self variables have been reported in psychological literature. Although it is apparent that it is chiefly the empirical ego with which researchers are dealing, problems of definition are not entirely solved by the operational approach. Statements are made as conclusions drawn from experiments using such names as self-esteem, self-acceptance and the self-concept, yet each of these, operationally defined, is a separate and unique variable. In other words, a collection of research conclusions which purport to pertain to self variables has no theme to justify such a collection. It is also true that no conclusions may be drawn as to the determinants and the determined since most of the examination of the data has been by correlation establishing some form of relationship with no suggestion of causation.

A survey of the current status of the self as a variable may be attempted then, always taking these conditions into account. The literature is collected in such a way as to emphasize the examination of self variables within several frames of reference. Experiments related to self-recognition and self-perception and changes in the structure of the self-concept are examined, as is empirical verification of hypotheses connecting self variables and personality variables. Social interaction in terms of the relationship between
self-feelings and feelings towards others and the effects of attitudes of others on the self-concept receive attention. The development of self variables as established empirically is discussed in more detail, and the validity of self-estimates is questioned. Throughout the survey attention is drawn to the origins of the hypotheses which have been tested.

Self-Recognition

For early writers such as Locke and Hume, who were concerned with recognition of self, introspection was the natural means of testing any related hypotheses. More acceptable methods now prevail, but there have been several more recent attempts to isolate the self along the same lines. A Japanese psychologist, Kitamura, in the early stages of his work (1936; 1940) attempted to establish the position of the self in ideation through the introspection of trained subjects, and defined, to his own satisfaction, two forms of imagination. One of these involved an objective approach to the situation, while the other consisted in a subjective consciousness of self. Later Kitamura examined the feelings of satisfaction the individual has about his own appearance and disposition (1951; 1952). Superficially his revised approach using questionnaires appears to be more sophisticated, especially in its similarity to the body-cathexis measures
of Jourard; however the question is raised as to whether it is justifiable to regard any measure of the self-concept or attitude to the self as more sophisticated than the introspection methods of Locke and Hume. Whatever the merits of his methods, Kitamura claimed to have demonstrated a negative reaction in recognition of self (1951) and, more particularly, in recognition of the physical self, this reaction being psychogenic in nature and not merely a reflection of aesthetic values (1952).

Experiments concerning the early development of this physical self-recognition could just as easily have been designed by Locke or Hume, or Condillac, J.S. Mill or William James in their interest in self-recognition and identity, as by Dixon (1957) who described the process of mirror recognition in the young infant. By six or seven months Dixon observed some attempts to relate the image to the self and by about twelve months true recognition is apparent. This observation lends some credence to the developmental theory of Sarbin who would describe the child of this age as developing the introjecting-extrojecting self through adaptation to the environment. Morowitz (1943), too, gave support to this theory.

Studies of recognition of James' 'bodily me' such as that of Wolff (1945) naturally stimulate interest in the
hypothetical factors governing such recognition which are difficult to isolate. Huntley (1940a; 1940b) accepted a view similar to that of Jung with his postulate of an unconscious self when he examined and compared conscious and unconscious self-judgements. That it is possible to have unconscious attitudes or feelings towards any phenomena appears to be a logical contradiction; but, be that as it may, Huntley established that when an individual makes judgements about his own expressions such as writing, voice or hands without recognition of identity his reactions are mostly favourable, never neutral and occasionally very unfavourable. It appears that with partial recognition the ego or self-esteem is threatened with the result that the judgements are almost entirely favourable. With recognition the self-judgements become more moderate: this change the experimenter interpreted as the effects of modesty.

Changes in the Self Concept

Sarbin would also predict from his theory changes in the concept of self through the learning process. Several studies have supported similar hypotheses. Babbitt (1962), attempting to produce changes in the individual's attitude to himself by means of verbal conditioning, reinforced one experimental group of subjects for a negative self-concept and another for a positive self-concept by appropriate
responses of 'good' while the control group was rewarded randomly. The semantic differential technique was used as a pre- and post-measure of the self-concept which was found to be affected in the intermediate dissatisfaction group reinforced for positive self-referents. In the same way it appears that changes in self-attitudes occur as a function of experimentally induced success and failure, success resulting in an increase in evaluations and failure in a similar decrease (Cohen, 1961). These findings hold for unconscious as well as conscious self-judgments as measured through subjects rating four disguised handwritings including their own and rating themselves and friends on ten traits (Diller, 1954). After success experiences attitudes to self are enhanced at both conscious and unconscious levels and show a positive relationship with attitudes to friends. After failure self-attitudes are not correlated with attitudes to others.

Such experimented results uphold the postulates which Carl Rogers makes concerning the organisation of experience within the self-concept in the fully-functioning individual. As further evidence, direction of changes in I.Q. scores has been successfully predicted on the basis of changes in self-ratings, confirming the notion that the individual seeks to maintain an identity by means of which to
conceptualise himself and his role in a given situation (Benjamins, 1950).

The extent to which experience determines self-attitudes and vice versa is not clear in the above experiments. Techniques for determining such causation are not available. There are, however, some factors which may act as independent rather than dependent variables since variation within these variables is sufficiently defined, perhaps in terms of physical factors. One such factor is sex, which in interaction with the self-concept must be cause rather than effect, except in so far as cultural demands act as intervening variables. On a rating scale for twenty-six traits, rated for self, ideal-self and social self, no sex differences appeared (Martire & Hornberger, 1957); although in checking adjectives women tended to select adjectives which emphasised motivational forces while men preferred those depicting regulatory activity. Differences for the first type of adjectives decreased with age, while for regulatory words the sex difference increased with age (Rongved, 1961). In a recent study relating self-perception to role conflict in woman, Soysa (1962) using a self-report questionnaire of thirty 'I' statements found that women do rate home-making above a career in their self-evaluations.
Relationships between Self Variables and Personality Variables

Of the attempts to establish some connection between the self-concept and well-authenticated personality variables, one of the most interesting is a study which invoked the unconscious self-concept, or, at least, unwitting self-evaluation on the part of the subject. Rogers and Paul (1959) hypothesised that an extreme degree of conscious impunitiveness has a substratum of unconscious aggressiveness. The hypothesis was upheld in that subjects with high NEO scores on the Rosenzweig Picture-Frustration study differed from the control group in rating unrecognised photographs of themselves as more aggressive when independent judges agreed that there was no difference. Another interesting reference in which colour preferences are related to the self-concept (Kouwer, 1955) is, unfortunately, unavailable, although it is apparent that some relationship was established.

Psychological adjustment is customarily related to the self-ideal discrepancy measures rather than to the self-concept, yet there are two studies which attempt to test that latter hypothesis. Perry (1961) was able to support his statement that well-adjusted individuals would admit to a greater number of self-damaging items as true of themselves than would a group of maladjusted individuals selected by
clinicians. Manis (1956) defined his well-adjusted and maladjusted groups of individuals in terms of M.M.P.I. scores on the D, Pt, Hs, Hy, L and K scales. Subjects described their real selves, ideal selves and each of their parents on twenty-four bipolar rating scales based on a selection of Allport-Odberht adjectives. Manis found from analysis of these scores, that well-adjusted subjects see themselves as more like their parents than do the maladjusted, but not more similar to the same sexed parent. Nor do the poorly adjusted prefer the opposite sex parent, in contra-indication to the psychoanalytic suggestion that the concept of self is formed through identification with similar significant figures in the environment. Sex differences were also revealed: female subjects see themselves as more like parents than male subjects do.

Evidence of Interaction between the Individual and the Environment

Much of the behaviour in which the self-concept is reflected, and which to some extent it may determine, is that involved in learning processes. Using the Gough Adjective List as a vehicle of description for both self and others for each subject, Bieri and Trieschman (1956) tested an hypothesis of mediated generalisation in learning. They showed that ease of learning to associate names of
persons to adjectives highly relevant to the self is a function of the perceived similarity of these persons to the self. Tests of immediate recall as related to the self-concept were also made by Cartwright (1956) in a manner reminiscent of the self-consistency construct of Zuckerman. Actually Cartwright claimed that his hypotheses arose out of the personality theory of Rogers: that there is no difference in immediate recall for stimuli that are consistent with the self-structure and those which are not, and that if a difference were found it would be the same for adjusted and maladjusted groups. Both null hypotheses were rejected.

The Rogerian series of postulates which stimulated the hypotheses outlined above have also stimulated most of the work aimed at establishing a link between the congruence of self- and ideal-concepts and adjustment. In 1952 Brownfain, using his own inventory, formed a self-ideal discrepancy model by subtracting the 'negative' from the 'positive' self-concept. The resulting measure he defined as one of stability and maintained that subjects with stable self-concepts are better adjusted than those with unstable self-concepts. Hanlon, Hofstaetter and O'Connor (1954) used a Q-sort as a measure of self–ideal congruence and the California Test of Personality for an adjustment score. They found an overall tendency towards congruence between self and ideal,
and a positive correlation between self-ideal congruence and adjustment. Block and Thomas (1955), on the other hand, related self-acceptance measures to defensiveness and rigidity rather than to adjustment. The experimental design of Chodoroff (1954) involved a similar Q-sort measure but projective tests to give ratings of adjustment for the thirty subjects. Chodoroff found a curvilinear relationship between the two variables, and not a linear relationship as predicted. He accounted for this result by postulating that there are two types of people who are rated adequate in adjustment: one type feels no need to change the self- or ideal-concept, while the other has the motivation to do so. Chodoroff's design, however, is suspect, if only for the doubtful validity of the Rorschach Test and the T.A.T. as measures of adjustment and for the small size of his sample. In contrast is the more recent study of Turner and Vanderlippe (1958) who from a sample of 175 college students extracted one group of twenty-five subjects with the largest self-ideal discrepancy scores and another of twenty-five subjects with the smallest discrepancy scores on the Butler and Haigh Q-sort (1954). These groups were distinguished on various criteria of adjustment, the latter group being described as:

a. participating in more extra-curricular activities,
b. gaining higher scholastic averages,
c. being given higher sociometric ratings,
d. gaining higher adjustment test scores,
e. distinguishable on the Guilford - Zimmerman Temperament Survey.

It would appear, then, that there does exist some positive relationship between adjustment and self-acceptance as measured by the self-ideal discrepancy model.

This relationship has been examined in more specific settings, as in the differentiation of successful from non-successful naval officers (Nahinsky, 1958). The self-concept of the successful officer was found to resemble more closely the Q-sort made for the ideal officer made by each subject than did that of the unsuccessful officer. Concomitants of the relationship have also been established. The more poorly adjusted the individual, the more self-depreciative he appears (Calvin & Holzmann, 1953). In describing performance on probability learning tasks subjects with high self-ideal discrepancy tend to depreciate their performance, while those with low discrepancy are more accurate in their estimations (Moses & Duvall, 1960).

Differently derived measures, also labelled self-acceptance, yield similar results in correlation with adjustment. The self-acceptance scale of the California Personality Inventory (Sa), when used in conjunction with a marital
adjustment questionnaire for married students and their spouses showed greater self-acceptance in the students, and a slight negative relationship with marital adjustment (Aller, 1962). Self-acceptance in Negros improved when the Negros were moved into integrated housing (Works, 1962). Pannes (1963) found that the more favourable the self-image, the higher the degree of dogmatism in high school students. These supported hypotheses might well have been generated through the constructs of self-feelings of James, the self-regarding sentiment of McDougall, or the self-esteem of Rado.

This is true also of the attempt to gauge the relationship between the reduction of cognitive dissonance and degree of self-acceptance made by Worchel and McCormick (1963) using the Worchel Self Activity Inventory to measure self-esteem. In their experiment the effect of the contrary opinion resulted in lower derogation of the source in subjects with high self-acceptance, and agreement and disagreement had more effect on the opinions of those with low self-esteem.

A relationship between self-feelings and perception may be suggested. Haigh (1951) presented his subjects with forty-eight descriptive words from counselling interviews tachistoscopically, and recorded recognition times. Subjects then ranked the words for self and ideal, enabling Haigh to
conclude from the analysis of his data that attitudes towards self determine perception. Again the structural framework of the personality theory of Carl Rogers is justifiable. As is more recently reported, Coopersmith (1964), too, dealt with visual perception as influenced by the self-concept. His subjects he divided into various groups according to the individual's own estimate of his self-esteem and a rating of that self-esteem by observers. Sensory constancy of space judgements was measured under stress, and the higher the self-esteem of subjects, by both methods, the better the sensory constancy.

Since motivation has been described in terms of interaction between the self and the object (Macleod, 1949), some empirical linkage of self-attitudes and motivation is to be expected. Nicholas Hobbes imputed to self-esteem the significance of a motive, and of the more recent personality theorists Goldstein, Snygg and Combs, and Rogers all believe the chief motive activating behaviour to be some form of self-actualisation. Certainly a reflection of the self-ideal discrepancy is suggested to lie in the chief projective test for the assessment of motivation, the Thematic Apperception Test (Faith, 1961). The higher the achievement need, as measured by the T.A.T., the greater the self-ideal discrepancy in subjects (Martire, 1956). College students with low
self-esteem were asked to rate their interests in a variety of security-enhancing behaviours while they imagined themselves in situations of varying security. Such interests were more affected by possibilities of success than were identical interests in those with high self-esteem (Stotland, 1961).

Self-perception and goal-setting behaviour represents another facet of the relationship between self and motivation, and one which is not clear (Steiner, 1957). At the time of Steiner's report there had been several attempts to examine the problem but with conflicting results. Using data from administrations of the Rorschach Test, Cohen (1954) found goal-setting not related to feelings of adequacy, although very low goal-settings are related to self-rejection. Lepine and Chodorkoff (1955) likewise found no correlation between levels of aspiration and correspondence between the perceived and ideal self. Solley and Stagner (1956) put forward an experimental design to study the relationship between valuation of self and temporal barriers, insoluble anagrams, and type of goal, whether neutral, negative or positive in affective stimulation. They found that motivational intensity as measured by palmar sweatings increases with increase in barrier magnitude. Barrier behaviour differs with the value the subject attaches to the self.
The Self and Ego Defences

This type of experiment obviously has affinities with those designed to estimate the effects of conflict and stress on self variables. Theoretical roots for such experiments may rise in the psychoanalytically-orientated basic anxiety construct of Horney, the threat and the self-concept postulate of Rogers, or Anderson's belief that if the self-image is intact there will be no anxiety experienced by the individual. Zimmer (1954), however, was not able to establish a relationship between self-acceptance, measured by ratings on seven-point rating scales for twenty-five personality traits, and conflict in a word association task with variables such as reaction time, recognition time, defective reproduction and repetition of stimulus word as samples of the subject's behaviour. No difference was found between groups with low and high negative self-concepts on the Brownfain Self-Rating Inventory in problem solving rigidity or reaction to threat (Cowen, 1954). Goldfarb (1961) failed to link self-acceptance scores and W.A.I.S. Digit Symbol scores as gained under stress. On the other hand, Miller and Worchel (1956) were able to conclude from a variety of results that a curvilinear relationship exists between the individual's evaluation of adequacy in coping with frustration and efficiency in maintaining accuracy of performance.
The question of the conditions under which defensiveness is likely to occur receives a clearer answer. Chodorkoff (1954b) from experimental data supported the notion that the greater the agreement between the individual's self-description and an objective description of him, the less perceptual defence he will show and the more adequate will be his adjustment. Using multiple measures of the self-concept and defensiveness, Wylie (1957) concluded that defensiveness is a function of self-concept discrepancies, rather than being predictable from the observer's knowledge of objective reality or the subject's insight into that reality.

Next comes the question of how this defensiveness makes itself manifest. It appears that in people generally described as defensive, unconscious self-evaluation entails greater dislike of self than that of moderately defensive people (Rogers and Walsh, 1959). Subjects with high self-ideal discrepancies were found to be more hostile under frustration (Rothaus & Worcel, 1960); conversely, by the similar experimental design of Rosenbaum and Stammers (1961) they were not. Perhaps the answer to this paradox lies in the experiment conducted by Veldman and Worcel (1961), the data from which supported the hypothesis that the variables of self-acceptance and defensiveness interact to influence the expression of hostility. Working within a psychoanalytic
framework Washburn (1962) isolated the use of several defence mechanisms: subjects who see themselves as less adequate will both become more hostile and use more retreating defences in the face of anxiety.

A recently developed form of typology characterizes each individual according to his place on the repression - sensitization scale, a scale which defines the characteristic mode of response of the individual to threat from the most elemental defence mechanism to intellectualization and its like. Using this typology, then, it is possible to state that repressors manifest smaller self-ideal discrepancies than do sensitizers (Altrocchi, Parsons & Dickoff, 1960). This statement receives added support from the work of Byrne, Barry and Nelson (1963).

The effects of stress on the relationship between acceptance of self and acceptance of others have been examined. Following administration of tests of acceptance of self and of others, with and without stress, Levanway (1955) was able to maintain that after stress subjects tended to express more liking for pictures of people, rate others more favourably and make significant changes in self-ratings. Anxiety, as measured by the Taylor Manifest Anxiety Scale and the Sarason General Anxiety Questionnaire, is associated with lowering of both self-acceptance and acceptance of others, but self-acceptance is lowered at a greater rate than
acceptance of others so that the hypothesis that anxiety increases the self-acceptance – acceptance of others correlation was not supported. Both acceptance measures were derived, in this case, from the Phillips Self-Other Questionnaire (Suinn & Hill, 1964).

Self-Acceptance and Acceptance of Others

Harry Stack Sullivan is one psychological theorist who would emphasize the significance of the self in interaction with other individuals of the environment. This theme has been taken up by many experimentalists attempting to illustrate three well-defined aspects of this interaction. Firstly, there are studies attempting to relate the variable of acceptance of self and those of acceptance of and degree of involvement with individual others. Secondly, there are those studies concerned with the influence of the behaviour of the group on the self-concept of the individual, mainly consisting of examinations of the relationships the individual has with small groups. Thirdly follow the experiments designed to assess the influence of sociological factors on the self-attitudes of the individual.

Subscribers to the hypothesis that there is a positive relationship between acceptance of self and acceptance of others would include Sullivan, Adler, Fromm, Horney and Rogers.
One of the first attempts made to substantiate such an hypothesis for normal subjects was made by Phillips (1951). Operationally speaking, he measured simply self-attitudes (25 items) and attitude to others (25 items) in his questionnaire, gaining a remarkably high coefficient of correlation (+.74, S.E. .065) which was not equalled by him with subsequent groups of student subjects, although substantial relationships were demonstrated. Similar results were demonstrated with acceptance measures (Berger, 1952; McIntyre, 1952; Norman, 1953), albeit rough measures. Berger, for example, used a self-rating frequency scale with item weights.

W.F. Fey, however, has conducted the most sustained investigations into the relationship between acceptance of self and others, and, incidentally, acceptance by others. Using a questionnaire of his own devising, Fey established a positive relationship between self-acceptance and acceptance of others scores; and found that, although neither of these scores was related to readiness for therapy, the discrepancy between them was (1954). In a repetition of this study a year later, with the addition of scores for acceptance by others and sociometric scores, Fey found that subjects with high self-acceptance tend to accept others and to feel accepted by others but be neither more or less accepted by
others than those with low self-acceptance scores (1955). Correlates of attitudes towards self and others, primarily from the scales of the Edwards Personal Preference Schedule, have been established (Fey, 1957). A recent checking repetition of Fey's basic experimental design with different populations from those out of which his samples were selected provided yet more evidence for the acceptance of self-acceptance of others relationship established by Fey (Williams, 1962).

Many similar experiments have been reported. Berger (1955), having established the relationship, correlated both scores with M.M.P.I. scales. Kennedy (1958), was able to support Rogers' dictum that an individual who accepts himself and others will have better interpersonal relations. An approach differing from the prevailing self-acceptance measures is that of Jervis (1959) who made use of the term positive self-concept. Individuals whose self-concepts were positive were defined as those with both low self and low ideal-self scores as well as those with both scores high, although these groups were differentiated by their attitudes to others. Suinn (1961) attempted a learning theory analysis of this relationship, defining the self as the stimulus object and the self-acceptance statements as responses and interesting himself in response generalisations. Postulating that this
phenomena accounts for acceptance of others, he took Q-sorts for the self, the father and the teacher and found significant intercorrelations for acceptance of each. Whatever the merits of this particular theory, Suinn verified again the existence of a relationship between acceptance of self and acceptance of others.

The variables of attitude to 'best friend' and attitude to self have also received some treatment. Positive sociometric choices are similar to acceptable self-descriptions, and similarity between self-description and description of positive sociometric choice friend is related to adjustment (Lundy, Katkovsky, Gromwell & Shoemaker, 1955). When subjects were asked to complete a questionnaire for self, ideal, positive opposite sex sociometric choice and negative opposite sex sociometric choice, the hypothesis confirmed was that maintaining a relationship between self-descriptions and descriptions of positive opposite sex sociometric choices (Lundy, 1956). Subjects who rate best friend less positive than self tend to change that friend and decrease in self-esteem (Kipnis, 1961). Liked persons, more so than disliked, are perceived by an individual as attributing to him traits similar to those he attributes to himself (Backman & Secord, 1962). Empathy forms part of this relationship with a friend, and is operationally defined for experimental purposes as
the congruence between friend's behaviour and prediction of friend's behaviour by the self, perhaps in terms of psychological test scores. Tarwater (1953) used the Bell Adjustment Inventory for this purpose and concluded that understanding of others is a by-product of understanding of the self. Halpern (1955) took a similar measurement of empathy and found it to be correlated with the similarity between the predictor and the predictee, and with the satisfaction of the predictor with his own behaviour in that area.

The Self in the Small Group

It would appear plausible, then, to postulate some relationship between the self-concept and the reactions of others in order to verify an interactionist hypothesis. Certainly such predictions made by Royce, Stout, Mead, Baldwin and McDougall have been borne out by the studies of Miyamoto and Dornbusch (1956), Anderson (1959), Gerard (1961), Evans (1962), and Maheer, Mensing and Nafzger (1962). Change has been shown to occur in response to cognitive dissonance and change in the self-concept should be no exception. Self-evaluations are affected by the individual's knowledge of the opinions of others about him and anticipated or assumed opinions. A Swedish study (Israel, 1956) indicated that acceptance of group evaluations of the self are determined
by strength of attraction to the group, strength of discrepancy between wishful self-evaluation and evaluation by the group and the degree of accuracy which the individual attains in estimating others' opinions of him. The more unfavourable such evaluations from others are and the more informed the source, then the more the individual tends to devalue the source, distort the evaluations in recall and dissociate the source from the evaluations (Harvey, Kelley & Shapiro, 1956). Flattery from the group, however, may result in improvement in self-evaluations (Hicks, 1962). False personality assessments result in greater change in self-evaluation of low consensus traits (Backman, Secord & Pierce, 1963), and Haas and Maehr (1965) showed these changes to be durable over periods of at least six weeks. Manis (1955) gave the reminder that while the influence of group behaviour on the behaviour of the individual, including the formation of the self-concept, is well validated, there is no evidence to suggest that self-estimates affect the views held by others.

The next question requiring an answer is how is the behaviour of the individual within the group related to his self-concept? Stotland and Cottrell (1961), in answer, measured the self-esteem of subjects by the Q-sort method and placed them in small groups in a problem solving situation in which the amount of information communicated can be
controlled. Unfortunately, the bearing their results have on their interactionist hypothesis is not clear. No more productive was the experiment of Bugental and Lehner (1956), who, although they found several variables related to leadership and popularity in small groups, did not find any relationship with accuracy of self-perception. We must conclude that no relationship between self-attitudes and behaviour within the group has been established.

Some statements can be made, however, about self-attitudes and attitudes to the group as a whole, especially when the group is seen from the outside by an isolate. The stronger the attraction of members to a group, the stronger will be the feelings of inadequacy in those scoring less well on a test and the stronger the feelings of adequacy of the others (Festinger, Torrey & Willerman, 1954). Individuals who perceive themselves as different from the way the group sees them or are unable to predict how other members of the group perceive them, tend to be isolated from the group (Gosline, 1962). Subjects farthest from the controlling clique are most likely to devaluate themselves, while the clique members are the most dependent (Rasmussen & Zander, 1954). Such experimental conclusions bear out the hypothesis of Gardner Murphy in which he maintains that the self-concept is defined by group values.
Sociology of the Concomitants of Self Variables

Sociological factors interact to some extent with self-concept formation. Social class is the first such variable which presents itself for examination, and as a categorisation process has not been shown to interact (Hill, 1957). The related variable, social mobility, is, however, of interest in this context. Kosa, Rachiele and Schommer (1962) showed that socially mobile male college students have high motivation associated with self-confidence and high achievements. Socially mobile college women, on the other hand, are timid and tend towards self-underevaluation. Harrington's work with Negro resettlements has supplied evidence of this interaction, although it did not help to clarify the sex differences involved (1965).

One of the most successfully measured variables of sociological interest is prejudice in its various forms. Prejudice against Negros is a significant topic of investigation for both American and British psychologists, and so has merited some attention in relation to the self-concept recently. For example, Tabachnick (1962) showed that self-satisfied children are less prejudiced than those with less self-esteem, while Stotland and Patchen (1961) described the performance of their subjects taking part in an experiment designed to clarify the causes of changes in prejudice as
as the result of pressure to achieve cognitive consistency in the self-concept. Broader types of prejudice are also related to self variables. Those individuals who score highly on measures of self-dislike score highly on the California test of authoritarianism and tend to prefer foreign individuals and institutions (Brodbeck & Perlmutter, 1954). The latter conclusion was born out by similar work by Perlmutter (1954) indicating that individuals with low self-esteem show a greater desire to travel and live abroad.

Self-Concepts in Children

Investigations concerning self variables in children have, to some extent, dealt with the same aspects of the self-concept as those using adults as subjects. For example Engel (1959) examined the stability of the self-concept in adolescence by taking two Q-sort measures over a ten-day interval. His findings included those that such concepts are relatively stable, that subjects who saw themselves negatively tend to be less stable than their friends and are less well-adjusted according to the M.M.P.I. scales. This relationship between self-acceptance and adjustment was examined in more detail in children, with the results that self-accepting children were found to be more capable of self-effacement and hence better adjusted (Taylor & Combs, 1952), and to have smaller scores on the Childrens' Manifest
Anxiety Scale (Bruce, 1958). Positive sociometric choice friends were shown to be described as more similar to the self than they actually are (Davitz, 1955). As an interesting reflection on children's self-conceptualisations Silverstein and Robinson (1961) found that although sixth grade boys and girls estimate their own height and weight well, self-drawn figures give negative correlations with these estimates and their ideal-image.

Some investigations, however, have been concerned solely with problems unique to the child. Educators are beginning to see the importance of the treatment of the self-concept of the child in the learning situation, since consistency with the existing self-structure apparently determines to some extent what is learned (Phillips, 1964). Perkins has explored this problem in relation to teachers' and peers' perceptions of the individual's self-concept (1958a; 1958b). The teaching of adolescents, in particular, must take into account their known negative self-concepts and feelings of inadequacy (Mussen & Jones, 1957). It is also true, of course, that school experiences may affect the self-concept of the child, and that it is possible to provide experiences to that end, such as school camping (Becker, 1960).

The most interesting work concerning the development of the self-structure has been concerned with the child as
part of a family group. The hypotheses of Wilkinson and Worochel (1959) were based on the assumption that the primary relationships of the child are with his parents. They suggested that the self-ideal discrepancy variable is related to that measure in the parents and to the discrepancy between the self-concepts of the parents and between the ideal selves of the parents. Demonstrated curvilinear relationships supported these suggestions. In this connection it is also interesting to note that the empathy of the parents with the children, as estimated again by predicted and actual test scores, is low (Helper, 1958). Specifically, parents underestimate children's feelings of inner adjustment, while overestimating those about social adjustment (Langford & Alm, 1954).

As to the structure of the family and self variables in the individual, the findings are much as might be expected from knowledge of the relationships of both these sets of variables to that of adjustment. Simmons and Lamberth (1961) used the Q-technique analysis of self and family structure variables, but their only demonstrable conclusion was that children of divorced parents show lowered self-esteem. Rosenberg (1963) indicated that extreme parental disinterest relates to low self-esteem. Treating the family as a group with the necessity for role specialisation, Couch (1962)
demonstrated that in terms of identification there is a positive correlation between the degree of role specialization and self-identification by sex status for boys and a negative correlation between these two variables for girls.

**Self-Estimates**

Since the early attempt to establish the meaning of self-estimates by Conklin and Hollingsworth (1915) there have been many similar studies as reviewed by Russel (1953). It would seem appropriate to examine their conclusions here since the estimate which the individual forms of his behaviour is necessarily part of his self-concept, and the predictions which he makes about his behaviour provide the psychologist with the rare opportunity to assess the congruence between his subjective self-concept and relatively objective estimates of the phenomena on which this is based. Such studies fall naturally into two groups: those pertaining to the abilities and achievements of the individual, and those involving assessment of personality variables, the unique characteristics of the individual.

In the field of academic achievement being asked for a self-estimate is apparently a threat to some individuals which restricts their field of perception (Torrance, 1954a). Asking for such estimates was claimed by Duet (1958) to raise the standard of learning in class conditions. As to the
accuracy of such self-estimates, this appears to increase with age in children to a certain level. Brandt (1958) derived this conclusion from the self-estimates and actual performances of children in arithmetic, spelling, vocabulary, broad jumping, strength of grip and baseball throwing, in which boys are more accurate in assessing these academic and physical abilities than girls although they tend to overrate themselves more. Such self-estimates attain a certain validity; for example, those who think of themselves as musical receive high scores on the Seashore tests although many contaminating variables such as opportunity for learning must be kept in mind here (Farnsworth, 1941). From a study conducted in the same period, Arsenian (1942) suggested that subjects whose estimates are not so accurate are usually less intelligent and less well-adjusted than those with more accurate perception. There are no reports of confirmation of this prediction for estimates of abilities.

The status of self-estimation of personal variables is, however, a little clearer. In 1951 Stanley published a report of a measure of insight into interests: subjects predicted the ranks of their values on the Allport-Vernon Study of Values and compared them with the actual ranks of the scores. The median Spearman's rho was reported as +.39, the range of coefficients being quite wide. A similar
comparison of self-predictions and actual scores on the Bell Adjustment led to the conclusion, not that insight or accurate self-estimation is related to adjustment, but that there is a relationship between adjustment and the success of rating of self by others (Wittich, 1955). An identical experiment, this time making use of the Heston Personality Inventory and the Gordon Personal Profile showed no difference in insight scores between the groups of subjects scoring highest and lowest on the emotional stability factor of the Heston Personality Inventory (Arbuckle, 1958).

The Value of the Evidence

This exhaustive collection of empirical conclusions pertaining to self variables has been made on the understanding that no conclusions may be drawn about the self, or indeed a self construct, but only about a specific self variable as defined operationally in a certain experiment. Even under these conditions it appears that some hypotheses deriving from self theories are supported and consequently provide validation for these theories. Such validation is satisfactory if the link between the operational definitions of the self variables and the self constructs of the theories is beyond question. The author undertakes to demonstrate, however, that these links are not adequate in that the meaning of the operational definitions is not clear. The lack of descriptive
evidence concerning the measures comprising the operational definitions is demonstrated by reviews of reported studies and by a series of operational checks.
CHAPTER 4

THE MEASUREMENT OF SELF VARIABLES
This chapter is designed to examine, by way of discussion and experiment, the bases of the theory verifying conclusions reported above. Each conclusion might be evaluated with reference to the experimental design involved, and some would be found wanting. An evaluation of the measuring instruments employed by these psychologists in search of evidence concerning self variables has more general implications, however, for the status of the self in psychology.

A wide range of such instruments is examined in a series of experiments. These experiments are designed to demonstrate the success with which predictions may be made about performances on these tests of self variables. A synthesis of a number of experiments reported above is repeated, but with the addition of some assessment of the formal characteristic of the measure used. An instrument designed to facilitate description of the self-concept is applied as a gauge of sex differences. The effects of the intervening variable of social desirability on one so-called measure of self-acceptance is examined, and a selection of such tests is intercorrelated.

Working with a preference for a phenomenological approach to self variables, the author attempts to find justification for the use of two test specifically. These are instruments which lay claim to measures of self-acceptance without delineating the self-concept which is held to be unique to each individual.
Problems of Validity and Reliability

Conventionally an evaluation of psychological measures is conducted in terms of the validity and reliability of the test scores. To define these terms the chief texts in the field are consulted:

Reliability coefficients are designed to provide estimates of the consistency or precision of measurements.... This two-fold purpose of reliability coefficients is reflected in the several methods which have been developed for estimating reliability. Methods which provide estimates based on a single sitting offer evidence as to the precision of the test itself: these include internal consistency estimates, such as those obtained by use of the split-half and Kuder-Richardson techniques when the test is given only once, as well as estimates based on immediate retesting, whether with the same form or an equivalent one. When a time interval of one or more days is introduced, so that day by day variability in the person taking the test is allowed to have an affect, we have evidence concerning the stability of the trait and of the examinee as well as of the test. (Wesman, 1952, p.1)

The relevance of these constructs to measures of self-concept and self-feeling may be questioned to some extent. Firstly, the precision of a measurement, as defined by say the split-half technique, has little meaning beyond that of demonstrating that random halves of a test may be measuring the same variable. Equivalent form reliability is only appropriate if there happens to be an equivalent form of the test under consideration, an unusual circumstance. Thirdly, it has yet to be demonstrated that self-acceptance, for example, is a
variable of which stability may be expected, for if it is not then consistency of measurement may not be demanded. Is this is the case, it may be argued that such a variable is not accessible to, and indeed does not merit, measurement.

The concept of validity is most usefully discussed under the four headings provided by the A.P.A. committee listing technical recommendations for psychological tests:

a. Content validity is evaluated by showing how well the content of the test samples the class of situations or subject matter about which conclusions are to be drawn.

b. Predictive validity is evaluated by showing how well predictions made from the test are confirmed by evidence gathered at some subsequent time.

c. Concurrent validity is evaluated by showing how well test scores correspond to measures of concurrent criterion performance or status.

d. Construct validity is evaluated by investigating what psychological qualities a test measures, i.e. by demonstrating that certain explanatory constructs account to some degree for performance on the test. To examine construct validity requires both logical and empirical attack. Essentially, in studies of construct validity we are validating the theory underlying the test.


Content validity, then, would appear to approximate face validity, while predictive validity is irrelevant to the purpose of phenomenological self measures. Concurrent validity may lapse for want of a criterion for these tests. Construct validity of some of the measures in use may be taken as substantiated since it is true that many of the
hypotheses generated by the self theorists have been supported in experiments.

The concept of construct validity, as defined by the A.P.A., has been modified by Campbell (1960) who maintained that the concept is appropriate to a proportion of tests only, and encouraging confusion and reification. His modification, described as construct, trait or discriminant validity, involves suggestions for a series of experiments to be conducted with every test. The relationships between test scores and those from intelligence tests, being the best authenticated psychological measures we have, should be gauged, as should the influences of the variables of response style, social desirability and response acquiescence. Campbell made the important point that the validity coefficients for general psychological tests must be higher than those for self-ratings.

Several of the conclusions suggested above concerning self variables and validity were supported by Crowne and Stephens (1961), who emphatically maintained that criterion validation is a logical impossibility and that face validity for measures of self variables, relying as they do on introspections, should be accepted without question. They were particularly concerned with self-acceptance measures which they claim will be improved when self-acceptance is a clear
construct with its relationships with other variables defined, when representative items are used in tests (i.e. not an almost random selection of items the meaning of which to individual subjects is not known) and when the effects of social desirability on such measures is known.

Intervening Variables in Self Measurement

The variable of social desirability is one of some importance to psychologists at the present time. Edwards, who first formulated the concept, described it as a property of the test item such that it may be responded to in a culturally acceptable way (Edwards, 1957). Assuming the existence of social desirability, he has factor analysed test data and shown that interpretation is much clearer if his factor is controlled (Edwards & Horst, 1953). Several measures of his variable, however, seem to relate in different ways (Spilka, 1961). Messick (1960) analysing social desirability in the Edwards Personal Preference Schedule isolated nine factors, placing in doubt the unidimensionality of the social desirability variable. Relationships have been demonstrated between various measures named social desirability, however. Milgram and Helper (1961) suggested that self-ratings are modified when the social desirability of the items is rated by the subjects first, and Kenny (1956)
suggested that self-ideal discrepancies are influenced by social desirability. Estimates of the relationship of this variable to individual test scores are reported below.

Several other intervening variables significant in the measurement of self are similar to that of social desirability. For example, Mohsin (1955) examined the effects of ego defences in self-judgement by factor analysing a set of self-ratings from eighty-five subjects. The first factor he extracted was described as the tendency to be either extraverted or reticent in ratings, while the factor accounting for the second largest proportion of the variance is the tendency to overestimate on desirable and underestimate on undesirable self-ratings. So much for such variables within the individual: the question of the interaction between the subject and the stimuli remains. By way of answer Loehlin (1961) attempted to establish the similarity of meaning of six adjectival concepts used for self-ratings. He found that consistent individual differences in the meanings attributed to words by the subjects were as great as those differences in self-description.

Particularly critically examined are the measures used in experiments linking self-ideal congruence, self-acceptance and adjustment, such as those of Turner and Vanderlippe (1958). Characteristics of the self-ideal relationship
are not yet clear, although factor analysis does reveal sex differences (Guertin & Jourard, 1962). The relationship as established by present measures such as the Butler and Haigh Q-sort is not free of the effects of contaminating intervening variables such as the response acquiescence tendency and is not independent of measures of anxiety, notably the Taylor Manifest Anxiety Scale (Kinkler & Myers, 1963; Lipsitt, 1958). The logical justification for regarding the self-ideal score as a measure of self-acceptance is also questioned. Levy (1956) asked twenty-one subjects to sort for actual and ideal 100 self-referent and 100 home-referent items. He found that the correlation coefficient between the two sets of coefficients was +.70, indicating a certain amount of generality in perceived self-ideal discrepancies.

**A Framework for the Evaluation of Measures**

Of the measures devised to estimate change, acceptance, consistency, insight, importance and development of the self, those which may be described as purely self-description, such as the 'Who Are You' technique and the essay approach, are not so vulnerable to the criticisms outlined above. They are, however, very open to misuse in that it is difficult to devise objective scoring systems for such techniques. The scoring of the so-called self-regard measures is more
acceptable to psychologists, so that it is after the formal characteristics of the test are established that the problems of validity become apparent. Such tests differ widely in these characteristics, ranging through adjective check lists, the semantic differential technique, Q-sorts, attitude scales, personality inventory scales of self-acceptance, and abstract measures such as those of Shlien (1961) to estimates of non-phenomenal self-regard in response to techistoscopic presentations of the handwriting and voice of the subject. Wylie (1961) has listed eighty-three measures of self-regard which would fall into these categories, for 66% of which she claimed that there is no information of reliability in published sources and that for 86% of the tests there is no published information on construct validity for inferring the phenomenal self.

The problem of validation of measures of self-variables is a difficult one and one which is in many ways unique in the field of psychological test construction. The assumption of the existence of a self-concept with concomitant feelings cannot be made without question. In view of these considerations the author proposes to work within the following frame of reference. The individual is defined as consisting in an array of behaviours, including needs, values, motivations, and traits as well as his observable performance which he
regards as peculiar to himself, i.e. his own. He will have some evaluative attitude to this array which may be named self-regard, self-evaluation, self-esteem or self-acceptance. This broad description of the construct appears to be amenable to operational definition, the content of the measuring instrument being selected to some extent according to the theoretical framework in which the test constructor is working. In other words, as long as he has a good sample of items, he can simply ask the subject how he feels about himself in this context. Content validity, then, is important; indeed, face validity may be accepted as having some meaning. Construct validity is to be tested in terms of theoretical predictions borne out by the test scores, while the criterion for concurrent validity is still lacking unless it be found in the isolation of mathematically pure variables through factor analysis.

Validity, as conventionally defined, may not, in the final analysis, prove to be the most appropriate yardstick against which to set self-concept scores. The primary consideration of the usefulness of tests may be more appropriate at this stage of the development of psychological measurement. A measuring instrument must be shown to fulfil at least one of two requirements in order to be considered useful. Firstly, its scores may agree with those of another
test to indicate some common phenomenon being measured, thus contributing to a definition of that phenomenon. Secondly, the scores may successfully discriminate between populations of subjects. If the latter criterion is achieved, as for example if a test differentiates between those individuals likely to profit from a certain form of therapy and those who are less likely to do so, then although the nature of the variable or variables measured is not known the test is useful. Individual tests must be examined in detail, however, before acceptance on these criteria is acknowledged.

Examination of the empirical validation of self theories reveals the use of a large number of measurement techniques which consist simply in a number of items selected solely on their face validity to which the subject must respond in a variety of ways set down by the experimenter. These tests demonstrate few of the formal characteristics of a psychological test. Examples of such instruments are found in the experimental reports of McQuitty (1950), Zimmer (1954), Spivack (1956), Webb (1956), Child, Frank and Storm (1956) and Manis (1958). The first experiment reported by the author is, in essence, an attempt to employ similar techniques to those of these psychologists. The second experiment parallels those which, assuming the existence of a self-concept, have employed purely descriptive instruments and lack a precise
definition of the variable to be measured. The aim of this experiment is to contribute to the validity of the 'Who Are You?' technique by demonstrating sex differences in agreement with those previously reported.

The remaining experiments are designed to examine measures of the variable of self-acceptance. Campbell's (1960) suggestion of construct validity in the form of the effect of social desirability on scores is applied to the Index of Adjustment and Values. The reliability and validity of the Shlien Abstract Apparatus measure of self-acceptance is investigated in the fourth experiment. A sample of self-acceptance measures are then intercorrelated, two Index of Adjustment and Values scores being employed as marker variables to aid in the interpretation of results. Repetition of a relationship established from analysis of this data is finally attempted in an investigation of the structure of the Ideo-Q-Sort self-acceptance score.

These experiments are concerned with definition of the phenomena being measured. In other words, the first method of establishing the usefulness of a measure is employed. If these experiments are not successful in achieving this aim, the method of discrimination will be applied.
Experiment I

This experiment was conducted in two parts: the first investigating the reliability of the test devised and the second examining its validity and the performance of the test items in relation to those of similar tests reported in the literature.

Aim

The reliability of a set of items selected on the basis of face validity for a measure of self-concepts in the area of social compatibility may be expected to attain certain standards both in terms of split-half reliability and more detailed item analysis. The aim of this experiment was to establish such reliabilities for the rating scale which was as arbitrarily devised as some of those reported above. It consisted of twenty-four statements directed at both aspects of social compatibility, the extent of the subject's acceptance of others (for example, X ..... criticizes his schoolmates) and others' acceptance of him (for example, X ..... is fun to be with). Subjects were asked to respond on a five-point scale according to the frequency with which each statement is true of X (in this case the self, but it could be the ideal or some other person) ranging from always to never. See Figure 4 of the Appendix for a copy of the test with scoring key. Undesirable items of the test were
scored in reverse, the final test score being the sum of all ratings. Test-retest reliability was not examined as it was considered to be an inappropriate concept to apply to this measure.

**Hypotheses**

Null hypotheses tested were as follows:

a. as to split-half reliability, that there is no significant correlation coefficient between total scores of random halves of the test of the self-concept of social compatibility.

b. as to item analysis, that there is no significant relationship between scores on each item and total scores on the test of social compatibility.

**Method**

The subjects for this analysis were 23 anonymous females, by occupation nurses, with a mean age of 17.8 years and an age range of 17 to 20 years. They were given the test form as described with instructions to fill it in appropriately substituting 'I' for 'X' making a self-rating scale. There was no time limit. Data was collected for the first hypothesis (H₀a) by selecting odd and even items to form the two halves of the test. Since the items were randomly ordered on the test form, this procedure amounted to random distribution. It was necessary to dichotomise the data for individual
items in order to test $H_0$. For Items 1 to 20 the division lay between ratings 3 and 4, so that the responses of always, often and sometimes were distinguished from those of rarely and never, with appropriate reversals for negative items. Items 21 to 24 were examined in their natural trichotomy against a trichotomy of total scores.

**Analysis of Data**

Such manipulation of data was necessitated by the methods of analysis employed. Pearson's product-moment correlation coefficient might have been employed for the split-half reliability measure if the assumptions of straight line regression between the variables and homoscedasticity could be made for the data (Guilford, 1956). The distribution of the scores was such that the assumptions could not be made and the size of the sample was inadequate; therefore Spearman's rho was employed as a substitute and tested for significance. The Spearman - Brown correction formula gauged the reliability of the total test. The biserial coefficient of correlation was employed for item analysis of items 1 to 20, since the population distribution of scores was in all probability normal and the sample scores were readily dichotomized (Guilford, 1956). The significance of these coefficients was computed by a $t$-ratio. Chi$^2$ was computed to estimate the relationship between items 21 to 24 and total test scores to form coefficients of contingency (Guilford, 1956).
The results of the experiment may be summarized to state that, with a rho value of +.559 significant at the .01 level (Siegel, 1956, Table P), the corrected split-half reliability coefficient of the test was +.719. To continue this form of analysis, of the relationships of the twenty-four items with the total test scores only those of items 2, 5, 7, 8, 12, 14, and 20 were significant. See Figure 5 of the Appendix for a summary of results.

Discussion

H₀ a was refuted, but the resulting reliability coefficient was below the standard usually demanded (+.900). Of the twenty-four hypotheses subsumed under H₀ b only one third were refuted. Assuming that the test was measuring a unidimensional variable, it appears that two thirds of the items could be disposed of since they do not contribute to measurement of the variable under consideration.

Aim

The second part of this experiment was concerned to demonstrate that this variable which the test measured was similar to that measured by other instruments such as that used by McKenna, Hoffstaetter and O'Connor (1956). The self-concept, the ideal self and the non-phenomenal self-concept were measured. The aim was to compare such measures, drawn from a selected area of behaviour, social compatibility, and
examine their interrelationships as well as their individual relationships with what objective evidence of behaviour in that area was available. Friedman (1955) examined these three concepts by a Q-sort of eighty items, basing his measure of the non-phenomenal self on the hero assumption of projective tests. Since Lindzey and Kalnins (1958) have established that heroes of Thematic Apperception Test stories are often identified as being very similar to the self, a similar measure was employed here.

**Hypotheses**

Null hypotheses examined were:

a. That there is no significant correlation coefficient between self and ideal scores on a rating scale of social compatibility.

b. That there is no significant correlation coefficient between self and fantasy hero scores on this rating scale.

c. That there is no significant correlation coefficient between self and rating by friend scores on this rating scale.

d. That there is no significant correlation coefficient between self-rating scores and sociometric scores.

e. That there is no significant correlation coefficient between ideal and fantasy hero scores on the scale of social compatibility.
f. That there is no significant correlation coefficient between ideal and rating by friend scores on this scale.

g. That there is no significant correlation coefficient between ideal rating scores and sociometric scores.

h. That there is no significant correlation coefficient between fantasy hero scores and rating by friend scores on the rating scale.

i. That there is no significant correlation coefficient between fantasy hero rating scores and sociometric scores.

j. That there is no significant correlation coefficient between rating by friend scores on the test and sociometric scores.

Method

The subjects for the experiment were 32 boys in the age range 13 to 14 years, with a mean age of 13.6 years. They formed a class for two terms of the school year prior to the time of testing, and so might be taken as the members of a group who can make sociometric choices and ratings of friends on the scale of social compatibility based on a reasonable amount of experience of interaction.

The experiment was conducted in two sessions. During the first session subjects were asked to rate themselves on
a five point scale for a series of statements relating to social compatibility, i.e. 'I' was substituted for 'X' in the test of social compatibility (see Figure 4 of the Appendix). They were then shown projections of four pictures consecutively, A1, B1 and B3 from the Symmonds Picture-Story Test and BG 10 from the Object Relations Technique (see Appendix, Figures 6, 7, 8, and 9) and asked to write a story for each of them. There was a time limit of five minutes for the showing of each picture and the writing of the story. Next, each subject responded to a sociometric test devised according to the principles laid down by Northway (1953) and later elaborated (Oeser, ed. 1960), requiring the choice of five boys in the class that they would like to have sit next to them. Finally, they rated the boy they would each like to be, either imaginary or a specific boy if they preferred, for the series of statements, i.e. 'my ideal' was substituted for 'X' in the test of social compatibility. During the second experimental session each subject rated a friend on the test. Each of these friends had been chosen by the subject in the sociometric test, and it was possible to collect reciprocal ratings for 20 mutual pairs out of the total 32 subjects. As a last task each boy chose the hero from one of his four stories which seemed to be most like himself and rated him on the social compatibility items, i.e.
'he' was substituted for 'X' on the test form. These procedures provided the scores which were related in the hypotheses, comprising sums of ratings for self, ideal, non-phenomenal self and friend and a sociometric score of the total number of choices received by each subject.

Self-rating scores showed a moderate range for this sample ($\bar{x} = 78.8, S = 9.3$), slightly larger than that for the sample of nurses ($\bar{x} = 79.1, S = 7.2$).

Analysis of Data

Since the distribution of sample scores on each variable was somewhat skewed, Spearman's rho was applied as a measure of association. The resulting coefficients and their levels of significance are shown in Table 3.

<table>
<thead>
<tr>
<th>$H_0$</th>
<th>Measures Related</th>
<th>Rho</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Self - Ideal</td>
<td>$+.405^*$</td>
</tr>
<tr>
<td>b.</td>
<td>Self - Fantasy hero</td>
<td>$+.363^*$</td>
</tr>
<tr>
<td>c.</td>
<td>Self - Rating by Friend</td>
<td>$+.388^*$</td>
</tr>
<tr>
<td>d.</td>
<td>Self - Sociometric score</td>
<td>$+.349^*$</td>
</tr>
<tr>
<td>e.</td>
<td>Ideal - Fantasy hero</td>
<td>$-.184$</td>
</tr>
<tr>
<td>f.</td>
<td>Ideal - Rating by Friend</td>
<td>$+.060$</td>
</tr>
<tr>
<td>g.</td>
<td>Ideal - Sociometric score</td>
<td>$+.218$</td>
</tr>
<tr>
<td>h.</td>
<td>Fantasy hero - Rating by Friend</td>
<td>$+.008$</td>
</tr>
<tr>
<td>i.</td>
<td>Fantasy hero - Sociometric score</td>
<td>$+.012$</td>
</tr>
<tr>
<td>j.</td>
<td>Rating by Friend - Sociometric score</td>
<td>$-.014$</td>
</tr>
</tbody>
</table>

* Significant at the .05 level (Siegel, 1956, Table 2)

Table 3. Values of Coefficients relating Self Measures.
Discussion

These results were in general as expected from study of the relevant literature. The significant relationship, moderate and positive, between self and ideal ratings ($H_0a$) corresponds to the coefficient of +.55 which Bills (1958), for example, found between his two scores with similar face validity in the Index of Adjustment and Values. Rejection of the second hypothesis ($H_0b$) is in line with the coefficient of +.375 which Friedman (1955) found representing the association between phenomenal and non-phenomenal self-concepts. Significant positive relationships between self-ratings and relatively objective rather than subjective measure of the same variable ($H_0c$ and $H_0d$) would also be predicted by theorists such as Rogers in a well adjusted group of subjects, information from the environment being well-integrated into the self-concept. Two-tailed tests of significance were used by the author in the belief that at the present time the psychologist has not established a sufficient basis of knowledge on which to predict direction and use a one-tailed test. However, had the latter been used, predictions of direction for the four significant coefficients would have been upheld. Neither is the lack of rejection of the other null hypotheses surprising, except in the case of the last ($H_0j$) considering that both variables are related
to self-ratings. Although friend's concept of the social compatibility in terms of the test ratings and an objective measure of one aspect of this variable are not related, neither of these measures was necessarily made by the test in question which claimed validity as a measure of aspects of the self-concept only.

The conclusions drawn from this experiment are not encouraging. The split-half reliability of the social compatibility rating scale is not satisfactory. The unidimensionality of the construct measured is in doubt since only one third of the test items correlated significantly with the total score. A very much larger pool of items is needed in order to select appropriate items more rigorously. But according to what criterion should they be selected? It has been suggested that face validity is sufficient for a test of self-description, but face validity for what variable? It is true that the test has been described as devised to estimate the self-concept in the area of social compatibility, but against what criterion has it been shown that such a variable exists let alone that it was measured by the test under consideration? In circuitous ways suggestions have been made that the test is a valid measure of such a variable, but it has proved difficult to apply any of the conventional measures of validity. In sum, this rating scale for social
compatibility is probably no more and no less useless as a measure of self variable than are many of the tests reported by Wylie (1961). Examination of better authenticated tests is suggested.

Some Instruments for Description of the Self-Concept

Certainly there are a large number of tests of self variables which may be examined, although few of them may be said to be well authenticated. Attempts to provide instruments through which the self-concept may be described have proved particularly difficult as even face validity is not easily established for such a purely phenomenal variable.

Some such descriptive instruments do not aim at even the phenomenal self-concept. Beloff and Beloff (1959) devised a measure of unconscious self-evaluation using a stereoscope. The subject was presented with three double faces in a stereoscope; the first comprising two randomly selected strangers, the second two strangers whose photographs the subject had previously rated as being equal to himself in attractiveness although his own photograph was not shown to him, and the third comprising his own picture and that of another stranger whom he had previously rated as being equal to himself in attractiveness. Data from the test was eliminated if the subject commented on recognition of himself, but this procedure does not entirely control the variable of
conscious evaluation. This places in doubt the authors' conclusion that the demonstration that subjects prefer the self composite picture supports the theory of favourableness of unconscious judgements. Further doubt has been cast on such a conclusion by the work of Taft (1965).

Some general psychological tests, often of the projective variety, have been adapted to provide self-concept descriptions. A case in point is the work with the Draw a Person Test, based on the finding that such drawn figures tend to resemble the actual self (Kamano, 1960). Bodwin and Bruck (1960) defined the self-concept in terms of self-confidence, freedom to express appropriate feelings, liking for oneself, satisfaction with attainments and feelings of personal appreciation by others. These aspects were represented in the modified test scoring by drawing characteristics such as reinforcement, erasures, sketchy lines, transparency, incompleteness and opposite sex identifications. Validation of the new scoring scheme was based on correlation with the results of psychiatric interviews.

Newstrand's Eavesdropping Question (1958) is also regarded as a projective technique. She asked her subjects 'if you were eavesdropping on a conversation about yourself, what would you most like to hear said about you? ... And what would disturb you the most to hear?', and found that the
responses could be grouped into two main categories. These were the responses of one group of people who primarily seek love and acceptance, and another group who are mainly guided by a wish for power. Within these headings finer categorization was possible. The main advantage of this instrument is that it is quick to administer and easily incorporated in an interview, and is probably helpful in determining the self-image and in ascertaining the main drives of the subject. The formal properties of the instrument as a psychological test have not been examined.

Other methods of stimulating responses by asking questions have been used more consistently. Boernstein (1954) asked his subjects to paint a verbal self-portrait. A number of psychologists employ the question 'Who Am I?' to which twenty answers are required. Kuhn and McPartland (1954) examined the importance of religious responses to the question from 268 students. More recently Kuhn (1960) examined the data from 1185 subjects ranging from 7 to 25 years. He noted differences in response categories according to professional training. Older subjects gave more responses in the categories of group membership, age, sex and educational attainment, and more females gave sex and kinship responses than males. Grossack (1960) presented mental patient norms for response categories. Responses do not, however,
differentiate between college students with superior, average or failing grades (Gustav, 1962). There is a consistent relationship between response to the 'Who Am I?' question and 'What is X...?', where 'X' is a social group to which the subject belongs, in that those subjects describing themselves in terms of directly understandable social and classificatory attributes describe their groups in the same way. According to the reporter of this finding (Garretson, 1962), these results support the assumption that the self is the core concept in the individual's organization of his environment. Research with the test so far is still concerned with the establishment of norms.

Apparently almost identical with this test is one formulated by Bugental and Zelen (1950), in which the question asked is 'Who Are You?' and only three responses are requested. An experiment devised to check some of the claims of this technique, one concerned purely with self-description, is reported.

**Experiment II**

Administration of the W.A.Y. is not a demanding task. It is by its scoring scheme that the test must stand, so that the determination of categories for scoring is the most formidable task which faces the psychologist who wishes to use the test. Face validity of responses must be accepted
when the instructions call simply for self-description, but the responses must be summarised into some useful form.

In their first report of the technique Bugental and Zelen (1950) tentatively suggested eleven categories for content analysis: name, personal pronoun, socio-scientific responses tending to deny the uniqueness of the subject, sex, age, occupation, family status, social status, neutral-geographic, neutral-nationality, and affective toning. Mason (1954), interested in the effects of age on responses, used a similar set of categories except for the necessary addition of longevity, and the useful categories of group membership and unit and the division of affect into positive and negative tonings. Bugental and Cuming (1955) added a duplicate or repetition category, while the contributions of Tolor (1957) included a concept of uniqueness and a category for incomplete responses. Information on the characteristics of these categories has been reported in terms of response percentages, representing frequency of usage. The category of name has been constantly used especially by younger subjects who also mention their sex, and are less likely to describe themselves in terms of the personal pronoun and occupation and use less affective toning than older subjects (Bugental & Zelen, 1950). Sex differences have been demonstrated for the categories of family and age with females
preferring these two categories, and for that of group membership where the males predominate (Bugental & Gunning, 1955). Both of these studies testified to the stability of the categories and the criteria used in their selection. Pathological discriminations are also made, and are reported in another context.

For this experiment one consideration, then, was to establish a set of categories for the scoring of responses. The author adopted the suggestions of the writers quoted with some modifications. The complete list of categories with definitions is available in the Appendix (Figure 10). The chief modification of the system lay in making a distinction between content categories, those categories describing the affect of the statement and the categories set for inadequate responses which were incomplete or repetitious. Of the content categories social relations, personality characteristics and physical characteristics were included on the intuitive grounds that these are areas likely to be of importance to the subject and were obvious omissions from the other systems. A religious category was suggested by the work of Kuhn and McPartland (1954) with the 'Who Am I?' question, and the category for comments on the immediate situation was the result of experiences of the author with subjects who are asked open rather than closed questions in
a pencil and paper test. Affect was divided for four types of responses since this area, again from experience with different tests, appeared as one which might act as a good differentiator.

**Aim and Hypotheses**

Of the differentiations made by other experimenters those between the sexes are of particular interest. The aim of this experiment was to demonstrate sex differences within responses to the W.A.Y. Null hypotheses tested were identical for each of the sixteen content categories, four affect categories and two performance categories for scoring responses to the W.A.Y.; namely, that there is no significant difference in the proportion of male and female subjects using each W.A.Y. category.

**Method**

The subjects involved were 15 male and 15 female students randomly selected from psychology classes, having a mean age of 18.2 years and an age range of 15 to 25 years. They were presented with a sheet of paper headed by the question 'Who Are You?' with spaces for seven answers. The decision to request seven responses was based on the assumption that a compromise between the very small response range of the W.A.Y. and the very large one of the W.A.I. was preferable. This decision had its disadvantages in that comparison of results
with reports of W.A.Y. results was rendered impossible except by a tedious and doubtful method involving the use of proportions. When the test was completed, to the satisfaction of the subject as there was no time limit, a frequency count was taken of the number of subjects for each category who gave at least one response that fell into that category. This again was a departure from common use which was necessary in order to test a hypothesis of sex differences to which the frequency of response of any one individual is irrelevant. To include such scores would be misleading. The stability of the scoring categories used in this experiment was demonstrated by the rank order correlation coefficient run between categorizations made by two independent judges over all the categories (rho = +.864 p < .01).

Analysis of Data

To facilitate the analysis of data, a 2 X 2 contingency table was drawn up for each category. The number of subjects giving responses in that category and the number not giving that response were plotted against the sex dichotomy. With such discrete data derived from measures of variables with suspect sampling distributions, a nonparametric test was indicated. In view of the independence and the small size of the samples, the Fisher Exact Test was selected to examine the hypotheses of differences in proportion. A one-tailed
standard was applied, and with a probability level set at .05 for only two categories was the null hypothesis rejected. Both of these were affect categories: more women than men scoring in the positive and ambivalent affect categories.

Discussion

So it appears that more women than men allow positive and mixed feelings to enter into their self-descriptions. It is interesting that no other sex differentiations were demonstrated in this experiment, and that those found by Bugental and Gunning (1955) were not substantiated. In so far as such differences can be predicted, and in so far as two experiments are expected to support the same hypotheses despite differences in data collection, the first step in determining the validity of the W.A.Y. by establishing scoring categories was a shaky one. Again a round-about method of estimating validity was used because selection of a criterion measure for self-description was impossible. It has been suggested above that before a test like the W.A.Y. may be used the existence of a self-concept must be assumed. The alternative assumption that the individual experiences some feeling towards his behaviour involves fewer concessions and suggests an examination of measures of self-acceptance.
Measures of Self Acceptance

Of the studies reported to demonstrate concomitants of self-acceptance many have involved the Q-sort measure. As evolved by Stephenson (1953; 1961), the measure is based on the statistical technique of running correlations between responses of one individual, rather than correlations over persons or time. Block (1961) examined the Q-sort method and stressed as one of its advantages that it is convenient for observer evaluations because the language used is consistent. He was also concerned with the advisability of requiring a forced distribution of items. Evaluation of a specific measure is more profitable, however, and the Butler and Haigh Q-sort (1954) is selected as the most widely used. The procedure for this method is as follows. The subject is given a set of one hundred self-referent items, for example 'I am disturbed, ... tolerant ... or impulsive' and asked to sort them according to several sets of instructions involving the self as seen today, the person he would most like to be, and, in some cases, the ordinary person. For each phase the items are sorted into nine piles of a certain size so that a quasi-normal distribution results, but it is important to note that Wylie (1961) has objected to this procedure on the grounds that most subjects prefer a U-shaped distribution. The test may also be criticized on
the basis of its item sampling since there is no way of knowing how representative the statements are of the population of self-characteristics of each individual subject.

Wylie (1961) has been particularly concerned with the reliability and validity of the Butler and Haigh Q-sort. She pointed out, in reference to the consistency of the measure, that the self-ideal correlation does differentiate between subjects, that a test-retest calculation of rho from 16 control subjects gave a reliability value of .78 although there is no way of knowing what contributions individual self and ideal sorts make to this coefficient, and that there is some information on the stability of group mean self-ideal correlations across time. By way of validity for the test as an index of self-esteem she reported four sets of results which lend support to such validity: correlations with other self concept measures although not the common ones, demonstrated differences between client and control subjects, significant increases in self-ideal correlations between pretherapy and posttherapy sorts and support of predictions made from theories of self congruence and adjustment. The criticism common to many of these tests may be made of this Q-sort: that there is no clear definition of the construct to be measured.

Vernon (1964) suggested another weakness of Q sorts, that is that they encourage an artificial introspective
attitude. He supported the use of the semantic differential technique as proposed by Osgood, Suci and Tannenbaum (1957) and as examined by Madden (1961) for a more indirect approach. A wide variety of concepts may be examined, including self and ideal, by rating on a series of bipolar adjectival scales. Smith (1960) employed this technique in a factor analytic study of the self-concept using seventy bipolar adjectives. From his analysis he derived five major dimensions of the self-concept. These aspects would be determined to some extent by the selection of adjectival scales which the experimenter made.

Adjectives, as test stimuli, are popular among devisers of measures of self-acceptance. That devised by Buss and Gerjuoy (1957) was composed of a number of groups of adjectives each of which is relevant to various personality dimensions. These dimensions include verbal and physical hostility, anxiety, sociability, dominance and self-esteem. Adjectives within the groups were scaled for intensity and abnormality by psychologists and weights were assigned to each word. The intensity weights are employed in self-acceptance scoring, for which the scale is filled out for self and ideal. The discrepancy score is the algebraic difference between the weights of the adjectives checked on the two administrations. The validity and reliability of this
score as a measure of self-acceptance remains to be demonstrated.

The Adjective Check List (Gough, 1960) is a similar but better authenticated technique. It comprises some 300 adjectives of which the subject checks those which he feels are self-descriptive. Two scores have been obtained by Crowne, Stephens and Kelly (1961): self-acceptance and self-criticality. These scores are expressed as the ratio of favourable or unfavourable adjectives checked to the total number of adjectives checked. An impressive array of evidence for the reliability and validity of such scores was reported in the manual (Gough & Heilbrun, 1965). Test-retest correlations over the total twenty-four scales over a ten week period range from +.46 to +.90, and over a six months period from +.31 to +.75. Relationships of test scores to response acquiescence and social desirability measures, as suggested by Campbell (1960), were examined in the study reported by Heilbrun (1958). Acquiescence was controlled for by allowing for frequencies of responses according to sexes. Significant correlation coefficients were drawn between the scales and an Edwards social desirability measure, but the authors pointed out, with some justification, that such correlations are to be expected and, unless very high, do not necessarily preclude good validity for the test as a measure of a certain variable.
The major concern with validity here is with that of the A.C.L. when used in self and ideal-self studies. A phi coefficient calculated between the two check lists serves as an index of correspondence, and for a sample of adult males this score ranges from +.01 to +.85, with a mean of +.50 and a standard deviation of +.21. Adjectives checked significantly more frequently by groups of high and low scoring subjects are detected and indicate that those with high coefficients see themselves in a generally healthy and positive way while those scoring poorly use more negative adjectives such as confused, hostile, slow and arrogant.

Brownfain (1952) has developed an index of self-evaluation which he has referred to as the stability of the self-concept. On each of twenty-five items the subject rates himself four times: for his most favourable realistic self-concept, his most unfavourable realistic self-concept, his realistic private self-concept and his most accurate estimate of himself as he believes others see him. The stability score is obtained by subtracting positive from negative self-concept ratings and summing across all items regardless of sign. This score has a split-half reliability of +.93, while it is related to some Rorschach sign of self-acceptance (Lafon, 1954). Cowen (1956a) found that if the negative self-concept ratings are made alone they differ from those
made for the positive self-concept, reflecting some doubt on the meaning of the scores. He found no sex differences under either conditions.

Other measures of self-regard, such as those of Phillips (1951) and Berger (1952) used in studies reported above, are employed by self psychologists. For few, however, have attempts been made to examine their formal characteristics. Wylie (1961) pointed out these inadequacies with gusto, although she did allow the omnibus questionnaire of Berger some slight evidence of reliability and validity as a measure of self-acceptance while the similar scale of Phillips were correlated to the extent of +.73 with it. Such measures are indeed in their infancy. Of all the instruments reviewed by Wylie as measures of self variables, it is probably only the Bills Index of Adjustment and Values which may lay claims to being established as a test of some psychological respectability.

**Experiment III**

Use of the I.A.V. was first reported by Bills, Vance and McLean in 1951. A test manual has been published subsequently (Bills, 1958). The test form (see Figure II of the Appendix) contains a list of 49 trait words for each of which the subject is required to answer three questions in terms of five point rating scales. The questions are how often
are you this sort of person (Column I), how do you feel about being this way (Column II), and how much of the time would you like this trait to be characteristic of you (Column III)? Two self-regard measures are derived from this process, Column II giving a direct estimate of self-satisfaction and the discrepancy score of self-ideal (III - I, or D) being regarded as a measure of self-acceptance. The test as it stands is filled in for self-description although there is provision for responding on behalf of a generalized other which is rarely used.

Evidence for the reliability of the self-rating test has been provided in the manual, as shown in Table 4.

<table>
<thead>
<tr>
<th>Reliabilities</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Split-half</td>
<td>.53</td>
<td>.36</td>
<td>.77</td>
<td>.88</td>
</tr>
<tr>
<td>Test-retest (6 weeks)</td>
<td>.90</td>
<td>.83</td>
<td>.92</td>
<td>.87</td>
</tr>
</tbody>
</table>

Table 4. Reliability values as reported for the I.A.V. (Bills, 1958).

Although the test-retest results show a surprising degree of stability over the six week period, the split-half reliabilities do not meet the usual required standard of .90. Whether such a standard of internal consistency should be required through items which are selected to sample as many aspects of the self-concept as possible is questionable, so
that it may be that these values are acceptable under the circumstances. Intercorrelations of the scores also reflect the structure of the test. Bills based these estimates on a sample of 300 subjects (see Table 5).

<table>
<thead>
<tr>
<th></th>
<th>II</th>
<th>III</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>.90</td>
<td>.55</td>
<td>-.83</td>
</tr>
<tr>
<td>II</td>
<td>.34</td>
<td>-.67</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td></td>
<td>-.15</td>
<td></td>
</tr>
</tbody>
</table>

Table 5. Intercorrelations of I.A.V. Scales (Bills, 1958).

On the content validity of the I.A.V. the only comment must be a description of how the trait words were selected. A sample of 124 words were drawn from the Allport and Odbert study (1936) and 49 of these were chosen on the basis of the finding that variations in ratings for these trait names were no greater than the average for two groups of subjects. So much is clear, but on what basis the original 124 words were selected as representing different aspects of the self-concept and having meaning for each subject is not clear.

Concurrent validity is, of course, suspect, in that the only criteria available are the tests already examined and found wanting. However the findings of Omwake (1954), Cowen (1956) and Crowne, Stephens and Kelly (1961) are worth reporting (see Table 6). The Index of Adjustment and Values,
### Table 6. Evidence of the Relationships of the Index of Adjustment and Values with other Similar Tests.

<table>
<thead>
<tr>
<th>I.A.V.</th>
<th>Brownfain Inventory</th>
<th>C.F.I.</th>
<th>Phillips S.A.I.</th>
<th>Berger S-acc Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SC</td>
<td>SC</td>
<td>Sa</td>
<td>S-acc Scale</td>
</tr>
<tr>
<td></td>
<td>SC</td>
<td>SC</td>
<td>Sa</td>
<td>S-acc Scale</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I.A.V.</th>
<th>Q-sort (Butler &amp; Haigh)</th>
<th>Buss &amp; Gerjuoy Adjectives</th>
<th>Adjective Check List (Gough)</th>
<th>Self-acceptance</th>
<th>Self-concept</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
<td>Males</td>
<td>Females</td>
<td>Males</td>
</tr>
<tr>
<td>II</td>
<td>-.35*</td>
<td>-.58*</td>
<td>-.85*</td>
<td>-.62*</td>
<td>+.48*</td>
</tr>
<tr>
<td>D</td>
<td>-.57*</td>
<td>-.65*</td>
<td>+.32</td>
<td>+.39</td>
<td>-.42+</td>
</tr>
</tbody>
</table>

(After Crowne, Stephens & Kelly, 1961)

+ Significant at .05 level.  
* Significant at .01 level.
actually scales II and D, has been compared with the Butler and Haigh Q-sort, the Buss and Gerjuoy weighted adjective scores, the Gough Adjective Check List, the Brownfain Inventory, the Phillips and Berger attitude scales and the Self-acceptance scale of the California Personality Inventory, the last-named being examined in Experiment V reported below. Although in some cases the relationships demonstrated were significant, none of them were large. It would appear that none of the tests devised with aims similar to those of the I.A.V. are measuring an identical variable although there is some small degree of agreement between test scores. Concurrent validity of the Index of Adjustment and Values must yet be given a verdict of not proven.

Comparison of I.A.V. scores was also made with interpretations from the Rorschach Inkblot Test. Bills (1953a; 1954) found that Rorschach signs of depression, such as the number of W response, the ratio W:M, the P+% and the percentage of responses made to the last three blots, differentiate high and low D scorers in the predicted direction. These reports may be regarded as evidence of the construct validity of the test.

A variety of experiments have supplied similar evidence. Roberts (1952), by measuring reaction time of free associations to I.A.V. words and comparing these in the light of the size
of the ideal-self discrepancy for each word, established that such ratings on the I.A.V. are indices of emotionality. Bills (1953b) showed that changes in trait ratings are accompanied by changes in the emotionality connected with the traits, and in 1954 reported that a correlation between judges ratings of self-acceptance based on interviews correlated highly with the self-satisfaction (II) score. In his manual (1958) he claimed that a group of students with high scores on II are distinguished from those with low scores in having higher group status, being more responsible, more efficient intellectually and more dominant and participating in more social events. They also have fewer psychosomatic complaints, fewer contacts with counsellors, a higher general psychological adjustment, better preparation for college work and higher scores in achievement tests.

A useful definition of the test scores is gained from the factor analysis which Mitchell (1962) carried out with scores on Column I. The self-concept, in terms of factors, consists in freedom from anxiety, motivation for intellectual achievement, offensive social conduct, social poise and self-confidence, warm-hearted attitude to others, impersonal efficiency and dependability. Mitchell drew attention to the parallel between three of these factors and three of Callell's factors, factors A and C (maturity and sociability) on the 16PF and the Introversion-Extraversion factors.

The relationship of social desirability measures to Index of Adjustment and Values scores has received some
attention. Cowen and Tougas (1959) found almost perfect correlation coefficients between self and ideal ratings and their measure of social desirability. Bills (1959), however, criticized their procedure severely on the grounds that the experimenters employed mean scores in their statistical analysis thereby ignoring the variability of the raters. Spilka (1961) designed his experiment more skilfully, but his measures of social desirability were more open to doubt. These were three in number and consisted of the Edwards item intercorrelation measure, the Edwards Social Desirability Scale and each subject's estimate of how the perfect person would fill in the I.A.V. rating scales. The resulting intercorrelations are recorded in Table 7.

<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edwards Item r</td>
<td>+.901</td>
<td>+.971</td>
<td>+.570</td>
</tr>
<tr>
<td>Edwards S.D. Scale</td>
<td>+.364</td>
<td>-.095</td>
<td>+.266</td>
</tr>
<tr>
<td>Perfect Person</td>
<td>+.409</td>
<td>+.460</td>
<td>+.081</td>
</tr>
</tbody>
</table>

Table 7. Relationships of I.A.V. measures with Social Desirability Estimates (Spilka, 1961).

The effect of social desirability on the I.A.V. appears to be considerable, although there is much room for improvement on existing experimental design before definite conclusions about this effect can be drawn. The present experiment
was concerned with the I.A.V. because it is a relatively well validated measure of self-acceptance, and consequently another attempt to isolate the social desirability effects was made. Two changes in design were indicated. Firstly, statistical analysis was selected to test the relationship more effectively, so that a partial correlation was run between individual scores on the relevant variables.

Secondly, yet another test of social desirability was employed. The Marlowe - Crowne Social Desirability Scale (Crowne and Marlowe, 1960) is included as Figure 12 of the Appendix. These test authors took a different view of social desirability from that of Edwards (1957), in considering it to be a characteristic within the responding subject rather than the test item. It was defined as the need of the subject to respond in culturally sanctioned ways, a definition which resulted in an independent test with face validity being the sole validity. Such validity must suffice in the lack of a criterion measure, this problem being common to all measures of social desirability. Crowne and Marlowe (1960) reported a significant relationship of +.35 with the Edwards Social Desirability Scale and an internal consistency reliability measure of +.88 and a test-retest reliability of +.89 for their scale.
Hypotheses

The purpose of the experiment was to examine the relationship of social desirability of responses to self and ideal ratings on the Index of Adjustment and Values, since these make up the discrepancy measure of self-acceptance. The null hypotheses tested comprised:

a. that there is no significant correlation coefficient between self and ideal ratios on the I.A.V. (I and III).

b. that there is no significant correlation coefficient between self ratings and social desirability scores on the Marlowe - Crowne Social Desirability Scale.

c. that there is no significant correlation coefficient between ideal ratings and such social desirability scores.

A fourth hypothesis predicted a correlation between self and ideal ratings after the variable was partialled out, but a null hypothesis could not be tested because of the nature of the statistical technique which was necessarily used.

Method

Forty-eight male and female students of a class in psychology completed the self-rating of the Index of Adjustment and Values (Figure II). This administration was immediately followed by administration of the Marlowe - Crowne Social Desirability Scale. Since the experiment was designed to validate the I.A.V. it was advisable to establish the
relationship of the experimental sample of scores with the sample on which the norms which Bills provides are based. Table 8 demonstrates the two sample distributions and their relationship.

<table>
<thead>
<tr>
<th></th>
<th>Experiment III</th>
<th>( \bar{X} )</th>
<th>( S )</th>
<th>C.R.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self (I)</td>
<td>Bills (1958)</td>
<td>156.81</td>
<td>26.66</td>
<td>0.506</td>
</tr>
<tr>
<td>Ideal (III)</td>
<td>Experiment III</td>
<td>208.00</td>
<td>19.79</td>
<td>0.331</td>
</tr>
<tr>
<td></td>
<td>Bills (1958)</td>
<td>222.31</td>
<td>16.86</td>
<td></td>
</tr>
</tbody>
</table>

Table 8. A Comparison of the Two Samples of I.A.V. Scores.

The experimental sample differed from the normative sample on both variables in showing lower mean scores and a larger variation of scores within the sample. Such differences might have been predicted from the nationality differences of the samples. The critical ratio values comparing the means of the Australian experimental sample and the American norms, however, indicated that the null hypothesis suggesting that both samples were drawn from the same population might not be rejected. On this basis it was possible to generalize conclusions drawn as to the effects of social desirability on the I.A.V. variables from the experimental sample to other samples of scores.
Analysis of Data

In the analysis of the data, acceptance of the assumptions of distribution form underlying the use of parametric techniques was impossible. An estimate of a correlation coefficient was required by hypotheses, and this had to be amenable to generalization to a partial correlation coefficient. The non-parametric correlation measure which best fulfills these requirements is Kendall's tau (Kendall, 1948), which, like Spearman's rho which may not be so generalized, is about 91% as efficient in the testing of hypotheses as the most powerful parametric correlation, Pearson's r (Hottelling & Pabst, 1936). The resulting coefficients were examined for significance by computing a Z score (Siegel, 1956, p.221); but as the sampling distribution of the Kendall partial rank correlation is not as yet known no test of significance of \( \tau_{xy,z} \) was applied (Siegel, 1956, p.228).

<table>
<thead>
<tr>
<th>Variables</th>
<th>( \tau )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self - Ideal (I - III)</td>
<td>+.384*</td>
</tr>
<tr>
<td>Self - Social Desirability</td>
<td>+.302*</td>
</tr>
<tr>
<td>Ideal - Social Desirability</td>
<td>+.159</td>
</tr>
<tr>
<td>Self - Ideal - S.D.</td>
<td>+.363</td>
</tr>
</tbody>
</table>

* Significant at .05 level.

Table 9. Relationships of Scores on the Index of Adjustment and Values and the Marlowe – Crowne Social Desirability Scale.
A significant correlation between the two scores making up the I.A.V. self-acceptance score was demonstrated; in other words, self and ideal ratings are related, if only slightly. The problem then posed concerned the extent to which this relationship was spuriously inflated by the relationship which each variable may have with social desirability. In analysis of this experimental data a significant relationship was demonstrated between self ratings and the social desirability variable but not between that variable and ideal ratings. The coefficient representing the correlation between self and ideal ratings when the third variable was partialled out, differed minimally from the original self-ideal correlation; so that it may be said that social desirability as measured by the Marlowe-Crowne Social Desirability Scale does not influence the relationship between Columns I and III of the I.A.V., although support for this null hypothesis was not available from statistical significance testing. As was expected from this conclusion the relationship between the social desirability measure and the discrepancy measure of self-acceptance (III - I) was not significant, analysis yielding a coefficient of only -.231.

Discussion

The conclusion that the tendency of the subject to respond in a culturally acceptable manner is related to his
self rating does not in any way invalidate these self rating measures. This author would suggest, rather, that the lack of relationship between social desirability and ideal ratings demonstrated in this experiment, in agreement with some of the findings of Spilka (1961) and disagreement with those of Cowen and Tougas (1959), casts some doubt on the validity of the Index of Adjustment and Values in that the very construct of ideal self especially as defined by the psychoanalysts implies the influence of social and cultural norms. To this extent the construct validity of Bills' test is in question. One aspect of the I.A.V. which contributes to this inadequacy as a test of any self variable may be the item content involved. In view of this suggestion, while the obvious values of the I.A.V. as a test of self-acceptance are kept in mind a somewhat different measure of self-acceptance is examined.

**Experiment IV**

The view of this author that it may prove impossible to identify or describe the self-concept of a number of individuals using the same measuring instrument is outlined at the beginning of this chapter. Following from this statement is the suggestion that even though such description is impossible at this stage of the development of psychology, it may be possible to isolate a measure of self-acceptance.
now even though the self to which the feelings of acceptance are directed is not isolated for measurement. Such an approach allows for the uniqueness of the individual and his self-concept as stressed by writers such as G.W. Allport, and provides a more appropriate test for the self theory of Carl Rogers than the tests structured with no reference to the phenomenal field of the individual subject which he and his co-workers use most frequently. Content validity is seen as being one of the most appropriate forms of validity for a measure of any self variable, so that test stimuli should be as unstructured as possible since:

Behaviour is caused, and the psychological cause of behaviour is a certain perception or a way of perceiving.

The client is the only one who has the potentiality of knowing fully the dynamics of his perceptions and his behaviour.

(Rogers, 1951, p. 221).

The test constructor, according to this argument is not qualified to define the item content of a measure of self-acceptance.

The Chicago Counseling Centre has designed one measure which meets these content requirements in the form of an abstract measure described by Shlien (1961b). This test is referred to below as the Abstract Apparatus or A.A. It should be noted that Shlien has devised this measure, not to fulfil these requirements, but to test the hypothesis that there is
an abstract, internal self-ideal relationship which exists within each person’s self-consciousness.

The apparatus of the A.A. consists of two transparent curved circles of plexiglass which can be moved by the subject so that they are back to back \((r = -1.00)\), or completely overlapping \((r = +1.00)\), or at any intermediate position. (See Figure 13 of the Appendix). The subject moves the two circles representing his self and ideal-self until he is satisfied by their overlap. On the back of the stand, hidden from his view, are pointers, one attached to each circle arm so that they indicate the angle of separation between the circles. The self-acceptance score which Shlien employs is the cosine of the angle between the two vectors which is represented as a correlation coefficient. The actual instructions given to the subject in the present experiment were as follows:

Now I want you to think of this circle as yourself. (Point appropriately). And this one as what you would like to be (pause), a sort of ideal self.

Do you know what I mean? (If the answer is 'no', repeat the theme of the instructions).

(Move circles on axis).

I want you to arrange these so that they overlap as they do in you. (This instruction is given after the identity of the two circles is clearly established by repetition and reflection).

The instructions which Shlien has used were presumably similar, although he did not report them verbatim.
He did, however, give some information as to the reliability and validity of the test (Shlien, 1961b). To estimate the stability of a measure taken at this level of abstraction a parallel forms reliability design was used. The resulting coefficient of correlation between the cosine score of the A.A. and a score similarly derived later from an apparatus consisting of two overlapping squares of frosted plexiglass was +.81, indicating as much stability with such unstructured test content as has been demonstrated with tester-specified test items. Shlien also reported estimates of one aspect of the validity of the A.A. using the Butler and Haigh Q-sort as a concurrent criterion measure of self-acceptance. In two small samples the validity coefficients within this design were +.39 and +.42 respectively. This description of the formal characteristics of the test is all that can be gleaned from publications to date, although there are two incomplete research projects relevant to this test which are at present being carried out in the United States (Shlien, personal communication, 1965). Since the test appeared to have some construct validity by virtue of its unstructured content so that the subject may formulate his own phenomenal concepts, as well as its freedom from item ambiguities as demonstrated by Loehlin (1961) and its acceptance of the generality of self-ideal discrepancies as
demonstrated by Levy (1956), the conducting of an experiment designed to establish more information about the formal characteristics of the Abstract Apparatus as a measure of self-acceptance was indicated.

**Aim**

The only A.A. measure which Shlien used as the measure of a self variable was the cosine of the angle of overlap of the self and ideal circles. The performances and comments of groups of subjects using the test apparatus suggested to the present author that another measure might throw some light on the attitudes to himself which the subject holds. This measure was based upon the observation that since the subject consistently identifies one circle as self and the other as ideal-self according to instructions, it would be possible to gauge from his final setting of the instrument whether he adjusts self to meet ideal or ideal towards self. In other words, since each subject is presented with the apparatus in a standard position direction of setting may prove to be a significant clue to self-attitudes. Such a measure would not be useful unless some stability is demonstrated, so that this experimental design involved the examination of test-retest reliability for the two measures of the A.A. Where stability of the variable or consistency of measurement was established, some estimate of the validity of the measure was made.
Hypotheses

It follows that for the first part of the experiment null hypotheses were identical for the two variables of direction of setting and cosine of overlap, and varied only in the different time intervals selected. Three time intervals were included in the experimental design: an interval of 20 minutes filled by general chatter, an interval of 90 minutes during which the I.A.V. was administered and an interval of 28 days. The resulting null hypotheses were:

a. that there is no significant correlation coefficient between two measures of the A.A. taken with a 20 minute interval.

b. that there is no significant correlation coefficient between two measures of the A.A. taken with a 90 minute interval.

c. that there is no significant correlation coefficient between two measures of the A.A. taken with an interval of 28 days.

If these hypotheses were rejected for direction of setting or cosine of overlap then hypotheses could be formulated about the concurrent validity of the measure, using material from the Index of Adjustment and Values and the Marlowe - Crowne Social Desirability Scale.

Method

The subjects for this experiment were those who took part in Experiment III, that is forty-eight male and female
students of a psychology class in personality testing. The materials used are described in detail above, and the administrative procedure was as defined in the hypotheses immediately below. In the actual experimental situation from which the data was drawn, the A.A. was administered to each subject individually after which the subjects chatted with the remainder of their class for 20 minutes when the A.A. was readministered. The I.A.V. was then filled out and scored by the subjects and followed by another individual administration of the A.A. The M-CS.D.S. was administered and scored. Four weeks later, when the class was assembled at the usual time, Abstract Apparatus measures were taken for the last time.

Analysis of Data

Methods selected for analysis of data differed according to the scaling of the measures under consideration. For the measure of direction of setting the two distributions correlated were dichotomised around a real gap, having a point distribution of only two categories. The phi coefficient is designed for use in such situations and was applied accordingly. Null hypotheses were tested through the relationship of phi to chi square (Guilford, 1956, p.313). Kendall's tau was employed with its Z test to examine the null hypotheses concerning the angle of overlap (Kendall, 1948). In this
case the variables were measured on continuous metric scales, but the regressions were not linear so that a non-parametric method was used. The results of analysis are shown in Table 10.

<table>
<thead>
<tr>
<th>Measures</th>
<th>Retest Interval</th>
<th>Statistics</th>
<th>Direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>( AA_1 : AA_2 )</td>
<td>20 minutes</td>
<td>(+.258)</td>
<td>1.85</td>
</tr>
<tr>
<td>( AA_2 : AA_3 )</td>
<td>90 minutes (IAV)</td>
<td>(+.583^*)</td>
<td>6.80</td>
</tr>
<tr>
<td>( AA_1 : AA_4 )</td>
<td>28 days</td>
<td>(+.195)</td>
<td>1.33</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Measures</th>
<th>Retest Interval</th>
<th>Statistics</th>
<th>Direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>( AA_1 : AA_2 )</td>
<td>20 minutes</td>
<td>(+.493^*)</td>
<td>3.68</td>
</tr>
<tr>
<td>( AA_2 : AA_3 )</td>
<td>90 minutes (IAV)</td>
<td>(+.637^*)</td>
<td>4.93</td>
</tr>
<tr>
<td>( AA_1 : AA_4 )</td>
<td>23 days</td>
<td>(+.463^*)</td>
<td>3.48</td>
</tr>
</tbody>
</table>

* Significant at .01 level.

Table 10. Test – Retest Reliability Estimates of Two Measures by the Abstract Apparatus.

Discussion and Further Hypotheses Testing

Only one coefficient was significant for the measure of direction of setting, and that was one taken over an interval filled by administration of the I.A.V. which might have spuriously raised the test-retest coefficient. The conclusion to be drawn from such analysis is that the direction of setting measure is not sufficiently consistent to make attempts
to isolate what such scores represent worthwhile. This measure, then, was discarded. On the other hand, all three null hypotheses as applied to Shlien's measure of the cosine of the angle of overlap between the circles were rejected. Some test users would argue that to establish the significance of a test-retest reliability coefficient is not enough, but that a certain standard of correlation, such as +.90, should be achieved (Anastasi, 1961). Conversely, it should also be kept in mind there is little evidence to support the assumption that self variables, such as self-acceptance, are so stable within any one individual that a test may be expected to give such a highly consistent measure. The coefficients for this measure suggest some spurious effect due to the administration of the I.A.V., but the 28 day test-retest coefficient indicates a surprisingly high degree of stability in the self-acceptance variable. Shlien claimed the A.A. as an instrument measuring self-acceptance so that further comparison with a marker measure of self-acceptance was indicated.

In this experiment both I.A.V. self-acceptance measures, Column II and III-I, were employed as concurrent criteria of validity since, although the validity of these measures is still in doubt, they were the best-documented measures available. Some description of the construct validity of the
test was gained by comparing scores from the Abstract Apparatus with an estimate of the influence of the social desirability variable, defined as scores from the Marlowe – Crowne Social Desirability Scale. The procedure through which the data was derived was that followed in the first part of Experiment IV, and analysis was conducted again by Kendall's tau because of non-linearity of regression in the data. The A.A. scores were those derived from the first administration of the test, and their relationships demonstrated with the criterion variables are recorded in Table 11. These relationships were examined in the following null hypotheses:

a. that there is no significant correlation coefficient between A.A. overlap scores and the discrepancy (III-I) scores of the I.A.V.

b. that there is no significant correlation coefficient between A.A. overlap scores and Column II scores of the I.A.V.

c. that there is no significant correlation coefficient between A.A. overlap scores and scores on the Marlowe – Crowne Social Desirability Scale.

The coefficients indicated that the Shlien measure from the A.A. is not an estimate of the discrepancy between self and ideal-self in terms of Bills' adjectives nor of the subject's liking or disliking of his state as described in
No coefficient is significant at .05 level.

Table 11. Concurrent and Construct Validity
Estimates of the Overlap Measure of
the Abstract Apparatus.

<table>
<thead>
<tr>
<th>Measures</th>
<th>tau</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.A. - III-I</td>
<td>-.216</td>
<td>0.66</td>
</tr>
<tr>
<td>A.A. - II</td>
<td>+.250</td>
<td>0.78</td>
</tr>
<tr>
<td>A.A. - M-G S.D.S.</td>
<td>+.062</td>
<td>0.19</td>
</tr>
</tbody>
</table>

this way. Had the coefficients proved to be significant
the relationships demonstrated would all have been positive.
This is true for the A.A. relationship with the discrepancy
score with the Index of Adjustment and Values in that high
cosines of angles of overlap of the circles and small discrep-
ancies between self and ideal ratings on the adjectives both
indicate a high degree of self-acceptance. Neither was the
A.A. score related to the present measure of social desirability.
If that measure can be accepted as valid this result supported
the null hypothesis \( H_0 \) that an abstract measure, in
contrast to some instruments in which more concrete items
are provided, is less susceptible to the influence of the
social desirability variable.

Experiment IV consisted, in essence, of an attempt to
provide some evidence for the validity and reliability of
measures of self variables taken from a test in which the
item content allows for the unique phenomenal field of each
subject tested. The Shlien Abstract Apparatus was the test selected for examination, and two scores derived from it, direction of setting and cosine of angle of overlap, were employed. Direction of setting did not appear to be a reliable measure, therefore it was discarded. The cosine measure was considered to be sufficiently stable to warrant further investigation, so that the question demanding an answer was of what is the constant cosine score of the A.A. an index. No significant relationship with the I.A.V. self-acceptance measures was found although Shlien claimed it as a self-acceptance estimator, correlating with scores from the Butler and Haigh Q-Sort. As suggested by Campbell (1960) the relationship between the cosine measure and social desirability was examined and provided no significant coefficient. Interpretation of this lack of relationship, and indeed use of the test, must wait until positive relationships of the A.A. with other personality and self variables are established.

Experiment V

Aim

In this search for an acceptable measure of a self variable the 'all the eggs in one basket' approach has not proved to be satisfactory. The social compatibility self-rating scale devised by the author is not a useful instrument
and does not lend itself to modification. W.A.V. content
categories do not demonstrate any sex differences which one
would expect to observe. A.A. scores do not correlate with
those from I.A.V. scales. Apart from the initial limitation
of its item content, the I.A.V. does, however, show correla-
tions with other measures of self-acceptance and its self-
acceptance (D) measure is not influenced by social desirab-
ility. It is suggested that self-acceptance may be amenable
to measurement even while the self-concept on which it is
based is not. The step following from these conclusions is
one of selecting a number of measures of self-acceptance and
intercorrelating them, employing as marker variables the two
self-acceptance scales of the I.A.V. to aid in interpretation.
This step was taken in Experiment V.

Selection of the self-acceptance measures to be compared
was guided in part by results from the research reported
above. For example excluded from selection on the grounds
that the relationships of their scales with the two I.A.V.
variables were already known were the Butler and Haigh Q-Sort,
the use of the Buss and Guerjoy adjectives, the Gough
Adjective Check List, the Brownfain Inventory, the Phillips
Self-Acceptance Inventory and the Berger Self-Acceptance
Scale. The I.A.V. scales II and D, then, were employed as
marker variables.
The Index of Adjustment and Values is contained in Figure II of the Appendix, and evidence of its validity has been outlined above. (See especially Table 6 of intercorrelations of the I.A.V. with the other tests). Of the two measures of self-acceptance, II represents the way the subject feels about the manner in which he has described himself in relation to the adjectives and D is the discrepancy score between the totals of self and ideal ratings. High scores for II indicate high self-acceptance within the subject, but high scores for D indicate low self-acceptance.

The measures discussed to date have borne little relationship to the self theories examined in Chapter 2, with the exception of those from the instruments of the client-centred theorists. Cattell is one theorist whose work is discussed in some detail, so it was considered appropriate to include some of his factor measures in this study. His broad definition of the self-sentiment is quoted above. Five related measures were examined here, four being scales of the Motivation Analysis Test (Cattell & Horn, 1964). In Cattell's treatment of motivation 'the self-sentiment, by our dynamic lattice theory, is the most distal of all structures in the subsidiation sequence, i.e., the most developed and most remote from the ergic goals' (Cattell, 1957, p.731). It is, however, subservient to the super-ego. Attitudes covered
by the self-sentiment include:

a. social reputation (I want ... a good career, a good family, a good reputation)

b. control and understanding of the self (I want ... not to go mad, to know me better, to keep impulses under control).

The self-sentiment is briefly described within the context of motivation as 'the level of concern about the self-concept, social repute and the more remote rewards (Cattell & Horn, 1964, p.3). Four sets of items comprise the M.A.T. from groupings of which the four measures are assessed. (These sets of items comprise the first section of the omnibus questionnaire of Figure 14 of the Appendix; Uses, Estimates, Word Association and Information). The first measure (USS) is derived from the Uses and Estimates subtests and is an unintegrated self-sentiment indicating the level of unconscious concern about the self-concept. High scores suggest strong unconscious motivation. The second measure (CSS) is provided by the Word Association and Information Subtests and is an indication of the extent of conscious motivation connected with the self-concept. High scores suggest high conscious interest. MSS is a measure of the total motivation involved, much motivation being shown by high scores. The fourth measure is the conflict score (CSS) which yields a high score to indicate a high degree of conflict in the dynamic area of the self-concept. All these four measures are statistically
related by the nature of the techniques used to derive them from the data collected.

An independent measure of a self-variable devised by Cattell was also employed in this study. This is Factor U.I. (Q) 18 or the $Q_3$ scale from the Sixteen Personality Factor Questionnaire (Cattell & Eber, 1957). The items contributing to this score were extracted from Form A of the 16PF and comprise the second section of the omnibus questionnaire which is Figure 14 of the Appendix. The norms applied for scoring were those supplied in the Australian Tabular Supplement of the 16PF (1963) from men and women doing Arts and Sciences at the University of Western Australia (Tables 5 and 6). This variable is fully described in Chapter 2, high scores on it indicating high self-sentiment formation, sometimes described as controlled exacting will-power (Cattell & Eber, 1957). In brief, $Q_3$ represents the strength of the dynamic investment and aspiration level achieved in the self-sentiment, and is related to measures of consideration for others, persistence, foresight, conscientiousness, leadership qualities, mechanical success and lack of accident proneness. It is the highest loaded factor in Cattell's second order factor of general anxiety. He hypothesises that $Q_3$ measures the extent to which the person is able to achieve the self-sentiment behaviour which society prescribes (1957).
The construct validity of this aspect of the 16PF was
generally demonstrated by Karson and Pool (1961), but the
more interesting validation study in the context of this
experiment is that of Smith (1958) who compared six measures
of self-concept discrepancy and instability with $Q_3$ and
found only one of the six relationships to be significant.
Nine more relationships were tested in this experiment.

Another questionnaire measure of the self-acceptance
variable is the Sa scale of the California Psychological
Inventory (Gough, 1956) as used in studies reported in Chapter
3 such as that of Aller (1962). The keyed items of this
scale are also found in the omnibus questionnaire which is
Figure 14 of the Appendix. Gough (1956) claimed that the
scale assesses factors such as sense of personal worth, self-
acceptance and the capacity for independent thinking and
acting. High scores are gained by subjects who are intelli-
gent, outspoken, cool, versatile, witty, aggressive, self-
centred and have more self-confidence. Those with low
scores are methodical, conservative, dependable, conventional,
easy-going, quiet, self-abasing, passive in action and
narrow in interests. The main method of validation of the
C.P.I. to date has been factor analysis. The factors isolated
by Mitchell (1960) agree in the main with those extracted by
Crites, Bechtoldt, Goodstein and Heilbrun (1961), and he
found that the C.P.I. and the 16PF, each taken in their entirety, have high loadings on a number of common factors (Mitchell, 1961). Of these factors the Sa scale, specifically, showed loadings of -.17 on the factor of Adjustment by Social Conformity, +.77 on Social Poise or Extraversion, +.08 on Super-Ego Strength and +.05 on the Capacity for Independent Thought and Action. The Sa scale correlates significantly with Column II of the I.A.V. (see Table 4). This relationship was retested in this experimental design.

Since it was necessary to reject the Abstract Apparatus score (Shlien, 1961b) as a measure of self-acceptance in spite of the advantage of its unstructured item content, another attempt to establish what the A.A. is measuring was made. The A.A. was included in this experimental design in which a variety of self-acceptance measures were applied, including the I.A.V. marker variables with which it does not correlate. The measure is the cosine of the angle which represents the overlap of the two circles of the apparatus as seen in Figure 13 of the Appendix. The higher the score, the greater the correspondence between self and ideal circles and, presumably, the greater the self-acceptance within the individual.

The last-mentioned of the ten measures employed is another abstract measure devised by Shlien (1961b). This is
a Q-sort, a type of self-acceptance measure not examined by the author in earlier experiments. However, items are not supplied for this sort, neither is any particular form of distribution of sort required. The subject is asked to make up a set of twenty-five statements about himself, and these are ranked for self and ideal. (Administration instructions for the I-A-Q-Sort are found in Figure 15 of the Appendix). The I-A-Q-Sort score (I-Q) is the rank correlation coefficient (Kendall's tau is appropriate, and therefore used) between self and ideal rankings or sorts. The reliability of the instrument is not known. Shlien (1961b) reported some attempts to establish its validity, but he did not provide information about the reliability of the statistics involved. Despite this omission the correlation coefficients of the I-Q with the Butler and Haigh Q-Sort of +.58 and with the discrepancy score of the I.A.V. (D) of +.56 indicate a definite relationship between the variables. His two abstract measures, the A.A. and the I-Q, have a rank correlation of +.67. This I-Q measure of correspondence between self-concept and concept of ideal-self yields a high score when the correspondence is great.

Hypotheses

These ten measures described above are those which were intercorrelated in this experiment. The aim was exploratory,
the plan being to analyse and interpret the resulting
correlation matrix and to extract factors from the matrix
if appropriate. In calculating the coefficients some 45
null hypotheses were tested. These concerned the intercorre-
lations between these measures:

a. Index of Adjustment and Values, Column II (II)
b. Index of Adjustment and Values, Discrepancy Score (D)
c. Motivation Analysis Test, Unintegrated Self-
   Sentiment (USS)
d. Motivation Analysis Test, Integrated Self-
   Sentiment (ISS)
e. Motivation Analysis Test, Total Motivation within
   Self-Sentiment (MSS)
f. Motivation Analysis Test, Total Conflict within
   Self-Sentiment (CSS)
g. Sixteen Personality Factor Questionnaire, U.I.18 (Q3)
h. California Psychological Inventory, Self-Acceptance
   Scale (Sa)
i. Shlien's Abstract Apparatus (A.A.)
j. Shlien's Ideo-Q-Sort (I-Q).

**Method**

The procedure of the experiment involved the administra-
tion of these measures to the subjects who were 40 males and
females aged between 16 and 25 years. The age distribution
was somewhat positively skewed. During the administration
the subjects were permitted to remain anonymous, and were
assured of this anonymity although it should be pointed out
that in several cases all the tests were administered individually so that some relationship between tester and testee was inevitable. The subject was first presented with the omnibus questionnaire (Figure 14 of the Appendix), and when this was completed the I.A.V. was administered. This performance in some cases took up to two hours, during which the subject may have gained a way of describing his self-concept which was not uniquely his own. The learning of such a style was not, however, apparent in the two abstract measures then administered. The A.A. was individually administered and then the subject was given the 25 blank cards to be filled in and ranked as quickly or as slowly as he liked. During this last stage the subjects occasionally needed some non-specific prompting and encouragement.

Analysis of Data

From the collection of data it was apparent that the relationships between at least some variables were not amenable to analysis by means of the Pearson-Product Moment Correlation Coefficient because of curved regression lines in the plottings of the relationships and the lack of homoscedasticity inherent in them (Guilford, 1956). Spearman's rho was used as an approximation of Pearson's r as the conversion cannot be used with this fairly small sample. A formula for a statistic with the same form of distribution as Student's t
(Siegel, 1956) was used to gauge the significance of the coefficients. Table 12 presents the resulting correlation matrix.

Discussion

Interpretation of the matrix was attempted at several levels, the most superficial question to be answered being whether relationships reported in the literature were supported in this experiment. The answer was not encouraging: not one of the intercorrelations tested was represented by a significant coefficient in this matrix. Bills (1958) reported a significant correlation between the two I.A.V. variables which this coefficient did not bear out. The relationship between Q3 and the M.A.T. variables found by Cattell (1957) was not supported, neither was his correlation between II and Sa (1958) borne out. The findings of Shlien (1961b) concerning the I-Q were contradicted by the small non-significant correlations in the matrix between I-Q and D and I-Q and A.A. The lack of relationship between the two abstract measures was particularly surprising, although it is possible that this wider selection of subjects would better reflect the true relationship than that tested by Shlien.

At another level the question which was asked was what variables did intercorrelate significantly, and in the light of these coefficients was factor analysis appropriate? Within
<table>
<thead>
<tr>
<th></th>
<th>I.A.V.</th>
<th>M.A.T.</th>
<th>16PF</th>
<th>C.P.I.</th>
<th>Skljen Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>II</td>
<td>D</td>
<td>USS</td>
<td>ISS</td>
<td>MSS</td>
</tr>
<tr>
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<td>.</td>
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<td>+.197</td>
<td>-.025</td>
<td>+.162</td>
</tr>
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<td>D</td>
<td>.</td>
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<td>+.115</td>
<td>+.134</td>
<td>+.195</td>
</tr>
<tr>
<td>USS</td>
<td>.</td>
<td>+.385*</td>
<td>+.416*</td>
<td>+.649*</td>
<td>+.163</td>
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<tr>
<td>ISS</td>
<td>.</td>
<td>+.587*</td>
<td>-.337*</td>
<td>+.158</td>
<td>+.161</td>
</tr>
<tr>
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<td>.</td>
<td>+.316*</td>
<td>.</td>
<td>+.170</td>
<td>+.208</td>
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<tr>
<td>CSS</td>
<td>.</td>
<td>.</td>
<td>.</td>
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<td>+.229</td>
</tr>
<tr>
<td>Q3</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>-092</td>
</tr>
<tr>
<td>Sa</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>-.151</td>
</tr>
<tr>
<td>A.A.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>I-Q</td>
<td>.</td>
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</table>

+ Significant at .05 level.  * Significant at .01 level.

Table 12. Matrix of Intercorrelations of Ten Self-Acceptance Measures.
this experiment factor analysis was not considered appropriate because of the small size of the sample involved. Yet clusters of significant intercorrelations in the matrix were apparent. The first of these was that of the six coefficients between the four M.A.T. variables. These were inter-related statistically through the scoring methods used, so that these correlations have no psychological meaning. The only other cluster is of more interest. The three variables significantly inter-related were II, Q₂ and I-Q; two of the coefficients proving to be quite small while the third, between the Cattell measure and the Shlien pencil and paper measure, showed a substantial relationship. Correlations with the marker variable, I.A.V. II, suggested the possibility of correlations with other tests to which II has been related in Table 6. None of these refutations of the three null hypotheses would have been specifically predicted from examination of the relevant literature, although they would have been predicted from the general notion that tests which are presented with verbally similar aims and rationales may measure similar variables.

Factor analysis was not an indicated method of analysis in this case because of the paucity of significant coefficients, only 9 out of 45 and some of those artificially produced, and those coefficients which were significant were generally too
small for useful factor extraction. Closer examination of
the meaningful correlation cluster was more appropriate.
Now the individual likes being the way he describes himself
is in part measuring the same variable as a correlation
between ranks of self-initiated items describing self and
ideal. Both of these measure in part the variable represented
in Cattell's self factor derived from questionnaire material.
In other words, some coherence was demonstrated in the area
of psychological research in the measurement of self variables
since the three authors of the tests, Bills, Cattell and
Shlien, work within extremely different frames of theoretical
reference. Some measures, in contrast, showed no significant
relationships with other measures. These were the D score of the
I.A.V., and the Sa scale of the C.P.I., while the M.A.T.
measures showed no correlations outside that test.

None of the nine measures correlated with the Abstract
Apparatus measure provided a significant coefficient. This
test then, despite its good content validity in comprising
individual items which stem from the frame of reference of
the subject rather than that of the test constructor, has
still no demonstrable concurrent validity as a measure of
self-acceptance. This experiment demonstrated, however, that
a test with similar advantages, the Ideo-Q-Sort, does correlate
significantly with a well-authenticated measure of something
at least resembling self-acceptance in that it does measure to some extent the same variable as a number of so-called tests of self-acceptance. For support of this description see the record of intercorrelations of I with other measures in Table 6. This conclusion is drawn somewhat tentatively. The most useful suggestion this experiment provided in relation to the phenomenal I-Q lies in the relationship between it and Q3. This relationship lies open to more extensive examination.

Experiment VI

Aim

Because of the impressive research which has been reported concerning the variables measured by the 16 Personality Factor Questionnaire (for example, Cattell, 1957), this test might provide a useful means of assessing what the Ideo-Q-Sort measures. A relationship is reported above between I-Q and Q3 from the 16PF which requires affirmation. Cattell has suggested that since he maintains that the self-sentiment is subservient to the super-ego within the dynamic lattice some relationship between I-Q scores and those on scale G of the 16PF may be predicted (Cattell, personal communication, 1965). It follows that the aim of this sixth experiment was to establish the extent of the relationships which the Ideo-Q-Sort has with the Q3 and G scales of the 16PF, U.1.(Q) 13 and U.1.(Q) 7.
From a survey of the relevant research Cattell (1957) described the G measure as one of the extent of super-ego strength or amount of rigid internal standards which the individual holds. He hypothesised that G corresponds with the psychoanalytic super-ego, and depicts the regard to moral standards and the tendency to drive the ego and restrain the id. Several psychoanalytically-oriented writers, such as Jacobson (1954) and Hartmann (1959), have postulated a relationship between the self and the super-ego. The individual with a high G score sees himself as able to concentrate, a guardian of manners, persevering, and cautious. He also demonstrates good organizational powers in thinking. G correlates significantly with leadership qualities and with lack of accident proneness, characteristics which it shares with Q3.

The relationship between I-Q and Q3 was re-examined because it was possible to introduce modifications of the experimental design which would provide a more reliable test of the relationship. In the design of Experiment V Q3 was represented by a sub-section in the omnibus questionnaire administered which comprised the items from Form A of the 16PF. The number of items was naturally small, so that in this experiment items from both Forms A and B making up the G and Q3 scales were employed, thereby increasing the
reliability of the measures. These forty items were randomly ordered to make up the questionnaire administered in this situation. (See Figure 16 of the Appendix).

Hypotheses

The null hypotheses tested were:

a. That there is no significant correlation coefficient between coefficients of the Ideo-Q-Sort and scores on the $Q_3$ scale of the 16PF.

b. That there is no significant correlation coefficient between coefficients of the Ideo-Q-Sort and scores on the $G$ scale of the 16PF.

c. That there is no significant correlation coefficient between scores on the $Q_3$ and $G$ scales of the 16PF.

Method

The subjects for this experiment, who remained anonymous throughout, were 60 second year psychology students with a mean age of 23 years and 5 months and an age range of 17 to 45 years. Twenty-five blank cards were presented to them and they were given the instructions orally in the form in which they are presented in Figure 15 of the Appendix. When the rankings were complete the $Q_3$ and $G$ questionnaire (Figure 16) was filled in. Since Cattell (1957) predicted low $G$ scores for academics and students, the collected data was examined to assess the representativeness of the sample. Comparison
with test norms can be made with the 16PF scales only, since norms were not available for the Ideo-Q-Sort. The mean $Q_3$ score for this sample was 5.00, a value which fell within the mean range specified in the 16PF manual (Cattell & Eber, 1957). In contrast the mean sample $G$ score was only 3.83, at least one standard deviation below the mean of the normative data. Because of the structure of the sten scores employed the sample standard deviations were not compared, however sample scores on each scale did range from 1 to 10, the total sten score range. It appears that the sample was representative of the population of $Q_3$ scores, but that in regard to the measure of $G$ interpretations and conclusions drawn from the data might be appropriate to the student population only.

Analysis of Data

The null hypotheses concerning the interrelationships of the scores were tested by means of Spearman's rho and its related t score was employed for the reasons stated in Experiment V. The resulting coefficients appear in Table 13.

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<table>
<thead>
<tr>
<th></th>
<th>$Q_3$</th>
<th>$G$</th>
</tr>
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<td>I-Q</td>
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<td>+.025</td>
</tr>
<tr>
<td>G</td>
<td>+.105</td>
<td></td>
</tr>
</tbody>
</table>
```

No coefficient is significant at .05 level.

Table 13. Intercorrelations of two 16PF Measures and the Ideo-Q-Sort.
Discussion

None of the three null hypotheses was rejected. The significant correlation between the two 16PF measures reported by Cattell (1957) was not supported, perhaps because of sample differences in the two experiments. The relationships between the self-sentiment and the super-ego apparently does not hold for students. Neither was there a significant relationship between I-Q and Q3 as found in Experiment V. The test of the null hypothesis in this case was more reliable, so the conclusion is drawn that Q3 and the I-Q are not measures of any common variables. Finally, despite the predictions of Cattell, Jacobson and Hartmann, 16PF G scores and Ideo-Q-Sort scores were not related in this student sample.

The meaning of the measure yielded by the Ideo-Q-Sort was clarified by this experiment. In the interests of validation of this promising but as yet undefined measure of a self variable, the reader is referred to the criteria of usefulness of psychological tests outlined at the beginning of this chapter. It has proved exceedingly difficult to show that the scores of the Ideo-Q-Sort agree with those of another test to indicate some common phenomenon being measured and contributing to a definition of that phenomenon. The second alternative remains; that is, the scores must successfully discriminate
between populations of subjects.

Conclusions: Contradictory demonstrations and unconfirmed hypotheses

Analyses of data from experiments designed to demonstrate, the success with which predictions may be made about performances on tests of self variables suggest that little is known about these tests. It was expected that from the thorough survey of the literature hypotheses would be formed which were easily verified. This proved not to be the case. A measure designed to parallel the ad hoc rating scales currently in use failed to fulfill the formal requirements of a psychological test. No sex differences were found in the content of responses to questions demanding a description of the self-concept. The variable of social desirability was not related to ideal self ratings. Tests claiming to be measures of one variable intercorrelated minimally. Definition of the variable measured by two phenomenologically oriented tests was not successful. This last result is particularly disappointing because these tests do fulfill the criterion of avoiding performance in a field entirely structured by the experimenter, enabling the individual to consider his self-concept in terms meaningful to himself.

It is suggested that if it is not known what a test measures, the test may still be useful if it discriminates
successfully. The most needed discriminations lie in the area of abnormal psychology in which the Ideo-Q-Sort is to be applied. This application entails an examination of the status of the self construct and the measurement of self variables in abnormal psychology. The inadequacies of the conclusions drawn about self variables reported in Chapter 3 due to lack of knowledge of the meaning of the measures involved are now apparent. The conclusions of the clinical psychologist remain to be examined.
CHAPTER 5

THE SELF IN ABNORMAL PSYCHOLOGY
The material concerning self variables which is examined in this chapter is chiefly of interest to those psychologists working as counsellors, therapists or diagnosticians, and who are concerned with states of the individual which are abnormal either physiologically or psychologically. Since abnormality of the self and self-perceptions is the content to be treated in this chapter, it may be regarded as in some ways an addendum to the preceding discussion of the self in general psychology. Material is relegated to it primarily on the basis of the stated pathological conditions of the subjects about whom conclusions are drawn. It is unfortunately true that such samples of subjects often introduce inadequately controlled intervening variables into the experimental design. Psychiatric diagnoses may be a misleading basis for classification, and sample sizes are often too small because of the relative size of the parent population available. Situational variables such as institutionalization, diet and incidental treatments make isolation of specific determinants difficult (Kline, 1958). Within all these limitations evidence of self pathology is examined to reflect the status of self variables in abnormal psychology.

In his earlier attempts to formulate a self theory of personality organization Carl Rogers (1947) defined the well-adjusted individual as one who is able to accept all his
perceptions, including those about his self, into his personality organization. Such an approach to the construct of adjustment suggests that it is not an all-or-nothing process but one which occurs in varying degrees according to the individual, his environment and his perception of his environment. Perceptions of the self, then, should differ not only between the grossly abnormal groups of subjects discussed above and the so-called normal groups, but between the so-called normal individuals whose levels of adjustment are subject to considerable fluctuation. With this approach as a guide, the author defines the abnormal psychology within which self variables are examined as including physically abnormal states as well as mentally abnormal states, common states of malfunction such as old age and the recognized psychiatric disorders which until recently have been described as functional rather than organic in origin. Against a background of such knowledge of self variables in abnormal psychology as has been established the validity of the Ideo-Q-Sort as a diagnostic tool is tested. The extensive literature demonstrating changes in self variables during counselling and psychotherapy is reviewed and the therapist himself comes under scrutiny. The Ideo-Q-Sort is finally examined as a measure of change.
Abnormal Physical States

Abnormal physical states may be experimentally induced or be the result of an uncontrollable factor such as disease. Of the latter type the earliest psychological manifestation may be mental retardation due to genetically or pre-natally determined structural abnormalities within the individual. The content of the self-concept of the mentally retarded child is certainly of interest to his teachers and parents who wish to gauge the limits of his abilities just as he, himself, does (Nelson, 1963); the problem being how to build up a positive self-concept in such a child who is receiving so little favourable feedback. The child with cerebral palsy, the result of physical trauma early in life involving very poor motor co-ordination and often mental retardation, has been shown to differ from other children in his self-concept (Bice, 1954). His body-image alters frequently. He shows that he feels different from his peers and in some way guilty, and he appreciates the attention-getting nature of his disabilities.

Self-attitudes in adults, also, tend to alter with changes in the physical state of the individual due to disease or disorder. Litman (1962) using an acceptable sample of subjects (100) but inadequately validated tests, claimed to show that the self-concept is related to the rehabilitation
response of the orthopaedically disabled. Diller and Riklan (1957) reported a study dealing with a group of patients suffering from Parkinson's Disease, a deterioration of the nervous system manifest in movement inhibition and tremor. On the basis of this movement inhibition Diller and Riklan divided their subjects into two groups of high and low M determinant users on the Rorschach Test. They found that the high M group verbalized more negative self-statements in structured interview situations than did the low M group. Such results suggest that phenomenal changes in physical status are related to self-attitudes or that change in body-image results in change in self-concept.

To examine more closely the relationship between the physical and the mental, the old mind-body problem, in relation to the construct of self, an investigation of the effects of physical changes not perceived by the individual must be made. From the theories of Dillon (1946) who believed the self to be dominated by the endocrine gland system and Kappers (1953) who centred the sense of self in the thalamus, it would follow that alterations in the structure of the nervous system or the system of ductless glands would result in changes in self-attitudes. This conclusion is supported only in part by relevant empirical studies. The most ambitious of these is that reported by Robinson and Freeman (1954), who
examined 51 patients successfully treated by pre-frontal lobotomy according to the criteria of present occupational adjustment and tests of so-called social intelligence such as the Porteus Mazes Test. Seventeen control subjects were selected for similar diagnoses, age and length of illness, but they had improved without the aid of psychosurgery. The measures on which the two groups were compared showed a respectable degree of inter-judge reliability, and differences were significant in the predicted direction. In other words, patients after surgery showed a small self-regarding span, a measure of the time the individual can spend contemplating himself in an interview based on the concept of the continuity of the self built up by William James. They also showed less self-concern than the non-surgical patients, and the amount of difference after surgery was reported to be a function of the amount of frontal lobe disconnected.

Robinson and Freeman, then, give some support to the theory of a physical basis for the self and self-attitudes, but other experiments involving artificial induction of abnormal physical states do not yield such encouraging results. Cranston, Zubin and Landis (1952) found that the administration of small amounts of stimulants and depressants resulted in no change in self-ratings. Neither these ratings of subjective states nor motor co-ordination tests were affected
by 

209

by a grain of phenobarbital or 25 milligrams of thonzylamine. Although 5 milligrams of dexedrine were found to affect the test performances of the subjects there were still no changes in self-ratings. More recently Markwell (1965) attempted to isolate changes in the self-concept during hypnosis. Using the Adjective Check List he demonstrated that self-attitudes do change in the trance state, individuals becoming either more self-accepting or more self-critical. This conclusion should be interpreted with due respect for the power of suggestion which the experimenter wields while the subject is in a trance and after.

Natural changes in physiological states occur during the ageing process in which a certain amount of physical deterioration is expected. Amongst other psychological aspects of ageing, Greenleigh (1955) has discussed self-concept change. One facet of the self-concept of an individual of any age group is the age level at which he places himself. When Tuckman and Lorge (1954) asked 1032 subjects to so classify themselves, all subjects under 30 years responded that they were young while only one under 60 years replied with 'old'. Of a number of residents of a home for elderly people, 70 to 96 years, those with greater sociometric scores were more decisive in their age classifications than those with lower scores, although there was no such differentiation.
on the basis of actual classification as young or old (Davis, 1962).

A report is reviewed above of a study of identity through mirror recognition in the young child (Dixon, 1957). At the age of about seven months the infant appears to link the image with the self. Pollak, Karp, Kahn, and Goldfarb (1962) examined the response patterns to mirror reflections in some six hundred subjects aged over 65 years. Self-derogatory responses were found to be more prevalent in women than in men and in institutionalized rather than in non-resident subjects. Self-derogation was not related to age or mental status. Bloom (1961) supported this conclusion by the use of an adjective check list in which the number of positive adjectives checked is taken as a measure of the self-acceptance of the individual while the number of negative items checked indicates the degree of self-rejection. He demonstrated, too, a curvilinear relationship between chronological age and self-rating of perceived age.

Mason (1954) attempted to examine the relationships of age, living conditions, economic status and self-judgements. Of the three groups of subjects studied, aged, indigent, institutionalized subjects viewed their self worth more negatively than aged, independent, middle-class subjects who in turn had more negative attitudes than a group of young, low
status adults. Mason administered the 'Who Are You?' test to these groups, and of the eleven scoring categories set up for responses six differentiated significantly between the three groups. These response categories were name, family, occupation, positive affect, negative affect and longevity.

Self variables and physical state variables, then, appear to be related to some extent, the physical basis of the self remaining hypothetical at present.

**Psychiatric Diagnoses**

Standard psychiatric nomenclature (A.P.A., 1952), based as it is on outmoded theories of etiology and biased assessments of symptoms, is now of doubtful validity or usefulness to psychiatrist and clinical psychologists who tend to use terms like 'schizophrenic' and 'psychopath' as a convenient form of shorthand. The use of such terms no longer indicates that a certain form of treatment might be more successful than another, nor even that the patient is exhibiting a certain standard set of symptoms. While reliability is reasonably satisfactory for global categories such as psychoses, neuroses and personality disorders, interrater agreement is very poor in differentiating subtypes within these categories (Kreitman, 1961). McNair and Lorr (1965) pointed out that these diagnostic categories have not even been set up according to the same criteria, since 'some diagnoses are labels
for symptoms, some describe predominant behaviour patterns, and others are names of hypothetical defence mechanisms'. (1965, p.33). Their answer to this inadequacy was to set up a statistical typing procedure based on the interpersonal factor - score profiles of several samples of patients. An earlier solution, suggested by Creelman in 1949, was based on the assumption that some distortion of self-concept is fundamental to any mental disorder. This suggestion bore little fruit until recently, when Foulds, addressing a symposium on Personality Variables in Psychiatric Classification (1964), suggested as one criterion of maladjustment the loss of awareness of self as agent. Semeonoff (1962) concluded that self-descriptions do give identifiable response patterns which indicate favourable and unfavourable personality adjustments although they do not discriminate well between accepted and rejected therapy clients. An examination of the material available about self variables in the maladjusted as defined in the current typology is indicated.

Self Variables and Undifferentiated Psychiatric Disorders

Several relevant experimental designs have involved groups of subjects who are described vaguely as being 'emotionally disturbed' or 'psychiatric patients'. Such studies are reviewed first in order to give a general picture of self variables associated with mental abnormalities. Some of this
work is carried out with children. A one year follow-up of the self-concepts of a group of institutionalized child psychiatric patients showed that changes in the function of the self tended to be associated with changes in other functions, with changes in the content of the self-processes and with changes in overt behaviour (Rosengren, 1961).

Reference is made above to the measurement of feelings of identity through mirror recognition in children and in elderly subjects. Faure (1956) followed the same procedure with a group of adult mental patients. Responses fell into three categories showing that the subjects believed themselves to be spellbound in the image (actually a photograph), they believed that the image was alive and a separate identity or they saw the image as only one part of their body. There was a tendency to disavow the image and exalt it as a manifestation of the self-image. These subjects would appear to be somewhat grossly disturbed, especially in contrast to those studied by Zuckerman and Monashkin (1957) who were also described as adult mental patients. These authors attempted to relate self-acceptance, measured by the discrepancy between self and ideal ratings on adjective scales, to scores on assorted M.M.P.I. scales. Although these subjects might have been as disturbed as the mirror recognition subjects according to the respective descriptions, it is unlikely since most of
the relationships found replicated those demonstrated in
college students. Interpretation of such conclusions,
however, is made unnecessarily difficult when the population
tested is unspecified.

Such difficulties occur in the interpretation of the
results of the administration of the 'Who Are You?' technique
by Tolor (1957). Scores differentiated between three groups
of subjects: neuropsychiatric patients, general medical
patients and orthopaedic control subjects. Tolor reported
significant differences between the two first named groups
which were not found between the second and third groups and
drew general conclusions about the self-perceptions of neuro-
psychiatric patients. The differences were demonstrated for
the scoring categories of name, group-membership and uniqueness.
These conclusions are highly suspect, however, since
the first group is actually made up of patients who may be
classified as suffering from organic disorders, psychoses,
character disorders and neuroses, the second of medical
patients with many with psychosomatic disorders and neurotic
physical symptoms, and the third group of orthopaedic patients,
who were accident victims. Accident proneness is related to
neuroticism (Cattell, 1957), so that the characteristics in
which the three groups differ are somewhat difficult to
isolate.
Farnham-Diggory (1964) examined self-evaluations in suicidal and non-suicidal psychotic males. Self-evaluation was found to be low in suicidals; but, interestingly, the real discrimination was between overt and covert suicidals, those individuals who made open suicide attempts giving higher self-evaluations than those who made covert attempts. These results suggest a differentiation between the self-concepts of extraverted, hysterical personalities and those of the more withdrawn schizophrenic and depressive types.

The extent of the patient's interaction with his environment does determine to some extent the nature of his self-concept. Achenbach and Zigler (1963) found that subjects with high social competence, as defined by education, intelligence, occupation, employment history and marital status show a high self-ideal discrepancy. Semantic differential techniques, when applied to patients and staff, showed that self-concepts were related to the perceived demand of different roles, in that subjects with greater ego organisation gave self-descriptions reflecting the capacity to meet the demands they perceived to be made on them in their various social roles. (Talbot, Miller & White, 1961). Manasse (1965) found that social setting affected the Q-sort self-regard of schizophrenics in that hospitalized patients had higher self-regard than day patients. He suggested that this effect is due to the
higher standards enforced by the world outside the hospital.

The Self in Schizophrenia

The self-concepts of schizophrenics have received some considerable attention from psychologists. The definition of schizophrenia given by English and English (1958) suggests that some abnormalities of self-conceptualization are to be expected: 'a group of psychotic reactions characterised by fundamental disturbances in reality relationships, by a conceptual world determined excessively by feeling, and by marked affective, intellectual, and overt behavioural disturbances' (1958, p.478). Arieti, in his definitive Handbook (1959), subscribed to this suggestion when he discussed three aspects of self within the context of diagnosis of schizophrenia: the body-image, self-identity and self-esteem. Earlier, McKinney (1951) had found schizophrenics interesting because they provide easy access to data from which to study subject-object relationships. Employing the self construct of G.H. Mead, he examined the self-process in terms of the language, thought and emotional incongruity of the patient. Along similar lines, Racamier (1963) postulated as characteristic of schizophrenia a lack of personation or inadequate maintenance of identity by which continuity between different levels of ego-functioning is established.
The relationship of unconscious and conscious self-evaluations have proved to be of interest in normal subjects (Huntley, 1940a; 1940b). Epstein (1955) followed the experimental procedure of Huntley to compare two groups of subjects described as schizophrenic and normal respectively. The subjects were matched on the variables of age, sex, veteran status, institutionalization and education, and they were asked to give direct ratings of their own voices, handwriting, names and selves and 'unconscious' ratings of disguised writing and voices. Normals tended to dislike their writings, but rated significantly more favourably their voices, names and selves. To a significant degree, schizophrenics liked their handwritings, names and voices but not themselves. Their self-ratings tended to fall to one extreme or the other, so that their rating variance was significantly larger than that of the controls although there was no difference in central tendency. Although some differences are apparent from the experimental analysis, they do not justify any conclusion that schizophrenia is characterized by low self-regard, be it conscious or unconscious.

Acceptance of self, as discrepancy between self and ideal scores, likewise does not differentiate significantly between schizophrenics and normals. Zuckerman, Baer and Monashkin (1956) compared a number of mental patients, half
of which were diagnosed as schizophrenics, with a group of normal control subjects on measures of self-acceptance, acceptance of parents and acceptance of other people. For the total sample of patients acceptance of father and acceptance of others were significantly related to the adjustment ratings made by the attendant psychiatrists. Differences in acceptance scores were as expected with schizophrenics showing the least acceptance except for acceptance of self. However, there were no significant differences between schizophrenics and non-schizophrenics on any measure. Kamano (1961) found that schizophrenics showing high self-acceptance recalled fewer unfavourable items from personal evaluations and a larger discrepancy between level of performance and level of aspiration.

Of the sub-types of schizophrenic diagnosis, the paranoid type is the most common and is distinguished by the highly elaborate and systematized delusions through which the patient expresses his resentment, hostility and aggression. A reflection of these personality traits of the paranoid schizophrenic was found with the help of the Berger Self-Acceptance Scale on which these patients demonstrate unrealistic self-enhancement as a defence against the loss of genuine positive affect (Havener & Izard, 1962). However, Ibelle (1961) provided support for the conclusion based upon data from
general schizophrenics by his finding that there is no significant difference between mean correlation coefficients of self and ideal Q sorts for paranoid schizophrenics and normals. Conversely, A. H. Rogers (1958) reported an experiment in which a significant difference between self-acceptance scores of paranoid schizophrenics and a control group made up of nursing aides was demonstrated. Self-acceptance, in this case, was measured by an apparatus similar to Shlien's Abstract Apparatus and yielding a similar abstract rather than concrete estimate. It consisted of two four inch red and blue squares of glass, the red sliding behind the blue on a metric scale. Rogers interpreted his successful differentiation not in terms of an actual difference in self-acceptance but as support of a hypothesis suggesting that schizophrenics would show more defensiveness than normals. This interpretation is based on the assumptions that such a measure gives a more direct estimate of self-acceptance which is thus more open to defensive distortion and that there is no real difference in extent of self-acceptance of paranoid schizophrenic patients and individuals not showing any evidence of psychiatric disorder. It would appear that, although schizophrenia may be characterized in some way by the self-concept, it is not consistently related to low self-acceptance.
There is yet more contradictory evidence bearing on this problem to be found in the experimental designs which involve comparison of a number of psychiatric disorders and maladjustments. It would appear from the studies reported in Chapter 3 that self-acceptance or self-ideal discrepancy is positively related to adjustment in the psychiatrically normal individual. Expectations from this finding suggest that this relationship should hold through the psychiatric disorders as well, forming the prediction that disorders which appear to be most maladjustive such as psychoses would involve lower self-acceptance or more self-rejection than neuroses which are relatively adjustive disorders. Yet schizophrenic self-acceptance does not differ significantly from that of the individual not requiring treatment, so a comparison must be made of the self-acceptance scores of a variety of patients receiving treatment.

The Self in the Neuroses

Chase (1957) found a tendency for self-ideal and self-average other Q-sort correlations to be smallest among psychotics, with neurotic scores next in size and the largest being among character disorders. Non-psychiatric patients showed significantly higher correlations than any other group. Differences were really in the self-sort, since the other two sorts were similar for all groups. On the other hand, the
work of Hillson and Worchel (1957) supported the more common conclusion. They found that neurotic subjects rated themselves significantly more unfavourably on the Phillips Self-Activity Inventory than did normal or schizophrenic subjects, while the subjects of the latter two groups made closely similar self scores. Schizoprenics and normals, then, may be similar in their self-concepts, while neurotics possess a much lower self-evaluation. Such an hypothesis is credible in terms of the known characteristics of neurotic disorders, especially when this category is broken down into the subtypes of anxiety states, hysteria, obsessive-compulsive reactions and neuroses with somatic symptoms. Monro (1962) asked a number of patients whose illnesses were of these types to rate themselves on some thirty-two traits. Factor analysis of correlations between scores on these self-attitude traits resulted in two major factors being isolated: uncritical acceptance of self-undervaluations and rejection of undervaluation. Underevaluation is the dominant theme in agreement with the finding of Hillson and Worchell (1957), although it should be remembered that neurotics tend to devaluate phenomena other than the self. This tendency was demonstrated by Wallen (1945) when he asked subjects to name those foods from a list of twenty common ones which they disliked to the point of refusal to eat them. While only
11% of normal subjects named two or more foods, 62% of neurotics responded in this way, suggesting that neurotics dislike things generally.

One adjustment which may be of sufficient magnitude to require psychiatric assistance is that of the individual who stutters. Since organic causation is the exception rather than the rule in such problems, the stuttering individual is often regarded as a neurotic making yet another self-defeating adjustment in order to cope with the interpersonal relationships of life. Rieber (1963) has reviewed the literature relating stuttering and the self-concept which in the main supports the conclusion arrived at by Fiedler and Wepman (1951). These authors asked their stutterers to complete a forced distribution of Q-sort of 76 descriptive items reflecting Henry Murray's theory of personality structure. Since stuttering is held to be a socially handicapping disorder, it was thought that it would cause the stutterer to have a self-concept which differed from that of the non-stutterer. Intercorrelations among the data, however, revealed no characteristic differences.

Other writers, particularly those concerned with the treatment of stuttering, have concluded that self-attitudes are significant. Shearer (1961) postulated that dissociation often occurs while the individual is stuttering because if
it did not a negative self-image would be received from observers. He defined the therapy of these patients as at the moment consisting of attempts to help them reconcile the horrible stuttering self with the good self by watching themselves speak and recognizing their speech in tape-recordings. Administration of the Who Are You? questionnaire led to the use of such theory and techniques in therapy. Zelen, Sheehan and Bugental (1954) found that of their eleven scoring categories, only two received significantly more responses from normal subjects than from stutterers. Those categories were age and sex. The stutterers, who were undergoing group therapy, made more positively toned statements about themselves; and of this experimental group those for whom therapy was successful made fewer negative statements and mentioned social status more often than the unsuccessful patients. From these findings the authors concluded that 'a fundamental goal in the treatment of stuttering is the alteration of the stutterer's attitudes and perception of himself' (1954, p.170).

Another disorder with significant interpersonal connotations which is often treated as a neurosis is alcoholism. It is difficult to settle on criteria which enable the description of one person as an alcoholic while another is referred to as merely a heavy drinker. One such description
of an alcoholic addict is that of an individual who is making an inadequate adjustment to life, be it psychotic, neurotic or antisocial in form, which is immediately due to drinking too much too often. Obviously other factors contribute more significantly to the basic problem, but the drinking habits are the most superficial of the difficulties and therefore the first to be tackled. Since this behaviour too results in a social problem, differentiation by the self-concept is again predicted. Connor (1962) has reported a thorough investigation of the self-concept of alcoholics, defining these subjects within the frame of reference outlined above. He administered to 347 male alcoholics a list of the Gough adjectives. The resulting data enabled him to identify adjectives which were checked by the alcoholics alone, by the control group alone and those which had some overlap. Non-alcoholics checked some 27 adjectives which were not checked by alcoholics indicating some differences in self-concepts. An index of self-acceptance, consisting of the ratio of the number of favourable adjectives checked to the total number of adjectives checked, was lower for alcoholics than non-alcoholics and almost as low as that for a neurotic group. Connor concluded that self-descriptions of alcoholics indicate a generalised lack of organization and integration of the self.
The Self in Delinquency

Another readily distinguished group of individuals are those who offend against the agreed codes of society, that is the law-breakers. Certainly to claim that everyone who offends in this way is abnormal would be inaccurate, but many of those who are convicted do exhibit certain characteristic modes of behaviour which may be related to distinctive self-concepts. The majority of adult offenders are classified as inadequate personalities or psychopaths, while the juvenile offender, the delinquent, is characterized by 'immaturity, egocentricity and inability to establish emotional relationships with others' (Hinsie & Campbell, 1962, p.183).

Since delinquency is a pressing social problem in most Western cultures great efforts have been made to isolate all the aspects of the phenomenon and the self-image of the individual has been no exception. Even the body-image, the physical 'me', has been described as a distinguishing and contributive characteristic. Kaufman and Heims (1958) have postulated that delinquent mechanisms are related to an underlying depression which is manifested in a distorted body-image. As to the attitudes to self of the delinquent, the early work of Carl Rogers and his co-workers is suggestive. In their study of delinquents they took ratings of family atmosphere, education, neighbourhood influences, social
experiences, health and heredity as well as a rating of the degree of self-understanding, and the last-named was found to be the best predictor of delinquency two to three years later (Rogers, Kell & McNeil, 1948).

Trent (1957; 1959) examined in some detail the relationship between self-concepts and social empathy in delinquents, the latter being an ability by diagnostic criteria they lack. He asked a group of boys undergoing reformative training to predict the sociometric scores of themselves and others in the group and found that accuracy improved with length of cottage stay (1957). This experiment also revealed that perception of own status was related to actual sociometric status, while perception of others was not. The delinquent group was superior to a high school group in perceiving others' status, but inferior in perceiving their own. Later, Trent (1959) attempted to relate the variables of sociometric status, length of institutionalization, accuracy of perception of own and others' status and anxiety as measured by the Children's Manifest Anxiety Scale in the delinquent group. The only significant relationship found was again between perception of own status and actual sociometric status.

Strodtbeck, Short and Kolegar (1962) found that sociometric pairs tended to have similar self-descriptions when they gave a delinquent and a control group a paired comparison
adjective list. The two patterns of self-description which distinguished the two groups as expected were cool, aggressive, mean and tough versus the clean, helpful, loyal scout type.

So successful have some of these investigations been in establishing self-concept structure as significant in delinquency, that there have been several reports published which refer to the self-concept as an insulator against delinquency (Reckless, Dinitz & Murray, 1955; Reckless, Dinitz & Kay, 1957; Lively, Dinitz & Reckless, 1962). The authors have concluded that the non-delinquent boy is characterized by the self-concept of 'a good boy', who is law-abiding, has strict values and conforming to the expectations of parents and teachers. The most successful insulation against future delinquency appeared to be a favourable self-image or self-acceptance.

Although the term is not recognized as describing a standard psychiatric category because the underlying behaviour patterns are not clearly understood, psychopathic is the description applied to a significant proportion of persistent adult offenders. Amongst his other attributed characteristics the psychopath is unreliable, untruthful, insincere, egocentric, shameless, lacking in insight, emotionally unresponsive and exhibiting poorly motivated antisocial behaviour. In sum, he shows a lack of integration of the affective
components of personality. Worchel and Hillson (1958) conducted an experiment very similar to that with neurotics with these subjects but found greater rather than less self-acceptance as measured by the Phillips Self-Activity Inventory. On the other hand, Foulds, Caine and Creasy (1960), using a self-criticism score derived from the M.M.P.I., found that psychopaths criticized themselves more than normal control group subjects but less than neurotics. Foulds (1960) summarized these findings and concluded that psychopathic criminals do show that high degree of self-acceptance which might be expected from their characteristic behaviour.

These studies have concerned male offenders but women, who for some reason are described as delinquent, have come under scrutiny. Cassell and Clayton (1961), for example, administered a test of social insight to a group of women in a correctional institution requiring responses for actual, ideal and would-be self. Only the actual and ideal scores showed significant correlations, and as about half the scores paralleled typical norms interpretation of results is inconclusive. More fruitful is the work of Epstein (1962) who examined the self-images of a number of female adolescents and contrasted them with normal adolescent girls. Significant differences were found, delinquents having a more
negativistic view of themselves and their future goals, and showing less group identification.

Evidence concerning the relationship between self-concept structure and psychopathology or maladjustment is not, then, easily interpreted. Some relationship is suggested but self-images characterizing specific disorders have not been isolated. In the light of this conclusion, further validation of the Ido-Q-Sort is best attempted as a demonstration of differentiation by the test scores of the psychiatric patient group from the non-patient group, rather than discrimination of specific but inadequately described disorders.

Experiment VII

Aim

The Ido-Q-Sort, the instructions for which are found in Figure 15 of the Appendix, was devised by Shlien (1961b) as a measure of self-acceptance. It has proved difficult, however, to provide validation for this measure in that it does not correlate significantly with other measures of attitudes to self such as the D score of the I.A.V., the C.P.I. Sa scale, and a variety of self-sentiment measures devised by Cattell. (See experiments V and VI). A significant coefficient is demonstrated between I-Q and Column II scores of the I.A.V., which in turn correlates highly with
interviewers' ratings of self-acceptance and with seven out of ten other so-called measures of self-acceptance (Table 4). Yet since the demonstrated correlation is low there is still much variance to be accounted for and information as to the meaning of II is inadequate for definition of the variable or variables measured by I-Q. Although this definition is not secured, the test may still be useful if it discriminates successfully between populations of subjects. Discrimination is much needed in the area of psychiatric disorders, to aid diagnosis, prognosis and treatment; but in the light of the inadequacies of the diagnostic categories outlined above it appears more reasonable to explore I-Q scores in generally maladjusted and so-called normal groups. The aim of this experiment is to demonstrate successful discrimination by the Ideo-Q-Sort between hospitalized psychiatric patients and a control group of supposedly normal subjects, regardless of the identity of the phenomenon being measured.

**Hypotheses**

The null hypothesis tested states that there is no significant difference in either central tendency or dispersion of scores on the Ideo-Q-Sort for an experimental group of psychiatric patients and a group of normal controls.

**Method**

The selection of subjects and procedure of the experiment was guided by known relationships with measures of self
variables which suggested that some variables should be carefully controlled while others might be ignored. Self-acceptance is known to be related to adjustment, from the work of Perry (1961) for example, and to its concomitants, acceptance of others and defensiveness. These were some of the variables which probably differentiated between the experimental and control groups and so were the variables which were systematically manipulated. Some sex differences in self-measurement are apparent (Martire & Hornberger, 1957; Rongved, 1961; Experiment II), so that subjects of both groups were matched for sex in order to control for spurious differences in scores. Age differences, too, have been observed, at least on the W.A.Y. (Mason, 1954), although there is no evidence to suggest that self-acceptance is a function of age. Control of the age factor was considered a useful precaution. The interaction of social class and self-acceptance is not significant (Hill, 1957), so that this variable was ignored when selecting the samples.

The two samples selected consisted of 30 subjects respectively. Precise matching of pairs of subjects was impracticable, so that matching was in terms of the distribution of the relevant variables through the groups. Both groups contained fifteen male and fifteen female subjects. The variable of age was controlled generally, in that with
similar distributions the range for the experimental pathological group was 19 to 55 years while that for the control group was 20 to 57 years. No attempt was made to control the variable of marital status since this might well be symptomatic of the maladjusted group. Of this experimental group ten subjects were single, ten married and ten separated or divorced, compared with seven single subjects and twenty-three married subjects in the control sample which was randomly selected from the general population.

Some comment should be made on the pathological characteristics of the experimental group. The symptoms of these patients led attendant psychiatrists to describe them as sociopaths, depressives, hypochondriacs, schizophrenics, inadequate personalities and so on. On admittance seventeen of the thirty subjects presented as alcoholics, although in several cases addiction was not really a problem. The primary diagnoses for the group, agreed upon by two psychiatrists, were seven alcoholics, fourteen patients with character or personality disorders and nine individuals in a psychotic state. This categorization may be a misleading way of describing individuals but does serve to give some suggestion of the dominant behaviour patterns. Each patient had been in residence at Kenmore Mental Hospital for between one and five months, where he or she was treated with tranquilizers,
occasional mild sedation, conditioning therapy for those with alcohol addiction problems and participation in a very large therapeutic community.

The procedure followed in the experiment was identical for both groups of subjects. Instructions and materials for the Ideo-Q-Sort were presented to three or four subjects at a time to allow for individual explanations and encouragement, the instructions being presented orally. The subjects were not permitted to discuss their responses as changes in self-concepts are known to reflect to some extent the opinions of others (Harvey, Kelley & Shapiro, 1956). Admittedly the effects of such interchange before the experiment could not be controlled, and it is possible that the hospitalised patients would have been stimulated to such interchange during therapy. The author, however, observed no relevant discussion among the patients in small group therapy sessions, and the promptings which the patients needed to complete their twenty-five statements indicated that they had not verbalized their self-concepts previously. One female member of the experimental group failed to complete the required number of items, while all the control group finished the test. Kendall's tau was run between the self and ideal sorts to yield the final correlation measure of the I-Q.
Analysis of Data

In order to test the null hypothesis preliminary description of the distribution of the two sets of scores must be given. For the I-Q scores of the experimental group the mean was +.091 with a standard deviation of +.39 in contrast to the mean of +.250 with a standard deviation of +.28 for the control group. Such results suggested an immediate test of the aspect of dispersion in the null hypothesis. An F test of the differences in standard deviations or a test of the significance of the ratio of the two variances (Guilford, 1956) was applied, and resulted in an F value of 1.99 which is significant at the .05 level (Guilford, 1956, Table F). In other words the null hypothesis of no difference in dispersion of scores was rejected.

This rejection raised problems for the analysis of the other aspect of the null hypothesis, that is the lack of difference in central tendency. Since there was no reason to suspect that the two population distributions of scores were not normal, and since the samples were small, a t test of the difference between correlated means would be appropriately employed here were it not for the demonstrated difference in variance showing that the two samples do not arise from the same population. Only some test which does not rely on an estimate of the population parameter, the
standard deviation was applicable. The Median test (Siegel, 1956) is an appropriate procedure for testing whether two independent groups differ in central tendencies and is calculated by a $\chi^2$ formula which is corrected for continuity. In view of the evidence for the relationship between adjustment and self-acceptance examined above it was predicted that the median of the control group would be higher than that for the experimental group. The test of the null hypothesis of central tendency was thus one-tailed. The $\chi^2$ value calculated from the data was 1.62, the probability level of which is only .10 (Siegel, 1956, Table c). The hypothesis of no significant difference in central tendency was not rejected.

Discussion

This experiment does not give rise to unqualified support for the validity of the Ideo-Q-Sort as a discriminator of a patient group. In fact the scores of patients and non-patients were no different except that there was a greater range of scores among the psychiatric patients. This conclusion suggests that the design which by-passed diagnostic sub-classifications as unreliable in so doing nullified the effects of differences in self-acceptance hypothesized in other studies. The size of the abnormal sample does not justify the comparison of such different groups within the sample. Neither is the author sufficiently satisfied with
the validity or reliability of the diagnostic sub-classification, widely used as they are. What does show promise of usefulness is a classification system based on the methods of treatment found to be appropriate. In methods of psychotherapy an estimate of the patients attitude to himself is often helpful. Evidence concerning the structure of the self during psychotherapy is therefore examined, prior to a description of an experiment designed to evaluate the performance of the Ideo-Q-Sort as an estimate of changes in self-acceptance during a quasi-therapeutic experience.

Counselling and Psychotherapy: Self changes as criteria of success

The attitudes which the patient experiences towards himself have come to be regarded as of significance by the majority of psychologists and psychiatrists who attempt to help him. In a recent comparative study of systems of psychotherapy, Ford and Urban (1963) examined the theories and practices of ten schools of psychotherapy, of which seven, those of the ego-analysts, Adler, Rank, Rogers, the existentialists, Horney and Sullivan, gave prominent place to 'a particular set of thoughts which we will call self-evaluative thoughts' (1963, p.60). For such therapists the development of normal behaviour and personality organisation involves the premise that 'the responses a person learns to make to
his own behaviour become inter-related in patterns, and that
these, in turn, become determinants of still further response
patterns which come to be acquired' (1963, p.617). The
learning situation provided by the unique relationship which
a patient may have with therapists of any of these schools
is an opportunity for him to form new response patterns, to
explore new self-attitudes. This description of psychotherapy
is appropriate too, to some extent, to the processes of
guidance and counselling. The term counselling is used here
to refer to a relationship through which one of the individ­
uals involved is trying to solve his problems of adjustment,
these problems usually not involving any degree of mental
illness.

In such counselling, often conducted within the context
of school or university, attitudes to self have been regarded
as being of importance in both method and evaluation for
some considerable time. Hobbs (1949), for example, defined
guidance as 'the function of providing an individual with
optimum opportunity to examine his self and his potentialities
in relation to his world'(1949, p.72b). Taking a somewhat
different attitude to his own role in counselling, Torrance
(1954) pointed out the value of knowledge of the self­
evaluations of students requiring counselling which would
contribute to the validity of the advice given. O'Dea and
Zeran (1953), more interested in evaluating the efficiency of counselling and guidance, declared after an extensive review of the relevant literature that changes in the self-concept are amongst the most valuable of the evaluating measures.

Similar points of view have been taken up with enthusiasm. The validating evidence, however, is rather more sparse. Comparisons of scores on an interest test with self-estimates of interests before and after counselling demonstrated that students show less discrepancy after counselling (Singer & Stefene, 1954). More impressive is the study of Ewing (1954) who asked 39 college students undergoing counselling to give ratings for self, ideal, father, mother and counsellor on 100 trait names. Changes in ratings were found to be correlated with counsellors' estimates of improvement. Those students who were rated as the most improved changed the rating of the self in the direction of the ideal and of the rating of the counsellor.

It is within the psychotherapeutic framework of Carl Rogers that most use of the self-concept change as a measure of efficiency has been made. Rogers, himself, claims that during therapy measurable changes in attitudes towards the self and in self-perception occur, and that these changes are probably related to changes in psychological and physiological
tension, in personality structure and in social attitudes (Rogers, 1950). The first indication that therapy is a process of changing the concept of self was produced by Raimy (1948) who studied the therapeutic interviews of 14 successful and non-successful clients, classifying their responses as positive, negative, ambivalent, external references and questions. After demonstrating the reliability and validity of his method, he showed that the interviews of the successful cases as compared with those of the unsuccessful contained a greater decrease in the number of negative self-references and a greater increase in the number of positive ones. The original rough technique of analysis which Raimy used was soon refined to provide objective ratings of attitudes to self expressed during interviews (Bugental, 1952).

Similar methods were used by two workers who were concerned not with self-attitudes alone but with social attitudes during therapy. Sheerer (1949) analysed client's statements reflecting their acceptance of self and acceptance of others, and found them to be related and both susceptible to alteration through therapy. Stock (1949) examined interview statements from 10 cases, and found that in the early stages of therapy those clients who had negative feelings about themselves also had negative feelings about others.
Acceptance of self was related to acceptance of others. During therapy, as the feelings about the self changed positively so did those about others.

The discrepancy model of self-acceptance was first devised by Butler and Haigh (1954) and was used to assess the effects of therapy. The most popular form is the Butler and Haigh Q-Sort, otherwise known as the Chicago Q-Sort reflecting its development at the Chicago Counselling Center. Butler and Haigh predicted that client-centred counselling would result in a decrease in self-ideal discrepancies and that self-ideal discrepancies would be more clearly reduced in clients who had been judged to have improved. Both these hypotheses were upheld in the experimental group undergoing treatment but not in the control group. Rosalind Dymond Cartwright has used the Chicago Q-Sort in a number of studies (1957; 1961; 1962), establishing patterns of self-attitudes in students and general clients and reaffirming the presence of greater consistency of self-attitudes in clients after therapy.

She edited the publication in which much of the evidence for the efficiency of client-centred therapy was collected, Psychotherapy and personality change (1954), in which yet another experiment confirming the theory supported above is reported by her. Of the many studies reported in the book only a certain number involved self-concept measures. One of
these is that by Rudikoff who was able to confirm the relationship between self-acceptance and acceptance of others and the changes in these feelings during therapy. In another, Vargas found that with counsellor judgements as a criterion of successful therapy there was a positive correlation between this variable and increasing self-awareness, but not between it and the Q-sort adjustment score.

A more recent experiment in which the Chicago Q-Sort was employed was that of Satz and Baraff (1962), the results of which are especially interesting because the subjects selected were psychotics as distinct from all those involved in earlier experiments which are best described as neurotic. In addition the authors were not so emotionally involved with the form of therapy used as were the authors cited above. They selected two groups of subjects, each with eight members, one of which was treated with occupational therapy only for 13 weeks while the other experienced a variety of client-centred group therapy involving some degree of basic encounter (Rogers, unpublished manuscript). Hypotheses predicted firstly that large self-ideal discrepancies would be indicative of inadequate adjustment, and secondly that such discrepancies would decrease with group therapy. The first hypothesis was supported while the second was not, so that it would seem that self changes which result from therapy
do not occur in cases of gross maladjustment and loss of contact with the environment.

That client-centred therapists, working within a self theory framework, should find and bring about changes in the self-concept is not remarkable. The internal consistency of the theory is demonstrated, but the construct validity of the therapeutic method employed is still not beyond question. A more interesting application of the self-concept change evaluator lies in its use within a different theoretical framework. Many of the psychoanalytically oriented therapies could profitably be tested in this way, and indeed some psychoanalysts do acknowledge the significance of the self-processes in psychotherapy. Sterba, for example, admitted that 'our analyses of resistances, the explanations and interpretations that we give to our patients, our attempts to alter their mental attitudes through our personal action upon them - all these must necessarily start with the ego' (1934, p.117). Hollon and Zolik (1962) have applied the self-ideal discrepancy measure of self-acceptance to a psychoanalytic therapy situation. Eight volunteer subjects were compared with seven neurotics whose symptoms were recorded on the Mooney Problem Check List. Analysis of data indicated that the neurotic group who received psychoanalytically-oriented therapy experienced a significant decrease in symptoms and a significant increase in self-esteem.
The studies reported above in general agree that increase in self-acceptance is related to success in psychotherapy, so that this variable is fast becoming the main criterion for successful therapy. This criterion is a doubtful one, however, because of the psychological measurement involved. The reliability of the tests used is inadequate. Neither is it known whether any of the tests yields a measure which may be defined as self-acceptance. This inadequacy would have little significance if it could be shown that these measures do differentiate between successful and unsuccessful therapies, but this is not clearly indicated by the studies reported above. Control factors are not clearly distinguished. For example, of the subjects examined by Cartwright (1961) the experimental group were poorly adjusted in the self to mother aspect in contrast to the control group who were poorly adjusted in the self to father relationship before therapy commenced and the experiment began. In other words, the groups were not matched. In another attempt to control intervening variables the same subjects were used with both experimental periods of therapy and control periods without therapy (Rudikoff, 1954). During the control period for these subjects their ideal ratings rose, suggesting unsuspected determining factors in operation. An experiment designed to assess changes in self-description in the absence
of therapy was devised by Taylor (1955), who obtained repeated Q-sort self-descriptions from his students. He found that replication of measures led to more positive and more consistent self-concepts, suggesting that self-concept changes are too readily achieved to be other than a dubious criterion for counselling success.

The Self Concept of the Therapist

So much may be said of the self-concept of the patient in the therapeutic situation, but such conclusions ignore the existence of the other individual making up this intrinsically two-way relationship. Several considerations suggest that the self-concept of the therapist may fluctuate according to his experiencing. Not the least of these is the evidence that college students who experienced companionship with hospitalized mental patients showed a concurrent positive change in self acceptance (Holzberg, Gerwitz & Ebner, 1964). It is not suggested that the situation is strictly analogous with the therapeutic situation, but such movement of a self variable in one group suggests the possibility of movement in another. Some authors have expected to observe such movement in the therapist accompanying the movement in the patient. Frisch and Cranston (1956) administered to a patient and his therapist fourteen Q-sorts tapping subjective and external viewpoints of self, ideal, the other and so on.
The Q-sorts were intercorrelated and the factors analyzed according to Thurstone's centroid method, the factors being rotated to orthogonal simple structure. The three resulting factors were named as social acceptance, struggle towards personal acceptance and hostility. The direction of change during therapy was from social acceptance to personal acceptance.

Of very real use would be an instrument which could predict the success of a therapist. It is possible that the self-concept is one characteristic of the individual which enables differentiation of therapists. In a test of this hypothesis Bandura (1956) compared the anxiety levels of psychotherapists, their self-insight and their psychotherapeutic competence as rated by supervisors. Intercorrelations of the three measures revealed a significant relationship between anxiety and competence only. Insight is not related to therapeutic competence, but there are other aspects of self-variables to be considered. Kates and Jordan (1955) directed their attention to an aspect which they described as the social stimulus self, the self which 'I' present to others. This derivative of the 'social me' of William James was compared with the actual self-image gained through introspection. Ten judges were able to match self-descriptions and social stimulus self descriptions of 14 clinical psychology
graduates at the .01 level of significance. An inverse relationship was found between the frequency with which subjects were correctly matched and their ranking as potential therapists. Apparently success as therapists is predicted for those subjects whose private self-images differ markedly from the social stimulus self which they present. This conclusion may lead to doubts about one of the conditions which Rogers and his co-workers list as being necessary for successful therapy, congruence. Of course the therapist's self attitudes in the actual therapeutic situation are yet to be isolated.

The Self in Basic Encounters

One major area of activity in which self-concept change may serve as a significant evaluator is that of the intensive interpersonal interactions within small groups which are becoming increasingly popular. Carl Rogers has referred to these groups as basic encounter groups, but they are also known as T-groups, workshops and so on. He has described them as having certain characteristics in common:

The group in almost every case is relatively unstructured, choosing its own goals and personal directions. The group experience, usually, though not always, includes some cognitive input, some content material which is presented to the group. In almost all instances the leader's responsibility is primarily the facilitation of the expression of both feelings and thoughts on the part of the group members. Both
in the leader and the group members there is some focus on the dynamics of the immediate personal interaction...

There are also certain practical hypotheses which tend to be held in common by all these groups. ... That in an intensive group experience the individual will gradually drop some of his defenses and facades; that he will relate more directly on a feeling basis (come into a basic encounter) with other members of the group; will come to understand himself and his relationship to others more accurately; that he will change in his personal attitudes and his behaviour; that he will subsequently relate more effectively to others in his everyday life situation. (Rogers, unpublished manuscript).

If such are the expectations and experiences within these groups it is reasonable to predict that some changes in the self-concept will occur during, and to some extent after the conclusion of the process.

In the experiment of Bower and Tashnovian (1955) a 76-item Q-sort was made by 75 subjects starting a mental health workshop, 28 subjects of a university workshop in guidance and a university class of 34 students of research methods. The sort was repeated two weeks later. Subsequent analysis of data revealed that the mental health group showed the greatest change in the self-sort, while the self did not appear to change more than the ideal. The self and ideal sorts for the two workshop groups became significantly more congruent over the two week period. The Butler and Haigh Q-sort was employed as a measure of self variables in a similar experiment involving comparison of a group of N.D.E.A.
guidance institute members and a control group of science discussants (Winkler, Munger, Gust & Teigland, 1963). Conclusions drawn were in line with those from the earlier experiment. The experimental group showed more positive feeling to others and a greater gain in self-acceptance. The sorts of the individuals of both groups became more similar to those of the other members of the group over time.

Apart from his own basic encounter groups, the groups which most closely approximate the description given by Rogers are the sensitivity training groups or T-groups conducted at the National Training Laboratory. Burke and Bennis (1961) reported a study in changes of self feeling within this setting. They tested 84 members of T-groups with the Semantic Differential Technique at the middle of the first week and the end of the third week of their programme. A factor analysis of scores yielded three factors, accounting for 86% of the variance, which were defined as friendly evaluation, dominance potency and participation activity. Significant changes in time were found between actual and ideal self. Since such changes are observed in these groups, it seems possible that they occur in similar groups conducted in Australia. Here, then, is another opportunity to assess the validity of the Ideo-Q-Sort, this time as a measure of change in a self variable.
Experiment VIII

The Counselling and Therapy Workshop which has been run on client-centred principles at the University of New England for the last three years provided an excellent opportunity to gauge the efficacy of the Idec-Q-Sort as a measure of changes in self attitudes in a basic encounter group. Individuals who attended the workshop in May, 1965, were selected as subjects for this experiment. The two groups in which they worked had the structure and aims described above as characteristic of a basic encounter group. Neither of the two leaders chose to participate in the experiment.

Aim and Hypotheses

If the Idec-Q-Sort is to be used as a measure of change the first requirement of the measure is that it be reliable over time. The retest reliability of I-Q scores must be established, and it was convenient to use for this purpose the data collected from the control group selected to match the experimental group of basic encounter subjects. The first hypothesis which was tested was, therefore, one which postulated no significant correlation coefficient between I-Q scores of a group of control subjects and I-Q scores from the same subjects after an intervening period.

If the test scores demonstrated acceptable test-retest reliability, the difference in scores for the experimental
group over the intervening period might be accepted as actual estimates of change. If, on the other hand, no satisfactory reliability was demonstrated, the relationship between the two sets of scores of the experimental group was still of interest. The second hypothesis reads that there is no significant correlation coefficient between I-Q scores of the experimental group and I-Q scores after an intervening period.

Independent of these estimates of reliability was the comparison of the experimental and control groups with respect to changes in I-Q scores. Changes of scores may be classified as taking place in either a positive or negative direction, that is there may be greater or less congruence between self and ideal after certain experiences. The third hypothesis tested the significance of the difference in the proportion of the experimental and the control group which showed positive or negative changes on scores of the Ideo-Q-Sort.

**Method**

Selection of subjects for the control group to match the pre-determined experimental group involved the consideration of several independent variables. Because of information gleaned from the literature the variables of sex and age were grossly controlled as in Experiment VII. The experimental group comprised eleven men and seven women, while nine men
and six women made up the control group. The age range of the control group was 21 to 55 years as compared with the 27 to 49 year range of the experimental group. The occupational status of the experimental group was unusually uniform and highly selected by virtue of their attendance at the workshop, so that the control group was selected according to the same occupational criteria. Consequently this matched group contained only clinical psychologists, marriage guidance counsellors, student counsellors, social workers and academics interested in counselling and psychotherapy.

Some variables, then, were controlled in their effects. Others, the effects of which are known to be significant in the measure of self variables, could not be controlled because of their intrinsic part in the situation of basic encounter under examination. It is accepted that adjustment is related to acceptance of self or the self-ideal discrepancy, and it may be suspected that the very choice of participation in the workshop is indicative of degree of adjustment and that the control group might well differ in the degree of its psychological well-being. This variable could not be fully controlled except to the extent of obviously successful occupational adjustment in all the subjects. Acceptance of others and acceptance of self, too, are known to be positively related, and increase in acceptance
of others is one of the unwritten laws of these basic encounter groups. This variable is another part of the experimental situation which may have had its effect on the self-concept measures, as is the fact that a member of one of these groups is highly likely to receive some indications of how others see him possibly resulting in cognitive dissonance. These evaluations have been shown to have marked and lasting effects on the self-concept of the individual (Hicks, 1962; Haas & Maehr, 1965).

For the experimental group the Ideo-Q-Sort was administered to the groups of subjects, instructions being given orally, before the first group meeting and nine days later as the workshop drew to a close. Administration of the test to the control group was somewhat more difficult since these subjects were located throughout Australia. A letter was sent to each of these subjects explaining the purpose of the study and asking them to complete the test twice, each time making up a set of items and following the set instructions which were enclosed. Also enclosed were the two packs of cards and a stamped, addressed envelope. Several other conditions of administration were held constant for both experimental and control subjects. All subjects believed their responses to be anonymous, although in fact identification was possible. No subject studied his first response to the test before his
second performance after the standard nine day interval which was common to all. The I-Q score was derived by a Kendall's tau correlation coefficient run between each pair of sorts.

Analysis of Data

The first hypothesis involving the reliability of control group scores could not be analysed by use of the formula for Pearson's product moment correlation coefficient because the trend of the relationship between the two sets of scores was not rectilinear. Kendall's tau (1948) was applied and its significance examined by computation of a Z score (Siegel, 1956). Under these circumstances the test-retest reliability of the Ideo-Q-Sort as measured in the control group was +.210, a value which is not significant at the .05 level. The first null hypothesis was not rejected, and the reliability of the Ideo-Q-Sort may be considered not to differ from zero.

The second null hypothesis was analysed in like manner, yielding a tau of +.477. This value is significant at the .01 level, so that the null hypothesis of no relationship between the two sets of scores for the experimental group was rejected. Apparently any changes that did take place during the workshop were distributed throughout the individuals participating so that rank orders of magnitude of self-acceptance were maintained to some degree, while random changes occurred in the control group.
Finally the data must be analysed to confirm or deny the prediction of differences between changes in the two groups. Comparison of the direction of the change would seem more profitable than any analysis of change magnitude considering the lack of reliability of the I-Q scores. Since direction of change yielded a dichotomous measure of positive or negative a technique for analysing discrete data from two small independent samples was appropriate. The Fisher Exact Test (Siegel, 1956) was applied to the 2X2 contingency table of direction of change against type of subject group. The difference in the proportion of the experimental group whose I-Q scores increased and the similar proportion in the control group, while in the expected direction of more positive change in basic encounter members, was not significant at the .05 level.

Discussion

The conclusions necessarily drawn from this experiment are that although changes in self-acceptance were in all probability experienced by the members of the basic encounter groups at the University of New England they were not successfully detected by the Ideo-Q-Sort. It may be argued in defence of the test that several of the independent but uncontrolled variables basic to the design of the experiment may have contributed to this conclusion. At any rate results
reported from earlier experiments were not supported as to
direction of change. However the inevitable conclusion which
delivers the death blow to the Ideo-Q-Sort as a measure of
a self variable is that the test may not be regarded as
reliable. Not only does the test-retest coefficient fail
to reach the accepted standard for reliability coefficients,
but no significant relationship is demonstrated between the
two sets of scores taken only nine days apart. It has been
suggested that great consistency over time might not be
expected of aspects of the self-concept and therefore not of
test scores representing them. A test which does not provide
a score which is reasonably consistent over a period of a
mere nine days, however, is unlikely to prove useful to any
psychologist.

Conclusions: More contradictory demonstrations and
unconfirmed hypotheses

In this addendum in support of the main thesis of an
inadequate level of functioning of self constructs and self
variables, the Ideo-Q-Sort is examined more fully. As a
discriminator between psychiatric patients and normals it
fails, because although a significant difference in the ranges
of the scores of the two samples was found there was no diff-
ERENCE IN CENTRAL TRENDENCY. The test fails, too, as a
measure of change, for which purpose its scores show
insufficient reliability. As in the area of general psychology the self measure employed under abnormal conditions did not fulfil the predictions gleaned from a review of the current literature.
CONCLUSIONS
This examination of the notion of self has been carried out with reference to both theoretical and empirical approaches of psychologists. These approaches are intrinsically clearly distinguished in this field of enquiry. The history of the notion was examined, giving some impression of the thoughts concerning the self expressed before present methods of study became available. Current theories of self, too, were explored. Then followed a report of what is known about the self in terms of relationships established experimentally between concomitant variables. Such relationships as predicted from the theories of the self gave support to the theories, but the measurements on which they were based were then called into question.

A summary of the findings reveals insufficient integration of research results and much technical inadequacy. The majority of the early writers were concerned with the individual defined as part of and belonging to himself, the self as subject alone or the self as both subject and object. In contrast, contemporary theorists have ignored the feeling of identity and the observer self, the majority forming constructs of the self-concept or self-sentiment type. This preference for the treatment of the object self exclusively is probably due to the demand for empirical verification of theories. Conceptually, at least, it is easier to devise
a test for the observed object. In practice, however, it is not easy to measure the object self. Some hypotheses evolved from theories current and antique, are supported by experiment under normal and abnormal conditions; but Wylie (1961) has shown up the technical faults and gross lack of information about the measures employed. A series of experiments were carried out and demonstrated the lack of success of predictions made from a thorough survey of the literature concerning the tests.

The most valuable step in establishing a useful notion of self in psychology would be to provide a valid measure of some self variable. Attempts were made to establish such a measure but they were unsuccessful. No concurrent criterion was established by agreement of test scores. The structure of a new phenomenological measure selected was not defined. Discrimination by the measure was inadequate, and its scores were not sufficiently consistent for use.

The validity of a construct or variable of self remains yet to be established.


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## Contents

**Figure** | **Page**
---|---
1. Incidence of Publication of Articles on the Self as reported in consecutive volumes of the *Psychological Index* and the *Psychological Abstracts* | 306
2. Outlines of Sarcognomy | 307
3. A Chronological Outline of the Major Self Theorists | 308
4. Items of the Social Compatibility Scale | 309
5. Analysis of Items of the Social Compatibility Scale | 312
6. Symonds Picture Story Test A1 | 314
7. Symonds Picture Story Test B1 | 315
8. Symonds Picture Story Test B3 | 316
9. Object Relations Test BG10 | 317
10. Scoring Categories for 'Who Am I?' Responses | 318
11. The Index of Adjustment and Values | 320
12. The Marlowe – Crowne Social Desirability Scale | 326
13. The Abstract Apparatus | 329
14. The Omnibus Questionnaire | 330
15. Directions for Administration of the Ideo-Q-Sort | 351
16. Questionnaire (16PF – Q2 and G) | 352
Figure 2. Outlines of Sarcognomy.

from Altschule, M.D. Roots of modern psychiatry.
Figure 3. A Chronological Outline of the Major Self Theorists. (500 B.C. – 1935 A.D.)

B.C. 500 - 0  Plato  Aristotle

A.D. 1 - 500  Plotinus  St. Augustine

501 - 1000

1001 - 1500

1501 - 1600

1601 - 1700  Hobbes  Locke  Descartes

1701 - 1800  Hume  Berkeley  Condillac  Kant

1801 - 1900  Spurzeim  Maine de Biran  Hegel  Schopenhauer

Buchanan  J.S. Mill

1901 - 1935  McDougall  Calkins

Cogan et al  Husserl

Mead  Koffka

(Freud)
All of these statements may be true of X.... at some time. Decide whether each is true of him

(A) (B)
always 1 5  Scoring is
often 2 4 carried out
sometimes 3 3 according to the
rarely 4 2 code number or
never 5 1 letter in

brackets.

then write one of these words in the space provided.

Example

X.... is ________ cheerful at school.

If X.... is sometimes cheerful at school write the word sometimes in the space. If he is never cheerful write

X.... is never ________ cheerful at school.

Use any of the five words listed above, but you must use one of those words.

1. X.... ________ makes new friends easily. (B)
2. When he is looking for something to do, X.... ________ invites the boys along. (B)
3. X.... ________ likes to be with his school friends. (B)
4. **X**.... ________ feels lonely. (A)
5. **X**.... ________ goes to visit friends. (B)
6. His schoolmates ________ criticize **X**.... . (A)
7. **X**.... ________ easy to get on with. (B)
8. In the week-ends the fellows ________ like to be with **X**.... . (B)
9. During the holidays **X**.... ________ likes to be out with the boys. (B)
10. Friends ________ come to visit **X**.... . (B)
11. **X**.... ________ fun to be with. (B)
12. When the boys are looking for something to do they______ invite **X**.... along. (B)
13. **X**.... ________ likes the people he goes around with. (B)
14. **X**.... ________ criticizes his schoolmates. (A)
15. During recess **X**.... ________ talks a lot. (B)
16. **X**.... ________ enjoys working with the people he goes around with. (B)
17. After school **X**.... ________ plays round with the boys in his class. (B)
18. **X**.... ________ finds it hard to talk to strangers. (A)
19. **X**.... ________ likes to be by himself. (A)
20. His schoolmates ________ like to be with **X**.... . (B)
Figure 4. (cont.)

Each of these items contains three statements. Mark a cross in the box beside the one statement in each set which is most true of X....

21. a. Boys like X.... a lot. (3)
   b. Boys think X.... is alright. (2)
   c. Boys don't like X.... much. (1)

22. a. Girls like X.... a lot. (3)
   b. Girls think X.... is alright. (2)
   c. Girls don't like X.... much. (1)

23. a. X.... likes boys a lot. (3)
   b. X.... thinks boys are alright. (2)
   c. X.... doesn't like boys much. (1)

24. a. X.... likes girls a lot. (3)
   b. X.... thinks girls are alright. (2)
   c. X.... doesn't like girls much. (1)
Figure 5.

Analysis of Items of the Social Compatibility Scale

<table>
<thead>
<tr>
<th>Item</th>
<th>$r_b$</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>+.435</td>
<td>1.500</td>
</tr>
<tr>
<td>2</td>
<td>+.555*</td>
<td>2.133</td>
</tr>
<tr>
<td>3</td>
<td>+.495</td>
<td>1.966</td>
</tr>
<tr>
<td>4</td>
<td>+.395</td>
<td>1.412</td>
</tr>
<tr>
<td>5</td>
<td>+.605*</td>
<td>2.448</td>
</tr>
<tr>
<td>6</td>
<td>+.453</td>
<td>1.688</td>
</tr>
<tr>
<td>7</td>
<td>+.529*</td>
<td>2.666</td>
</tr>
<tr>
<td>8</td>
<td>+.307+</td>
<td>3.720</td>
</tr>
<tr>
<td>9</td>
<td>+.360</td>
<td>1.355</td>
</tr>
<tr>
<td>10</td>
<td>+.496</td>
<td>1.966</td>
</tr>
<tr>
<td>11</td>
<td>+.408</td>
<td>1.566</td>
</tr>
<tr>
<td>12</td>
<td>+.583*</td>
<td>2.393</td>
</tr>
<tr>
<td>13</td>
<td>Not applicable.</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>+.715+</td>
<td>3.074</td>
</tr>
<tr>
<td>15</td>
<td>-.184</td>
<td>0.165</td>
</tr>
<tr>
<td>16</td>
<td>+.298</td>
<td>1.000</td>
</tr>
<tr>
<td>17</td>
<td>+.278</td>
<td>1.032</td>
</tr>
<tr>
<td>18</td>
<td>+.528</td>
<td>1.727</td>
</tr>
<tr>
<td>19</td>
<td>Not applicable.</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>+.387+</td>
<td>4.435</td>
</tr>
</tbody>
</table>

* signifies significance at the .05 level, while + signifies significance at the .01 level (after Guilford, 1956, Table D). None of the chi$^2$ is significant at these levels (after Siegel, 1956, Table C), although the upper limit for the contingency coefficient is only .816.
Figure 5. (cont.)

<table>
<thead>
<tr>
<th>Item</th>
<th>$\chi^2$</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>0.108</td>
<td>+.021</td>
</tr>
<tr>
<td>22</td>
<td>4.363</td>
<td>+.400</td>
</tr>
<tr>
<td>23</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>4.018</td>
<td>+.395</td>
</tr>
</tbody>
</table>
Object Relations Test. H510.
**Figure 10.**

Scoring Categories for 'Who Am I?' Responses

<table>
<thead>
<tr>
<th>Category (Content)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>The actual name of S is used as a response.</td>
</tr>
<tr>
<td>Sex</td>
<td>S responds with male or female, boy or girl.</td>
</tr>
<tr>
<td>Age</td>
<td>The actual age of S in years, or descriptively is recorded.</td>
</tr>
<tr>
<td>Occupation</td>
<td>S mentions his employment.</td>
</tr>
<tr>
<td>Family</td>
<td>Reference is made to the family of genesis or procreation.</td>
</tr>
<tr>
<td>Social Status</td>
<td>This category describes the standing of S in the community.</td>
</tr>
<tr>
<td>Social Relations</td>
<td>Interpersonal relationships in all areas of life are involved, with emphasis on communications.</td>
</tr>
<tr>
<td>Group membership</td>
<td>It is apparent that S sees himself as a member of a specific group.</td>
</tr>
<tr>
<td>Neutral</td>
<td>Identification is made by means of geography, location or nationality.</td>
</tr>
<tr>
<td>Uniqueness</td>
<td>This category entails recognition of the unique nature of the self as an individual.</td>
</tr>
<tr>
<td>Socio - Scientific</td>
<td>S makes a biological or sociological comment on the human species, thereby including self.</td>
</tr>
<tr>
<td>Physical</td>
<td>Characteristics of the physical self are identified.</td>
</tr>
<tr>
<td>Personality</td>
<td>Mental and emotional characteristics of the individual, references to his personality, are identified.</td>
</tr>
<tr>
<td>Category (Content)</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Values</td>
<td>Moral or political values are described.</td>
</tr>
<tr>
<td>Religious</td>
<td>Indicates some form of belief in a god.</td>
</tr>
<tr>
<td>Immediate</td>
<td>A reference is made to the immediate testing situation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category (Affect)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Affect</td>
<td>Approval of self-description is indicated in the choice of words and phrases, e.g. 'I am proud of being a Catholic'.</td>
</tr>
<tr>
<td>Neutral</td>
<td>No feeling tone is apparent.</td>
</tr>
<tr>
<td>Ambivalent</td>
<td>Both positive and negative feeling tones are present in reference to the same item.</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>Disapproval of self-description is indicated in the choice of words and phrases, e.g. '... and I wish I were taller'.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category (Other)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repetition</td>
<td>A phrase of description appears more than once.</td>
</tr>
<tr>
<td>Incomplete</td>
<td>The seven responses required are not given.</td>
</tr>
</tbody>
</table>
The Index of Adjustment and Values
R.E. Bills, College of Education, University of Alabama.

DIRECTIONS
(Adult Form)

This device is a way of helping you to state some of your beliefs about yourself and other people. It tells nothing more than what you want it to say - there are no hidden scores or tricks. It will have value only if you are careful and do your best to give us an accurate description of yourself and other people as you see them.

On page of this booklet is a list of 49 trait words. You will be asked to answer three questions about yourself and three about other people for each of these traits. For yourself these questions are:
1. How often are you this sort of person, 2. How do you feel about being this way, and 3. How much of the time would you like this trait to be characteristic of you?

You will also answer these same questions about other people. In order to do this you will first think about other people like you, and then answer the questions as you think the average member of this group would answer it for himself.

Please complete the ratings for yourself before you make the ratings for other people. Be certain that you use the answer sheet marked SELF in the upper right hand corner.
for yourself and the one marked OTHERS when making the
ratings for other people. Finally, please make the three
ratings for each trait before going to the next.

On page 215 is a list of 49 trait words and an example.
Take each word separately and apply it to yourself (or to
other people) by completing the following sentence:

I am (average person in my group is) a (an) ______person.
The first word in the list is academic, so you would substi-
tute this term in the above sentence. It would read:

'I am (He is) an academic person'.

Then decide how much of the time this statement is like you
(him), that is, is typical or characteristic of you (him) as
an individual, and rate yourself (him as he would himself) on
a scale from one to five according to the following key:

1. Seldom, is this like me (him).
2. Occasionally, this is like me (him).
3. About half of the time, this is like me (him).
4. A good deal of the time, this is like me (him).
5. Most of the time, this is like me (him).

Select the number beside the phrase that tells how much of
the time the statement is like you (him) and insert it in
Colum 1.

Example: Beside the term ACADEMIC, a number two is inserted
to indicate that, 'Occasionally, I am (he is) an academic person'.

Now go to Column II. Use one of the statements given below to tell how you feel (he feels) about yourself (himself) as described in Column I.

1. I (He) very much dislike(s) being as I am (he is) in this respect.
2. I (He) dislike(s) being as I am (he is) in this respect.
3. I (He) neither dislike(s) being as I am (he is) nor like(s) being as I am (he is) in this respect.
4. I (He) like(s) being as I am (he is) in this respect.
5. I (He) like(s) very much being as I am (he is) in this respect.

You will select the number beside the statement that tells how you (he) feel(s) about the way you are (he is) and insert the number in Column II.

Example: Beside the term ACADEMIC, number one is inserted to indicate that I (he) dislike(s) very much being as I am (he is) in respect to the term, academic. Note that being as I am (he is) always refers to the way you (he) described yourself (himself) in Column I.

Finally, go to Column III, using the same term, complete the following sentence:

I (He) would like to be a (an) __________ person.
Then decide how much of the time you (he) would like this trait to be characteristic of you (him) and rate yourself (him as he would himself) on the following five point scale:

1. **Seldom**, would I (he) like this to be me (him).
2. **Occasionally**, I (he) would like this to be me (him).
3. **About half of the time**, I (he) would like this to be me (him).
4. **A good deal of the time**, I (he) would like this to be me (him).
5. **Most of the time**, I (he) would like this to be me (him).

You will select the number beside the phrase that tells how much of the time you (he) would like to be this kind of person and insert the number in Column III.

**Example:** In Column III beside the term **ACADEMIC**, number five is inserted to indicate that **most of the time**, I (he) would like to be this kind of person.

Start with the word **ACCEPTABLE** and fill in Columns I, II, and III before going on to the next word. There is no time limit. Be honest with yourself so that your description will be a true measure of how you see yourself and other people.

Please fill in the blank with your name or number.
**Figure 11.** (cont.)

<table>
<thead>
<tr>
<th>Name or number</th>
<th>KEY</th>
<th>SELF</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. academic</td>
<td>I II III</td>
<td>I II III</td>
</tr>
<tr>
<td>1. acceptable</td>
<td></td>
<td>26. merry</td>
</tr>
<tr>
<td>2. accurate</td>
<td></td>
<td>27. mature</td>
</tr>
<tr>
<td>3. alert</td>
<td></td>
<td>28. nervous</td>
</tr>
<tr>
<td>4. ambitious</td>
<td></td>
<td>29. normal</td>
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<tr>
<td>5. annoying</td>
<td></td>
<td>30. optimistic</td>
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<td>6. busy</td>
<td></td>
<td>31. poised</td>
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<td>7. calm</td>
<td></td>
<td>32. purposeful</td>
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<td>8. charming</td>
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<td>33. reasonable</td>
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<td>9. clever</td>
<td></td>
<td>34. reckless</td>
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<td>10. competent</td>
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<td>35. responsible</td>
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<td>11. confident</td>
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<td>36. sarcastic</td>
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<td>12. considerate</td>
<td></td>
<td>37. sincere</td>
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<tr>
<td>13. cruel</td>
<td></td>
<td>38. stable</td>
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<tr>
<td>14. democratic</td>
<td></td>
<td>39. studious</td>
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<tr>
<td>15. dependable</td>
<td></td>
<td>40. successful</td>
</tr>
<tr>
<td>16. economical</td>
<td></td>
<td>41. stubborn</td>
</tr>
<tr>
<td>17. efficient</td>
<td></td>
<td>42. tactful</td>
</tr>
<tr>
<td>18. fearful</td>
<td></td>
<td>43. teachable</td>
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<tr>
<td>19. friendly</td>
<td></td>
<td>44. useful</td>
</tr>
<tr>
<td>20. fashionable</td>
<td></td>
<td>45. worthy</td>
</tr>
<tr>
<td>21. helpful</td>
<td></td>
<td>46. broad-minded</td>
</tr>
<tr>
<td>22. intellectual</td>
<td></td>
<td>47. businesslike</td>
</tr>
<tr>
<td>23. kind</td>
<td></td>
<td>48. competitive</td>
</tr>
<tr>
<td>24. logical</td>
<td></td>
<td>49. fault-finding</td>
</tr>
<tr>
<td>25. meddlesome</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The test is scored in terms of the total of ratings for each column, each rating counting its face value except in the case
of those for the words numbered in red for which rating values are reversed, i.e. a rating of 5 means that one must be added to the score, for 4 add 2, and so on.
Figure 12.

Personal Reaction Inventory
(The Marlowe - Crowne Social Desirability Scale.)

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally.

**KEY.**

1. Before voting I thoroughly investigate the qualifications of all the candidates.  
   T  X  F

2. I never hesitate to go out of my way to help someone in trouble.  
   T  X  F

3. It is sometimes hard for me to go on with my work if I am not encouraged.  
   T  F  X

4. I have never intensely disliked anyone.  
   T  X  F

5. On occasion I have had doubts about my ability to succeed in life.  
   T  F  X

6. I sometimes feel resentful when I don't get my way.  
   T  F  X

7. I am always careful about my manner of dress.  
   T  X  F

8. My table manners at home are as good as when I eat out in a restaurant.  
   T  X  F

9. If I could get into a movie without paying and be sure I was not seen I would probably do it.  
   T  T  X

10. On a few occasions, I have given up doing something because I thought too little of my ability.  
    T  F  X

11. I like to gossip at times.  
    T  F  X

12. There have been times when I felt like rebelling against people in authority even though I knew they were right.  
    T  F  X
13. No matter who I'm talking to, I'm always a good listener.  

14. I can remember 'playing sick' to get out of something.  

15. There have been occasions when I took advantage of someone.  

16. I'm always willing to admit it when I make a mistake.  

17. I always try to practice what I preach.  

18. I don't find it terribly difficult to get along with loud-mouthed, obnoxious people.  

19. I sometimes try to get even rather than forgive and forget.  

20. When I don't know something I don't mind admitting it.  

21. I am always courteous, even to people who are disagreeable.  

22. At times I have really insisted on having things my own way.  

23. There have been occasions when I felt like smashing things.  

24. I would never think of letting someone else be punished for my wrong doings.  

25. I never resent being asked to return a favour.  

26. I have never been irked when people expressed ideas very different from my own.  

27. I never make a long trip without checking the safety of my car.  

28. There have been times when I was quite jealous of the good fortune of others.
29. I have almost never felt the urge to tell someone off.  
   KEY:  
   TX F   

30. I am sometimes irritated by people who ask favours of me.  
   TX F X  

31. I have never felt that I was punished without cause.  
   TX F   

32. I sometimes think when people have a misfortune they only got what they deserved.  
   TX F X  

33. I have never deliberately said something that hurt someone's feelings.  
   TX F   

Figure 12. (cont.)
Figure 13. The Abstract Apparatus.
Figure 14

Omnibus Questionnaire (Experiment V)

Name __________ KEY

(The Motivation Analysis Test, Cattell & Horn, 1964)

This is not a test of intelligence or other abilities. It is to enable you to tell something about your thoughts and interests. It is to your advantage to answer as freely and frankly as you can.

There are several sections here and each begins with instructions and examples.

Subtest I (USES)

Instructions: In this test you are asked what seems to you to be the better use to make of a given amount of time, money, etc., under given circumstances. For example:

1. If someone has all the money he needed, he'd use it better by:
   Just enjoying himself

   X  Studying abroad

Place a cross in the square if you would prefer to study abroad. Work quickly and check in each case what seems to YOU the more attractive answer. Sometimes it might be hard to choose between the two answers, but always choose one (and only one).
1. If I could, I would spend more effort trying to:
   X Master undesirable impulses.
   Employ people profitably.

2. An interesting essay to write would be on:
   Success in business.
   X The best kind of citizen.

3. Young people should devote time to:
   Doing well in educational courses.
   X Understanding themselves better.

4. One advantage of knowing your boss better is that:
   X You feel more secure in your job.
   It improves chances of promotion.

5. If work were cut to a thirty-hour week, it would be good to spend the extra time:
   Seeing old neighbourhood friends and relatives.
   X Attending a course on emotional adjustment and poise.
6. To know more about one's parents' early life would help, by:

   Teaching one what counts in a good home life.

   Revealing things about one's own mental growth.

7. If I got a raise I would spend money on:

   Taking a course in the psychology of personal development.

   Improving my home and its neighbourhood.

8. Longer week-ends might permit a person to:

   Read more about how to get ahead in his work.

   Spend more time with his family.

9. More newspaper articles should stress:

   Self control in facing sexual distractions.

   Gaining happiness by being socially useful.

10. I would like to know more about myself in order to:

    Succeed in my job.

    Correct my bad habits.

11. I should like to study psychology because it would:

    Provide me with a better understanding of myself.

    Give me the tools for helping others.
12. Marriage counseling should help you toward:

- Providing for your spouse a home to be proud of.
- Recognizing spiritual as well as physical aspects.

13. I enjoy do-it-yourself tasks because I like:

- To keep busy and get work done.
- To improve my own house.

14. If I were going to see an old movie, I would rather see:

- 'The Snake Pit', a story of the life of a mentally-ill person.
- A 'Biography of Dr Schweitzer', who has devoted his life to practical religion.

15. A man with time to ponder could well spend it thinking:

- How one can learn to control unruly emotions.
- On ways of helping others.

16. One can point to many well-spent careers in:

- Social service and religion.
- Business and politics.

17. If someone were giving me a book as a gift, I would prefer one on:

- The history of clothing styles.
- The proper outlook on sex.
Figure 14. (cont.)

18. If I were to attend a lecture, I would like to hear a talk on:

X Famous romances in history.

Making a success of one's marriage.

19. If I had time to spare in a library, I would rather:

Spend some minutes with a modern book on social etiquette.

X Talk to a librarian of the opposite sex.

20. Talking with old friends is fun because one can:

Discuss childhood love affairs.

X Recall the important things one's family stood for.

21. People join a local mental health movement to:

X Learn more about the prevention of mental illness.

Work with their Neighbours in a worthwhile activity.

22. An advantage of having a lot to do with people is that you:

Get a chance to show leadership qualities.

X Learn mutual respect and trust.
Figure 14. (cont.)

23. A good magazine should have articles on:
   X Happiness in marriage.
   Current fashions of dress.

24. It would be more interesting to read a pamphlet on:
   Remodeling the home to look modern.
   X The prevention of mental disorder.

Subtest 2 (ESTIMATES)

Instructions: Each item in this test has four possible answers. You are to choose the answer that you think is best, and circle it. For example:

1. The library is the best place to study.

   VERY TRUE   true   false   VERY FALSE

In an item like this, VERY TRUE means that in your experience there are very few exceptions and that you strongly agree;

   TRUE means that it tends to be true more often than it is false and that you agree moderately;

   FALSE means that you tend to disagree and that in your experience it is more often untrue;

   VERY FALSE means that in your experience it is almost always untrue and that you disagree strongly.
In other questions you are asked to make your best estimate of a truly correct answer. For example:

2. 'Hot' war between the U.S.A. and Russia is likely to break out within the next ___ years?

   1   5   20   never

No one knows the answer to a question like this, but everyone can make an estimate (and some estimates will be more accurate than others). If the estimate you would make is not among those listed, mark the answer that is closest.

The questions which follow either ask for a true or a false choice like the first above or for a quantity like the last.

1. How many girls allow a boy to kiss them on their first date?

   3  10%  2  30%  1  60%  80%

2. In times of depression, seniority, more than reputation and merit, helps a man to keep his job.

   3  VERY  2  false  1  true  VERY

3. What per cent of married couples are considered by sociologists to be poorly matched physically?

   3  15%  2  25%  1  60%  95%

4. A lot of attention to manners and 'etiquette' is based on stupid tradition and serves no purpose.

   3  VERY  2  false  1  true  VERY
5. The practice of rigid self-control serves no useful purpose as such.

<table>
<thead>
<tr>
<th>VERY TRUE</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>true</td>
<td></td>
<td>false</td>
<td>VERY FALSE</td>
</tr>
</tbody>
</table>

6. What percentage of psychologists would vote that 'self-respect' is often used as an excuse for avoiding unpleasant tasks.

<table>
<thead>
<tr>
<th>3</th>
<th>2</th>
<th>1</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>5%</td>
<td>25%</td>
<td>50%</td>
<td></td>
</tr>
</tbody>
</table>

7. A happy marriage is necessary for a complete life.

<table>
<thead>
<tr>
<th>VERY FALSE</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>false</td>
<td>true</td>
<td>VERY TRUE</td>
<td></td>
</tr>
</tbody>
</table>

8. Attention to the needs of parents and relatives, as in services, contributions to support, or gifts, is gladly made by what per cent of young adults?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>30%</td>
<td>50%</td>
<td>70%</td>
</tr>
</tbody>
</table>

9. Psychologists have discovered that the average man goes out of his way ___?___ times a day to perform acts that are concerned purely to maintain his self-respect.

<table>
<thead>
<tr>
<th>3</th>
<th>2</th>
<th>1</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
<td>40%</td>
<td>25%</td>
<td></td>
</tr>
</tbody>
</table>

10. In the next ___?___ years, insanity will cease to be the dreaded disease that it is today.

<table>
<thead>
<tr>
<th>40</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

11. True wisdom comes through self-knowledge, i.e., knowing oneself.

<table>
<thead>
<tr>
<th>VERY TRUE</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>true</td>
<td></td>
<td>false</td>
</tr>
</tbody>
</table>
12. The chances of advancing in his job for a man with good technical skills are about _____ times as good as for a person without such knowledge.

1 2 3 4

13. Research on the causes of duelling reports that % of the duels fought were over matters of self-regard.

10% 20% 50% 70%

14. Diagnosis and treatment of states of the mind that might develop into insanities can now be provided for % of the population.

35% 60% 75% 95%

15. Self-knowledge (i.e. to know oneself) is a hopeless pursuit.

VERY TRUE false VERY FALSE

1 2 3

16. There is a real lack of educational opportunity nowadays in training oneself for a job.

3 2 1

VERY FALSE true VERY TRUE

Subtest 3 (WORD ASSOCIATION)

Instructions: Here are some groups:

birthday X policeman

1. PARTY 2. TRAFFIC

X political accident
You are to read first the 'key' word in big letters which has a number by it. Then decide which of the two 'association' words, above and below, it makes you think of. For example, after PARTY the word that springs to your mind might be 'birthday' or 'political'. To the person whose answers are checked above you will notice that 'political' went better with PARTY, and that on example 2, 'policeman' seemed naturally to go with TRAFFIC.

Check the first, most natural word that comes to you for each key word. Do not skip any items but move along fast, choosing the first of the two association words that comes to your mind.

<table>
<thead>
<tr>
<th>Key Word</th>
<th>First Association</th>
<th>Second Association</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SKILLED</td>
<td>manner</td>
<td>parents</td>
</tr>
<tr>
<td></td>
<td>job</td>
<td></td>
</tr>
<tr>
<td>2. SECURE</td>
<td>employment</td>
<td>family funds</td>
</tr>
<tr>
<td></td>
<td>reputation</td>
<td></td>
</tr>
<tr>
<td>3. SELF</td>
<td>command</td>
<td>kiss</td>
</tr>
<tr>
<td></td>
<td>career</td>
<td>parents</td>
</tr>
<tr>
<td>4. IMPORTANT</td>
<td>virtue</td>
<td>parental</td>
</tr>
<tr>
<td></td>
<td>home</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>self</td>
</tr>
</tbody>
</table>
Figure 14. (cont.)

9. GOOD  
10. MIND  
11. HUNGRY  
12. MASTER  
13. COMMUNITY  
14. GOOD  
15. KNOW  
16. GOOD

- natured  
- citizen  
- at rest  
- sound  
- love  
- poor  
- emotions  
- apprentice  
- respect  
- chest  
- repute  
- habits  
- self  
- facts  
- craftsman  
- Friday

- country  
- peace of mind  
- enemy  
- self-respect  
- impulse  
- shellfire  
- will  
- dose  
- sentimental  
- serene  
- renown  
- love vows  
- spirit  
- sex  
- thoughtful  
- divine
Instructions: This test is designed to measure the amount of information you have about various areas of knowledge. There are always four answers from which you are to choose one. For example:

1. How many days are there in February in a leap year?
   a. 28  b. 29  c. 30  d. 31

Circle the best answer.

Please make a choice on all questions. In every case there is a best answer or one that is more true than the others. Even if you don't know the correct answer make a guess.

Work quickly.

---

1. A stoic is:
   a. A person who seeks pleasure of a physical nature.
   b. The monetary unit of Ethiopia.
   X c. A person not affected by passions.
   d. A small haystack in a field.

2. Which of the following is the most frequent reason given for not wanting to stay on a particular job?
   a. Too much supervision.
   X b. Insufficient salary.
   c. Too much demand for accuracy.
   d. Being kept late by the boss.
3. Which of the following is a drug used to limit interest in the opposite sex?
   X a. Saltpeter.
   b. Sandalwood oil.
   c. Mercaptin.
   d. Benzoin.

4. Peace of Mind, by Liebman, deals with:
   X a. Self-realization.
   b. Tranquilizing drugs.
   c. Life insurance.
   d. The proper use of leisure.

5. Yoga is:
   a. A sour milk.
   X b. A mental discipline.
   c. A religion of the East.
   d. A sweetmeat.

6. The Community Chest (United Fund) supports:
   b. Tuberculosis drives.
   c. Red Cross here and abroad.
   X d. Local charities.

7. In which of the following places is polygamy (i.e., the practice of having more than one wife or husband) still acceptable?
   a. U.A.R.
b. Utah.
c. Ethiopia.
X d. Jordan

8. A woman should always precede the man except:
   a. Through the door, if there is a doorman.
   b. Down an aisle, if there is an usher.
   X c. In a restaurant, if there is no head waiter.
   d. Up a flight of stairs.

9. Which of the following has the highest reputation as a man of honesty and principle?
   a. Tallyrand.
   b. Charlie Chaplin.
   c. Theodore Roosevelt.
   X d. Woodrow Wilson.

10. Upon a person's being declared mentally ill, he may not:
    a. Choose his own doctor.
    b. Remain at home.
    X c. Get married.
    d. Get a hunting licence.

11. Which is the main difference of a psychiatrist from a psychologist?
    a. Dealing with mental defectives.
    X b. Having training in medicine.
    c. Studying unconscious as well as conscious behaviour.
    d. Treating neuroses as well as diagnosing them.
12. Which of the following is not a 'fringe benefit' (i.e., a reward in addition to wages)?
   a. Vacations with pay.
   b. Union membership dues.
   c. Disability insurance.
   d. Dismissal compensation.

13. Which of the following is not an instance of slander?
   a. Repeating a newspaper story about a person.
   X b. Repeating a false story of harmful character that has been told you.
   c. Making statements about a person that will damage his reputation.
   d. Saying something derogatory (bad) about a person's property.

14. The most reliable sign of insanity is:
   a. Repeatedly seeing things that aren't there.
   X b. Insomnia.
   c. Talking to yourself.
   d. Getting easily irritated.

15. Which of the following techniques helps one to gain self-knowledge?
   a. Coueisim.
   b. Extra-sensory perception.
   X c. Psychoanalysis.
   d. Voyeurism.
16. How to Win Friends and Influence People is by:
   a. Liebman.
   b. Freud.
   c. Sokolsky.
   X d. Carnegie.

(The Qscale of the 16PF, Cattell and Eber, 1957)

Instructions: In order to learn something about your attitudes and interests we want you to answer the following questions. There are no 'right' or 'wrong' answers because everyone has the right to his own views. Circle each answer which is true for you.

For each question three answers are indicated. Decide which answer is correct for you.

1. I appreciate constant change in the type of work to be done.
   a. yes 1 b. in between 2 c. no

2. I would rather stop in the street to watch an artist painting than to listen to some people having an argument.
   a. yes 1 b. uncertain 2 c. no

3. I can work on most things without being bothered by people making a lot of noise around me.
   a. yes 1 b. in between 2 c. no
4. The idea that sickness comes as much from mental as physical causes is much exaggerated.

2  
1  
a. yes   b. in between   c. no

5. When talking I like:

1  
2  
3  
a. to say things just as they occur to me.  
b. in between  
c. to wait and say them in the most exact way possible.

6. I know I do most things at least a little more thoroughly than most people.

2  
1  
a. yes   b. in between   c. no

7. I like to wait till I am sure that what I am saying is correct, before I put forward an argument.

2  
1  
a. always   b. generally   c. only if it's practicable

(Sa Scale of the California Psychological Inventory, Gough, 1956)

Instructions: Here is a series of statements. Read each one, decide how you feel about it, and then mark your answer by circling either TRUE or FALSE. If you agree with a statement, or feel that it is true for you, answer TRUE. If you disagree with a statement, or feel that it is not true about you, answer FALSE. Be sure to answer either TRUE or FALSE for every statement, even if you have to guess at some.
1. I looked up to my father as an ideal man.  
   TRUE   FALSE X

2. When in a group of people I usually do what others want  
   rather than make suggestions.  
   TRUE   FALSE X

3. My daily life is full of things that keep me interested.  
   X TRUE   FALSE

4. I doubt whether I would make a good leader.  
   TRUE   FALSE X

5. It is hard for me to start a conversation with strangers.  
   TRUE   FALSE X

6. I sometimes pretend to know more than I really do.  
   X TRUE   FALSE

7. Women should not be allowed to drink in cocktail bars.  
   TRUE   FALSE X

8. I would disapprove of anyone's drinking to the point  
   of intoxication at a party.  
   TRUE   FALSE X

9. Most of the arguments or quarrels I get into are over  
   matters of principle.  
   X TRUE   FALSE

10. I must admit that I often do as little work as I can  
     get by with.  
     X TRUE   FALSE

11. I would like to see a bullfight in Spain.  
    X TRUE   FALSE
Figure 14. (cont.)

12. When in a group of people I have trouble thinking of the right thing to talk about.

   TRUE    FALSE X

13. I set a high standard for myself and I feel that others should do the same.

   TRUE    FALSE X

14. I was a slow learner in school.

   TRUE    FALSE X

15. I seldom or never have dizzy spells.

   X TRUE    FALSE

16. I would like to wear expensive clothes.

   X TRUE    FALSE

17. I never make judgements about people until I am sure of the facts.

   TRUE    FALSE X

18. I am certainly lacking in self-confidence.

   TRUE    FALSE X

19. When I work on a committee I like to take charge of things.

   X TRUE    FALSE

20. I would rather go without something than ask for a favour.

   TRUE    FALSE X

21. I often do whatever makes me feel cheerful here and now, even at the cost of some distant goal.

   X TRUE    FALSE
22. Once in a while I laugh at a dirty joke.
   X TRUE     FALSE

23. Before I do something I try to consider how my friends will react to it.
   TRUE      FALSE X

24. I have frequently found myself when alone pondering such abstract problems as free will, evil etc.
   TRUE      FALSE X

25. At times I have worn myself out by undertaking too much.
   X TRUE     FALSE

26. It is hard for me to find anything to talk about when I meet a new person.
   TRUE      FALSE X

27. A person does not need to worry about other people if only he looks after himself.
   X TRUE     FALSE

28. When a man is with a woman he is usually thinking about things related to her sex.
   X TRUE     FALSE

29. In school I found it very hard to talk before the class.
   TRUE      FALSE X

30. Sometimes I rather enjoy going against the rules and doing things I'm not supposed to do.
   X TRUE     FALSE

31. It is hard for me to act natural when I am with new people.
   TRUE      FALSE X
32. I think I would like to belong to a motorcycle club.
   X TRUE     FALSE

33. I would like to be an actor on the stage or in the movies.
   X TRUE     FALSE

34. Police cars should be especially marked so that you can always see them coming.
   X TRUE     FALSE
Figure 15

Directions for Administration of the Ideo-G-Sort

'Here are twenty-five blank cards'. (Present cards and pencil). 'I want you to write on each of them a statement which might describe you at any time'.

(Wait until that is completed, then...)

'Put these cards in order from the statement most like you to the statement least like you as you are at this moment. When you have done that, number the cards in that order: number one being the one most like you, down to twenty-five, the one least like you'.

(After that sort and numbering, say ...)

'Now sort the cards into the order they would be in if you were the kind of person you would really like to be'.

'Thank you'.

Note to Administrators:

Some comment on the anonymity of responders may be advisable.

Reiteration or variations of wording of the central theme of the instructions are permissible.

Please preserve the order of the second sort, unless it too is numbered.
Questionnaire (including Scales Q3 and G of the 16PF, A & B).

Instructions: In order to learn something about your attitudes and interests we want you to answer these questions. There are no 'right' or 'wrong' answers because everyone has the right to his own views. Answer each question according to what is true for you.

For each question three answers are indicated, a., b., and c. Decide which answer is correct for you and mark it with a circle.

1. If I saw two neighbour's children fighting I would:
   a. leave them to settle it
      (1) b. uncertain
      (2) c. reason with them.

2. Through getting tense I use up more energy than most people in getting things done.
   a. constantly
      (1) b. occasionally
      (2) c. never

3. In my job I appreciate constant change in the type of work to be done.
   a. yes
      (1) b. in between
      (2) c. no
4. I am an easy going person, not insisting on always doing things as exactly as possible.
   a. true
   (1) b. in between
   (2) c. false

5. I would rather stop in the street to watch an artist painting than to listen to some people having an argument.
   (2) a. yes
   (1) b. uncertain
   c. no

6. I think that plenty of freedom is more important than good manners and respect for the law.
   a. yes
   (1) b. uncertain
   (2) c. no

7. I can work on most things without being bothered by people making a lot of noise around me.
   (2) a. yes
   (1) b. in between
   c. no

8. People sometimes call me careless, even though they think me a fine person.
   a. yes
   (1) b. in between
   (2) c. no
9. The idea that sickness comes as much from mental as physical causes is much exaggerated.
   (2) a. yes
   (1) b. in between
   c. no

10. I make sure that anyone who hurts my good name regrets it in the long run.
   (2) a. generally
   (1) b. sometimes
   c. not usually

11. When talking I like:
   a. to say things just as they occur to me
   (1) b. in between
   (2) c. to wait and say them in the most exact way possible

12. I think the police can be trusted not to ill-treat innocent people.
   (2) a. yes
   (1) b. in between
   c. no

13. I sometimes let my actions get swayed by feelings of jealousy.
   a. yes
   (1) b. in between
   (2) c. no
14. I know I do most things a little more thoroughly than most people.
   a. yes
   (1) b. in between
   (2) c. no

15. In thinking of difficulties in my work I:
   a. assume I can handle them when they come
   (1) b. am in between a. and c.
   (2) c. try to plan ahead, before I meet them

16. I always make a point, in deciding anything, to refer to basic principles of right conduct.
   (2) a. yes
   (1) b. in between
   c. no

17. I have periods when I cannot stop a mood of self-pity.
   a. often
   (1) b. occasionally
   (2) c. never

18. I like to wait till I'm sure that what I'm saying is correct, before I put forward an argument.
   (2) a. always
   (1) b. generally
   c. only if it's practicable

19. Everyone could make a success of his life with reasonable effort and perseverance.
   (2) a. yes
Figure 16. (cont.)

(1) b. in between
   c. no

20. I enjoy work that requires careful, exacting handskills.
   (2) a. yes
   (1) b. in between
   c. no

21. I admire more a person who:
   a. is brilliantly intelligent and creative
      (1) b. is in between
      (2) c. has a strong sense of duty to the things he believes in

22. I often say things on the spur of the moment that I later regret.
   a. yes
      (1) b. in between
      (2) c. no

23. In going places, eating, working, etc., I:
   a. seem to rush from one thing to another
      (1) b. in between
      (2) c. go in a very deliberate, methodical fashion

24. I enjoy giving my best time and energy to:
   a. social activities and public affairs
      (1) b. in between
      (2) c. my home and the real needs of my immediate circle of friends
25. However difficult and unpleasant the obstacles, I always persevere and stick to my original intentions.

   (2) a. yes
   (1) b. in between
   c. no

26. In my work and dealings with others, I:

   a. believe in aiming at only what is practicable

   (1) b. in between
   (2) c. sometimes set standards almost impossibly hard

27. Business superiors and members of my family, as a rule, find fault with me only when there is real cause.

   (2) a. true
   (1) b. in between
   c. false

28. When a town has a lot of stray, diseased cats it is best to:

   a. ask people to take them in

   (1) b. uncertain
   (2) c. do away with them painlessly and humanely

29. I am always able to keep the expression of my feelings under exact control.

   a. yes

   (1) b. in between
   (2) c. no
30. A strong will power is a more valuable gift than a well-formed imagination.

(2) a. yes
(1) b. in between
   c. no

31. I find that my interests and hobbies in people and amusements tend to change fairly rapidly.

   a. yes
(1) b. in between
(2) c. no

32. I find it desirable to make plans to avoid waste of time between jobs.

   (2) a. yes
(1) b. in between
   c. no

33. I tend to get over-excited and rattled in upsetting situations.

   a. yes
(1) b. in between
(2) c. no

34. I make a point of not being absent-minded or forgetful of details.

   (2) a. yes
(1) b. in between
   c. no

35. When I do something my main concern is that:

   a. it is really what I want to do
(1) b. uncertain

(2) c. no bad consequences will follow for my associates.

36. If people would talk less and work more, everybody would be better off.

(2) a. yes
(1) b. in between
(2) c. no

37. I feel 'cramped' on a job where I have to take orders from several people.

a. yes
(1) b. in between
(2) c. no

38. If people think poorly of me, I can still go on quite serenely in my own mind.

(2) a. yes
(1) b. in between
(2) c. no

39. I believe that one cannot be too scrupulously correct in manners and social obligations.

(2) a. true
(1) b. uncertain
c. false

40. I always check very carefully the condition in which borrowed property is returned, either to me, or by me to others.

(2) a. yes
Figure 16. (cont.)

(1) b. in between

c. no

Note: The scoring key is provided, with weights listed in black for Scale $Q_3$ and in red for Scale $G$ in brackets before the relevant item.