A TECHNIQUE FOR THE DESCRIPTION OF THE SELF

by
LAWRENCE WALKER

A THESIS

Submitted to the School of Graduate Studies of Michigan State College of Agriculture and Applied Science in partial fulfillment of the requirements for the degree of
MASTER OF ARTS

Department of Psychology
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This is to certify that the

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Major professor

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INTRODUCTION

The term 'self' is used in many different contexts. Historically the term evolved from a spiritual heritage embodied in the concept of the 'soul' which was supposed to account for the actuating cause and purposiveness of mental life. Under the impact of Wundt and the positivists the term 'soul' fell into disrepute among psychologists. James (11) and Calkins (4) were largely responsible for calling attention to the 'self' and making it a popular concept.

Since late in the nineteenth century, the term 'self' has been bandied about among psychologists so that today it is vested with an overflow of meaning. Epistemologists deal with a 'self' or 'subject' which knows objects. Modern psychotherapists view the 'self' or 'ego' as an entity to be diagnosed and treated. Many psychologists have assumed some sort of active agent serving a cognitive function such as intending, knowing, etc. Others have treated the 'self' as an abstraction or theoretical construct outside the realm of experience and direct description. For some the 'self' has served the dual function of knower and object of knowledge.

The structuralists and behaviorists generally avoided the concept, although Titchener and his associates trained their introspective sights on the 'self' and found nothing but kinesthetic feelings and sensations. Brentano and the

'act' psychologists maintained that conscious acts implied the 'self' as actor and as object although the 'self-object' was of secondary importance. Calkins (4) and the personalists believed that the 'self-object' was the same as the active self. James (11) discussed the 'empirical self' as an object in the stream of consciousness. He said that "in its widest possible sense, however, a man's Self is the sum total of all he CAN call his." (p. 291). Thus the 'self' can be divided into material, social, and spiritual selves and the pure ego. James' selves were the products of psychological performance at times, but were often alluded to as an object in consciousness rather than as an active agent.

Failure to distinguish clearly between the 'self' as doer and the 'self' as object has led to the confusion that now exists. Hilgard (9) has described this approach in these words:

> ". . . you presently find yourself as between two mirrors of a barber shop, with each image viewing each other one, so that the self takes a look at itself, taking a look at itself. It soon gets confused as to the self that is doing the looking and the self which is being looked at." (p. 377).

In summarizing the literature on the ego, Allport (2) enumerated eight capacities of the ego, viz., (1) as knower, (2) as object of knowledge, (3) as primordial selfishness, (4) as dominator, (5) as a passive organizer and rationalizer, (6) as a fighter for ends, (7) as one segregated behavioral system among others, (8) as a subjective patterning of cultural values (p. 459). He viewed the 'self' as

a knower, organizer, observer, status seeker, and as a socialized being. In his theorizing Allport posited ego-involvement as a ". . . condition of total participation of the self. . ." (p. 459). He then cited experimental evidence to buttress his position and concluded:

> "In the experiments I have cited, and in many others of an analogous nature, it turns out that one group of subjects (those who are personally aroused and committed to a task) behave in ways quite unlike other subjects (who are not so committed). . . . In short, we are here confronted with some parameter that makes a vast difference in our experimental results." (p. 472).

Although Allport presented a convincing case for the importance of ego-involvement as a determiner of behavior, he admitted that the concept of 'self' or 'ego' has not been adequately defined.

Koffka (12) and Lewin (13) regarded the 'self' as a particular field part in constant interaction with the rest of the field. The self was conceptualized as a sub-system of the ego which is in various degrees of interaction with the other sub-systems wherein certain tensions arise if the ego becomes engaged. Both agreed that the facts of action are the empirical foundation of the ego. Snygg and Combs (21) who have been greatly influenced by the Gestaltists spoke of a 'self-concept' that included all those aspects of the field which the individual perceives to be definite and fairly stable characteristics of himself. Rogers (18) who espoused a similar view said that "by this 'concept of self' we mean the individual's perceptions of his own

characteristics and his relations to others, and the values he attaches to these perceptions" (p. 68).

Although this historical sketch is by no means comprehensive, it should be clear that there is a preponderance of seemingly disconnected theories which purport to deal with the same phenomena. A renewed interest to the problem of the 'self' or 'ego' has taken a firm foothold in experimental psychology. With their modern tools and techniques the scientifically oriented psychologists have begun the weighty task of proving the validity or worthlessness of the morass of speculation surrounding the 'self', 'ego', 'self-concept', etc. Although many experiments in the area of personality are related to the 'self', only those focusing particularly on the 'self' will be examined.

SOME MODERN TECHNIQUES

The techniques employed in the studies of the 'self' and 'self-concept' are varied and ingenious. Personal documents, behavior in controlled and uncontrolled situations, projective techniques, personality schedules, and questionnaires have provided sources for studies concerning the 'self-concept'. In all cases, however, the nature of the 'self' is interpreted from palpable data which provide the basis for inference.

The recording of therapeutic sessions at the Counseling Center of the University of Chicago has provided a rich source of data from which has developed a great deal of research. Sheerer (19) carefully defined "self-acceptance" and "acceptance of other persons". With these definitions four judges rated on a five-point scale 51 recorded statements showing some self evaluation and 50 statements revealing evaluative attitudes toward others. The scale accounted for degrees of acceptance of self and others. Among other things the study suggested that acceptance of self is definitely related to acceptance and respect for others. Stock (23) employed a similar procedure, but the statements were judged for intensity and direction of feeling. Philips (16) utilized a ten-item questionnaire with five items relating to self and five items relating to others.

In this method the individual himself rated the statements as to how applicable they were to him. This much simpler instrument yielded about the same general results as the aforementioned method of protocol analysis.

The problems of insight and stability of the self-concept have recently found their way into experimental psychology. Rogers (18) expounds and uses a method called the Q technique which compares a client's internal reference of himself with the external reference of a psychologist toward the patient. The assumption underlying Roger's method is that insight, operationally defined as the degree of agreement between the internal and external frames of reference, should increase as therapy progresses. The internal reference is obtained by the technique of self-rating. One hundred self-descriptive statements relating to behavior or internal states are sorted into nine piles and the patient is asked to arrange the statements according to how closely he thinks they describe him. He is also asked to re-sort the cards to represent the person he would like to be, his ideal self. The patient is given the Thematic Apperception Test which a psychologists evaluates blindly. The psychologist then arranges the one hundred statements according to the personality picture as revealed by the Thematic Apperception Test. Ideally, at the end of therapy the evaluation of the diagnostician should agree with the individual's self-evaluation, and both should agree with the ideal self.

Holt (10) and Grossman (6) reported ways by which insight may be determined. The former experimenter used a method whereby individuals rated themselves as regards 35 needs, and then experts who had interviewed them gave their ratings for each individual. The differences between the self-ratings and the experts' ratings yielded a measure of insight. Grossman (6) constructed two tests of insight. The first measure used a discrepancy score between self-evaluations on a personality schedule and self-evaluations on specific traits derived from the personality schedule. The individual was instructed to rate himself as compared to his peer group. The other technique involved the construction of multiple-choice items to cover the attitudes revealed by the subjects on Thematic Apperception Cards. According to Grossman the measure of insight was:

> "The degree of discrepancy between the manner in which the subject answered the items and the manner in which the two psychologists felt he should have answered it ... indicated the amount of insight the subject possessed (p. 111).

Brownfain (3) investigated the stability of the self-concept. The subjects rated themselves on 25 personality variables. Under one set of instructions the individual was told to give himself any benefit of a doubt, and then the second set of instructions required the subjects to re-rate themselves but this time they were told not to give themselves the benefit of a doubt. The absolute difference between the two self pictures was a measure of the stability of the self-concept.

The recent trend has been in the direction of ratings and evaluations by self and others in respect to feelings, attitudes, and remembered or anticipated behavior as they relate to the individual. The techniques and instruments appear to be as varied as there are psychologists working on the problem. The potential methods and experimental designs in this area are limitless, but researchers employing different techniques have already approached essential agreement (6, 10, 16, 19, 23).

PURPOSE

In the midst of the confusing philosophizing and speculation concerning the 'self', there is one general facet of the 'self' which has been universally agreed upon either directly or by implication. But for some inexplicable reason experimenters and researchers have neglected this aspect of the 'self'. The thread of continuity runs through the writings of innumerable authors since the time of William James (1, 2, 11, 12, 13, 15, 17, 20, 22). This common position although stated in language unique to each author may be summarized thusly:

A. <u>The subjective, phenomenal, or perceived self is not limited by the boundaries of the body</u>. The evidence points to the notion that one's own body with its appurtenances, family, friends, country, culture, race, social and class groups, etc. can be in fact an integral part of the self. Even the values which are inculcated by virtue of being a member of a group may be more important than the body itself. The extensions or projections which refer to the self might be termed <u>self-referents</u>. These self-referents are organized into areas forming the <u>self-structure</u>. The boundaries of these self-areas though variable might be charted and delineated. The catatonic schizophrenic who has contracted his boundaries to nothing save the pulsing

of his heart is representative of one extreme, while the mystic who has attained the state of "cosmic consciousness" portrays the other extreme. Both of course are pathological, but they are poignantly illustrative. Literature too is fraught with perceptive observations regarding the solubility and extensions of the self.

It seems then that anything an individual holds dear whether it be objects, persons, values or abstractions and which can be considered as me, my, or mine are to a certain degree functionally equivalent and are rooted in the subjectively felt self. Any threat or disapproval directed toward these self-referents is perceived as danger or insult, and enhancement or approval of these self-referents is perceived as gratifying. The proposition presents itself that instigations to self-defensive or self-enhancing behavior are dependent upon the structure of these self-referents as it interacts with forces which are either threatening, approving or neutral.

B. <u>The subjective, phenomenal, or perceived boundaries separating the self-referents into areas tend toward consistency but are nonetheless modifiable</u>. From a genetic point of view, as a child matures, the self-referents and their boundaries encompass more and more psychological territory until a point is reached in adulthood when the bounds become relatively fixed and stable. Adolescence marks the climax of this reorganizing process. When the

organization and development of these self-referents are determined, predictions can be made and hypotheses can be tested.

The impact of cultural and social forces upon the individual and the reinforcing nature of his membership therein determine to a great extent a basic and common self-structure. The process of social interaction and its consequent identifications, though, determines differential self-structures and self-referents which are related to culturally defined roles. Thus there are probably both similarities and differences in the self-structures of males and females. In fact there are probably as many different areas of the self as there are definite groups with which an individual identifies although these are imbedded in a more basic cultural matrix.

These two general propositions suggest that some technique should be devised which would open this area to experimental verification. Specifically, the object of the present study was to investigate the feasibility of a technique which would chart the unexplored regions of the extended self and its referents. The technique decided upon was a self-rating schedule. Although this is a simple instrument, it was felt that the merits of a straightforward device should be investigated first before attempting to use the complex projective methods. Accordingly, then, the primary aim was to demonstrate whether an instrument which

meets the necessary statistical requirements can be developed. Since the reliability of such an instrument is probably the sine qua non of its validity, the former problem logically must be settled first. When this is accomplished, the inductive-deductive process of science with its strictures of validity and empirical verification can begin.

A secondary intent of this study was to pose some questions that follow from theoretical considerations in an effort to partially answer them. Of course the reliability of this instrument must be assumed if meaningful answers are to be expected, but the work of Hartocollis (8) and Gladin (5) indicated that this would be the case. It was hoped that this method would shed light on the following questions.

1. Are there distinguishable areas of the self-structure differing in psychological significance to the individual?

Since this is a nomothetic approach, and since a select population of college students was tested, the answer to this and the following questions applied only to groups and more particularly college groups. The self-structures of college students have much in common. Traditionally the college population is composed of a select group primarily representing a certain segment of American society who are thrown together in a common social milieu. Further, selective factors such as native intelligence, financial security, and class expectations operate in the direction of

attracting and molding certain characteristic types of self-structures. Therefore, it seems likely that intellectual, college, and home referents might tap different crucial areas of the self structure. A fourth area utilizing physical self-referents was deemed important since the American college culture places a high value on physical appearance.

2. Do the sexes exhibit differences in their self-structure?

Due to the process of cultural conditioning the defined roles of males and females probably have their psychological counterparts in the personality organization of individuals and consequently should be reflected in their self-structures.

3. Is the college experience associated with changes in the self-structure?

Since the college experience is usually coincident with the period extending from late adolescence through young adulthood, and since the college years are in marked contrast with pre-college life, the resultant change in personality should be manifest in the self-structure.

4. Is there any correlation between education and the tendency to regard oneself as an abstraction rather than as a physical object?

Murphy (15, p. 521) enumerated several hypotheses relating to the self, and this question was derived from one of them. Since this experimental technique might be appropriate to a question of this sort, it was hoped that the results of the present study would shed light on Murphy's hypothesis.

TECHNIQUE AND METHOD

According to the results of two investigators (5, 8), it was suggested that items representative of the self-referents relating to the physical self and its appurtenances, possessions, group identifications, intellectual symbols, and affective experiences might be utilized in the construction of a self-rating schedule. These studies indicated that items grouped under pertinent categories tend to have high split-half reliabilities. One study showed that this technique might reflect both overall modifications due to living in a collegiate environment and the effects of other cultural variables.

The schedule was composed of 44 items which were assumed to possess face validity. It was hoped that a structure would be evidenced, showing itself by virtue of internal consistency within each category and non-significant or relatively lower intercorrelations between categories. The definitions of the four categories and the items comprising each category, numbered as they are in the schedule, appear below.

1. Intellectual

   These items referred to things which are an integral part of a college student's career and are concretely related to academic pursuits. One item, "My belief in free speech", was indicative of a broader cultural value.

2. Physical

These items referred primarily to the observable person and his appurtenances.

3. Home

These items referred to the home and high school surrounds.

4. College

These items referred specifically to Michigan State College and its symbolic representations. One item, "College students in general", had a more abstract referent.

Items Comprising Each Category

Intellectual

23. My grade point average
35. My present educational plans
10. My IQ
21. My notebook
41. My belief in free speech
28. My reputation on campus as a student
8. My command of the English language
32. A term paper in my major subject
15. My "brains"
38. The textbook in my favorite course

Physical

13. My fingernails
31. My reflection in a mirror
42. My nose
29. The color of my hair
26. My complexion
18. A photograph of myself
39. My eyebrows
24. The clothes I am wearing now
11. My height
36. My appearance in a bathing suit

Home

20. My bedroom at home
44. My high school's newspaper
16. My hometown
19. My family
14. My old high school
33. My high school teachers
30. My high school's senior prom
5. The neighborhood I played in as a child
9. My high school's football team
37. My old high school chums

Group

17. Michigan State College
34. MSC's football team
27. The reputation of MSC in the Big Ten
43. The officers of my class
7. My immediate circle of friends
12. Beaumont Tower
22. College students in general
25. MSC's library
40. The name of Michigan State College when it appears in a national magazine or on the radio
6. President Hannah's success as Assistant Secretary of Defense

Anchoring Items

1. The blood in my veins
2. Blood spilled on the floor from a cut in my hand
3. My hair
4. Hair on the floor which has just been cut from my head

The first four items were intended to anchor the individual's frame of reference and were not scored. All items were randomly arranged.

The schedule was administered to 129 students attending Michigan State College. There were 32 subjects each in the freshman, sophomore, and junior classes, and 33 in the senior class. Approximately three-fourths of the schedules were given to students enrolled in courses taught by the psychology department of Michigan State College, while the remainder was solicited from the college dormitories. Seventy-seven subjects were males and fifty-two were females.

The subjects were instructed to rate each item on a six-point scale with intervals of twenty percentage points extending from 0 percent to 100 percent. The six points were: 0, 20, 40, 60, 80, and 100 percent. It was felt that a scale employing the idea of percentage is more meaningful

to the student than are the simple integer scales. The lowest extreme was defined as representing something that has nothing to do with the individual, like the moon, while the uppermost extreme was defined as being a very important part of the self like the central nervous system. A diagram was incorporated on the item sheet to guide the subject's ratings.

RESULTS

As stated previously, certain statistical considerations must be satisfied before this technique can be used in scientific research. But the resultant statistics are mainly the empirical material by which the soundness of a theory may be evaluated. The following discussion will therefore proceed at the most parsimonious descriptive level analyzing the data as ratings of items and at an inferential level interpreting the data as to their theoretical import.

Question 1.

Are there distinguishable areas of the self-structure differing in psychological significance to the individual?

If it is assumed, as theory has suggested, that the self-referents are organized into regions that exhibit a definable structure, the statistics will reveal the nature of this structure. Tables I and II indicate that the ratings of the items organized themselves into a fairly definite pattern. The relatively high reliability coefficients of Table I indicate homogeneity or internal consistency within each category. The relatively lower intercorrelations of Table II show considerable independence between categories. That is, ratings of items within a category tend to be more closely related than ratings between categories. If the items are divided as they were

TABLE I

SPLIT-HALF RELIABILITY COEFFICIENTS FOR EACH CATEGORY CORRECTED BY THE SPEARMAN-BROWN PROPHECY FORMULA

Category	Reliability coefficient
Intellectual	.79
Physical	.88
Home	.76
Group	.82

TABLE II

INTELLECTUAL, PHYSICAL, HOME, AND GROUP CATEGORIES AND THEIR INTERCORRELATIONS

(N = 129)

	P	H	G
I	.23 (.27)*	.35 (.45)	.47 (.58)
P		.15 (.18)	.22 (.26)
H			.54 (.68)

*Parentheses indicate correction for attenuation.

.17 significant at the 5 percent level of confidence
.22 significant at the 1 percent level of confidence

when the reliabilities for each category were computed, the split-half reliability for the entire schedule is .90.

Table II shows that when the intercorrelations between the categories are corrected for attenuation, the consequent coefficients yield theoretical values indicating the degree of overlap between the categories. These indices show that when the sources for unreliability of measurements between categories are ruled out, the corrected coefficients yield higher values. Since the reliability coefficients derived from internal consistency methods are usually underestimated, the reported coefficients corrected for attenuation probably are overestimates of the true values. Table II therefore shows slightly overestimated values of the degree of overlap between the categories. If the categories overlapped completely, the coefficient would be one.

Keeping these things in mind, it is clear that the ratings of items in the Physical category are differentiated from all other categories. In contrast the theoretical correlation between ratings of items in the Home and Group categories is .68, indicating relatively high overlap. The corrected coefficient between the Intellectual and Group categories is .58 which is relatively high, and the coefficient between the Intellectual and Home categories is a moderately high coefficient of .45.

On the whole the emergent pattern seems fairly well established, but the higher relationships need further

elaboration. It was expected that the Home and Group categories would be completely independent since it was thought that they tap functionally different areas of the self-structure, but the data revealed a theoretical correlation of .68. In spite of this finding there is not complete overlapping, and later results will make this point clear. Also the overlap between the Intellectual and Group categories is .58, but since the Group category contains referents associated with the intellectual atmosphere of a college, it is probable that group identifications become confounded with intellectual referents. There is little doubt, though, that the Physical category is a well differentiated area within the self-structure.

Table III gives the mean ratings for each category and Table IV reveals that the differences between all categories are significant with the exception of the difference between the Intellectual and Physical categories. On a hierarchical scale the Intellectual and Physical categories rank uppermost followed by the Home and Group categories in that order. The interpretation pertinent to the present study is that the regions of the self-structure have varying degrees of psychological importance to the individual.

The significant intercorrelations of Table II should be considered since no correlation was desirable as indicants of structure. This phenomenon might be regarded from

TABLE III

MEAN RATINGS FOR EACH CATEGORY

Category	Mean
Intellectual	63.5
Physical	60.1
Home	42.0
Group	32.4

TABLE IV

't' RATIOS BETWEEN THE MEANS OF THE INTELLECTUAL, PHYSICAL, HOME, AND GROUP CATEGORIES

(N = 129)

	I	P	H	G
I		1.6	14.8	23.0
P			8.6	13.6
H				7.4

1.98 significant at the 5 percent level of confidence
2.62 significant at the 1 percent level of confidence

two viewpoints. First, these data might be attributable to behavior unique to the schedule. That is, a schedule frame of reference might have been adopted encompassing the upper, middle, or lower parts of the rating scale. Thus ratings varied within this range irrespective of categories. The explanation in accord with this thesis, however, is that individuals tend to vary in the extent of their self-involvement -- a psychological condition that cuts across all areas of the self-structure.

Although the reliability coefficients of Table I with the possible exception of the Physical category are slightly below the desired values, it can be assumed that if comparability of items were improved, the coefficients could be raised to an acceptable level. Intercorrelations of every item with each other or correlations of each item with the total category score would indicate those items homogeneous with one another. If the poor items were eliminated, and if items with equal intercorrelations as compared to the other items were added, the addition of about ten such items to each category would raise all category reliabilities to very satisfactory values. Ideally, the method of factor analysis should be applied in refining this self-rating schedule.

Question 2.

Do the sexes exhibit differences in their self-structure?

According to the data of Table V, the differences

TABLE V

MEAN RATINGS FOR EACH CATEGORY BY SEX

Sex	Mean ratings			
	Intellectual	Physical	Home	Group
Male	64.7	57.5	42.5	33.3
Female	62.3	63.9	41.4	31.2

between sexes for the Intellectual, Home, and Group categories are not significant. But when a one-tailed 't' test was applied to the difference in the Physical category, the difference of 6.4 points was significant at the 5 percent level of confidence. Here a 't' ratio of 1.66 is required for significance, and the obtained 't' ratio was 1.66.

Theoretically these results probably indicate that the Intellectual, Home, and Group categories do not tap those areas of the self-structure which are sex-linked, while the differential results in the Physical category suggest that this area has distinguishable psychological importance to each sex. In light of the culturally defined role of women as passive sought-after objects by the ascendant male, and considering the culturally ingrained value of physical attractiveness in heterosexual activities, it seems likely that the physical referents comprise a sex-linked area of the self-structure, and the higher value placed upon them by women is to be expected. There are probably other sex-linked areas of the self-structure which this schedule has not reached.

Question 3.

Is the college experience associated with changes in the self-structure?

The following results were not based upon an ideal representative sample of the college population since many of the subjects were drawn from courses catering to students

with special needs and interests. In regard to this, as Figure 1 indicates, there is a peak in the Intellectual, Physical, and Group curves at the junior level. If this trend is a function of some factor within the non-representative sample, the explanation for this trend is not evident in the data. Therefore, since it is dubious to assume that some selective variable was confounding the results, the data were interpreted as if they were really the manifestations of the social psychological processes.

Another source for concern is the possible inadequacy of controls. Since this study attempted to investigate the self-rating schedule *per se*, no control group consisting of a non-college population was used. This methodological technique would have indicated whether the college experience was actually the crucial variable operating. Therefore, the generalizations derived from the data must, in this case, be regarded with caution.

As a partial control, though, the mean ratings for all categories were computed for age levels. This was done in order to check whether the impact of the college experience rather than age was the more important variable affecting the results. The data of Table VI reveal trends presumably stemming from the college experience while Table VII gives the aforementioned control data. Figures 1 and 2 are graphs representing the data of Tables VI and VII, respectively.

As a difference of approximately seven points in the

TABLE VI

MEAN RATINGS FOR EACH CATEGORY BY CLASS LEVELS

Class	Mean ratings			
	Intellectual	Physical	Home	Group
Freshman	61.2	53.3	43.8	28.3
Sophomore	62.0	62.3	42.8	33.3
Junior	68.4	64.4	43.6	38.3
Senior	62.4	60.3	38.1	29.9

TABLE VII

MEAN RATINGS FOR EACH CATEGORY BY AGE LEVELS

Age level	Mean ratings			
	Intellectual	Physical	Home	Group
18-19	62.1	58.2	46.4	32.2
20-21	64.2	65.0	40.0	34.1
22-26	64.8	53.6	38.8	28.8

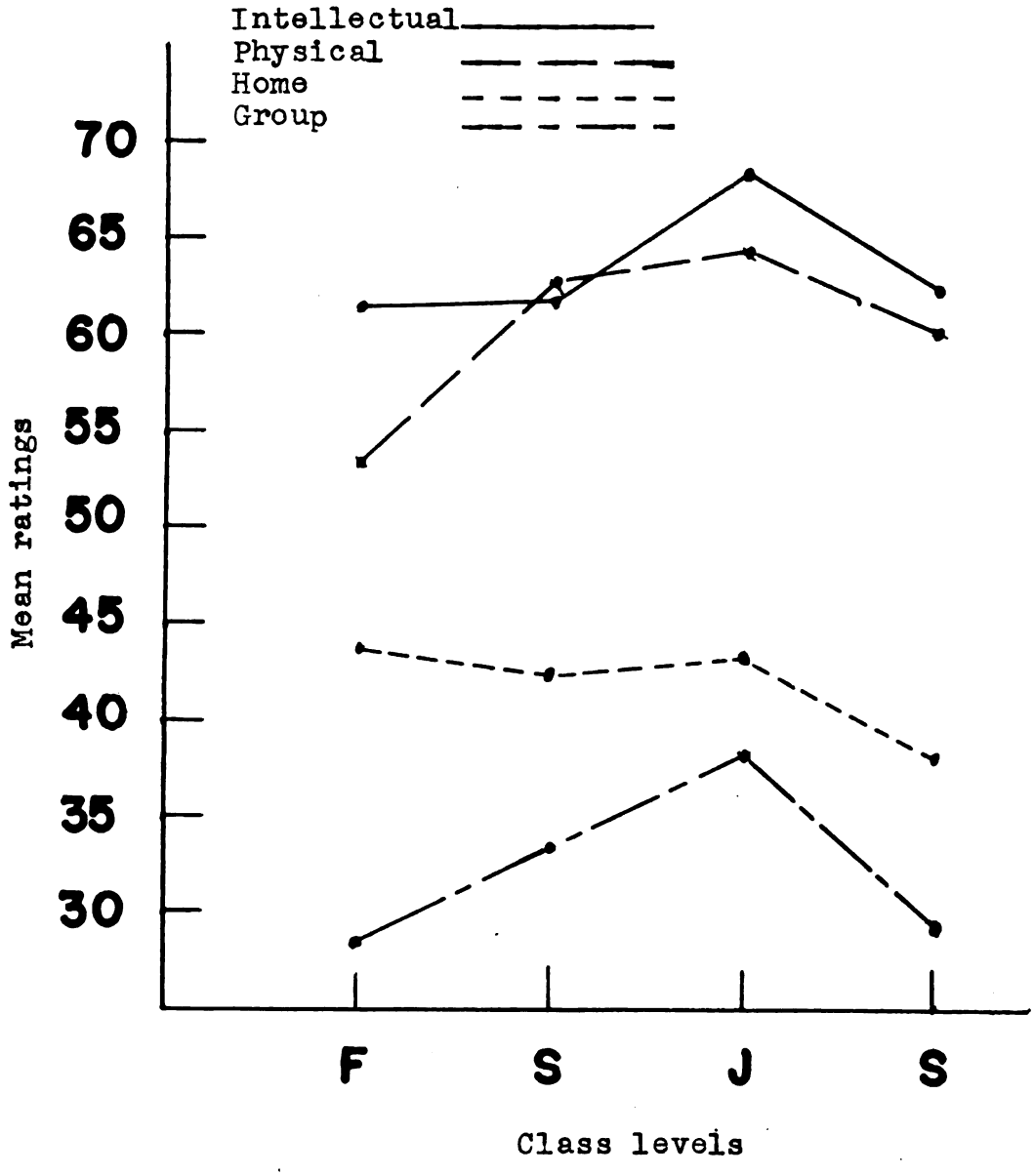

Figure 1. Mean ratings for each category by class levels.

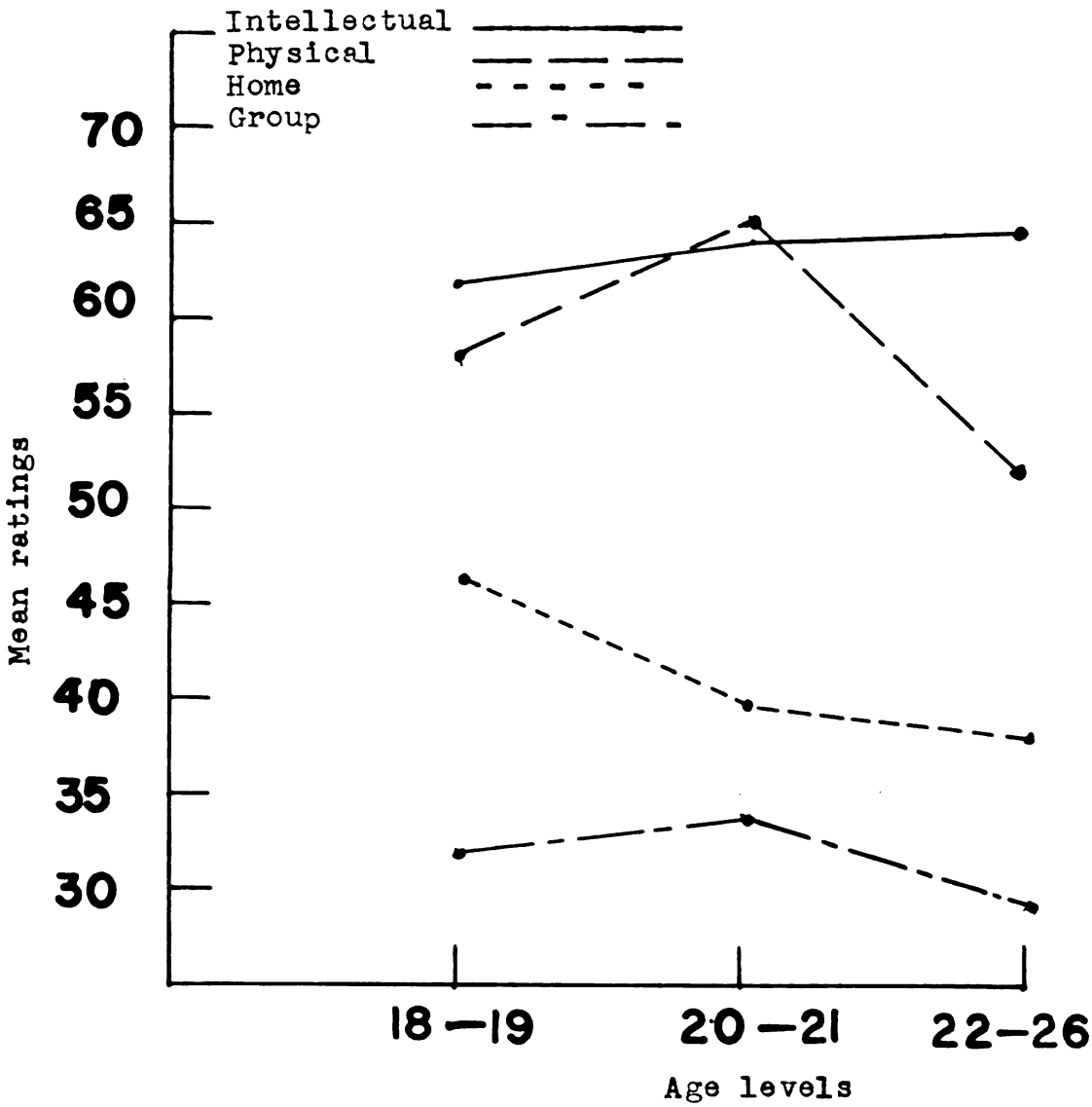

Figure 2. Mean ratings for each category by age levels.

Intellectual category is required for significance at the 5 percent level of confidence, the upward trend from the freshman to junior years evidences a significant increased emphasis on the referents consistuting this area. The negligible differences in the Intellectual category between age levels of Table VII probably show that the college experience rather than age contributes to the increased ratings of the intellectual referents between the freshman and junior groups. The decrement of six points between the junior and senior groups might be due to chance, but theoretically considered, the intellectual area of the self-structure probably increases in psychological importance to the college student as a result of his college experience. Then, with the prospect of graduation and its practical vocational implications, he "turns away" from his ivy tower and looks toward the future. The self-structure is modified accordingly.

A comparison of the mean ratings for each class and age level in the Physical category indicates a curvilinear tendency in both cases. Figures 1 and 2 show this trend clearly. When the curves are analyzed individually, it appears that the difference of 11.1 points between the freshman and junior groups is significant beyond the 5 percent level of confidence, and the difference of 12.4 between the 20-21 and 22-26 age levels is significant beyond the 5 percent level of confidence. In the former case the

difference is significant in an incremental direction whereas in the latter instance, the difference is significant in a decremental direction. Since significance is primarily a matter of degree, the curvilinear tendency viewed from a molar point of view might give a better description of the changes in the self-structure than an atomistic analysis of the situation. In this case parsimony permits only the statement that there is probably some determinant modifying the importance of the physical referents to the individual as he passes through his college career. Any social-cultural explanation as was invoked when considering the differences in the Intellectual category is somewhat obscure here.

Both Tables VI and VII and the derived Figures 1 and 2 show a downward trend of mean ratings in the Home category, but the only difference that is significant is between the 18-19 and 22-26 age levels. About a seven point difference is necessary here for significance at the 5 percent level of confidence. From these data it seems that age rather than the college experience is the factor determining the trend toward lowered mean ratings in the Home category. These empirical facts probably represent a decline in the psychological significance that the home and its surrounds have to the self-structure of the college student. Since a control group was not used, it is difficult to say definitely whether this phenomenon is the result of the college experience or,

as these data tend to indicate, due to age. Further, these results tend to confirm the notion that with social maturation there is a process operating which increases the psychological distance from the home, a condition which manifests itself in the self-structure.

If this weaning process is a valid assumption, it might be expected that these former allegiances will be displaced on to the group which has replaced the home environment. The ascending mean ratings of Table VI in the Group category tend in part to confirm this expectation. The increase of ten points between the freshman and junior groups is significant beyond the 5 percent level of confidence since only about seven points are needed for significance. Theoretically this trend indicates that the self-structure associated with the college group gains in psychological meaning to the individual up to a point. Then, interestingly enough, there is a marked drop in mean ratings between the junior and senior groups which is significant beyond the 5 percent level of confidence; and similarly, as Table VII shows, there is a non-significant decline of 3.2 points between the 18-19 and 22-26 age levels. A comparable pattern was evidenced when the mean ratings on the Intellectual category were analyzed. Here again the college experience rather than age seems to be the crucial variable. The explanation for this declining effect probably is that the seniors

become concerned with their future plans and the significance of the self-referents encompassed by living in a college milieu is reduced and supplanted by referents projected into the future. Again the area of the self-structure and its group referents are modified in the direction of decreasing importance to the individual.

Question 4.

Is there any correlation between education and the tendency to regard oneself as an abstraction rather than as a physical object?

The method and technique of this study are less appropriate to this question than they are to the preceding issues. A proper study would cover a much greater educational span, and the abstraction referents should probably have different content. But the effect might be revealed by the mean ratings in the Physical and Group categories of Table VI. Murphy's original hypothesis (15, p. 521) suggested that the tendency to regard oneself as an abstraction increases while the tendency to regard oneself as a physical object decreases with education. The mean ratings in the Intellectual and Group categories of Table VI show a positive correlation rather than the hypothesized inverse relationship. There is a significant upward swing between the freshman and junior levels in the Group category and a corresponding upward swing in the Physical category between the freshman and junior groups which approaches significance.

Then both means decrease between the junior and senior groups but only the Group decrement between the junior and senior levels is significant. If anything, these results point to a positive correlation between the trends.

Theoretically the Intellectual and Group categories correlated .58, and, as was pointed out, this was probably due to the close association between the two in the college milieu. As Figures 1 and 2 show, both the Intellectual and Group curves are practically identical. It seems, then, that some independent variable, possibly the college experience, is affecting these areas in a like manner. The Home and Group categories, which are correlated .68, are probably not affected by the independent variable in the same way because, as Figures 1 and 2 indicate, the Home and Group curves are dissimilar especially between the freshman and sophomore and the 18-19 and 20-21 age groups. Since the trends are in the expected direction for the Home and Group categories, their validity as measures of different self-areas is partially confirmed. The fact that the Physical category which was theoretically the most differentiated area of the self-structure is also similar to the Intellectual and Group curves suggests that the independent variable affects the Physical area similarly. Since the results of Tables VI and VII and Figures 1 and 2 are based upon groupings of four and three respectively, any difference between the curves representing the same category might be ascribable solely to their grouping.

SUMMARY AND CONCLUSIONS

The purpose of this study was to investigate the usefulness of a self-rating schedule as a technique in describing the self. The need for such a technique was discussed and the general theory underlying it was examined. A secondary intent of the study was to partially answer some questions derived from theoretical considerations which could be clarified by this experimental schedule. The schedule was administered to 129 students attending Michigan State College.

The questions posed and the related findings were:

Question 1.

Are there distinguishable areas of the self-structure differing in psychological significance to the individual?

In general it was found that the subjects' ratings were organized with regard to four categories of items. These categories were conceived as representing definable areas within the self-structure. The four categories were: 1) Intellectual, 2) Physical, 3) Home, and 4) Group. The split-half reliability coefficients for each category were .79, .88, .76, and .82 respectively. Intercorrelations between categories were computed, and these values ranged from .22 to .54. The relatively low intercorrelations between categories as compared to the high split-half reliabilities were offered as empirical evidence of an assumed

self-structure. The hierarchical order among the four categories was deemed indicative of the psychological importance that these areas bear to the individual. Theoretical problems relating to the independence of the self-areas and improvement of reliability were discussed. Since insignificant intercorrelations between categories were desirable for this study, possible explanations for the significant intercorrelations were advanced.

Question 2.

Do the sexes exhibit differences in their self-structure?

The sample was classified on the basis of sex and comparisons of mean ratings for each category were made. The Intellectual, Home, and Group categories revealed negligible differences between the sexes while the difference in the Physical category was significant, favoring as might be expected, the female sex. It was surmised that the three non-discriminating categories are not sensitive to sex-linked areas of the self-structure, but the Physical category is.

Question 3.

Is the college experience associated with changes in the self-structure?

The cross-sectional approach was applied, utilizing the four class levels as representative of a developmental sequence. A partial check was employed whereby differences

related to age were compared to class level differences. The possibility of bias in the sample was noted and due caution was advised. Developmental trends were considered for each category, and significant differences, when they appeared, were discussed. Interpretations and explanations were advanced for the empirical phenomena. The decrement between the junior and senior classes and the 20-21 and 22-26 age groups necessitated a specific interpretation. In general it was suggested that the Intellectual area of the self-structure increases in psychological importance to the college student until the junior year when a decrease occurs. A similar curvilinear trend was found for the Physical area. The Home area appeared to decrease in psychological significance to the individual with time. Developmentally the group area of the self-structure appeared to correlate with the intellectual area in its psychological significance to the individual.

Question 4.

Is there any correlation between education and the tendency to regard oneself as an abstraction rather than as a physical object?

Although this technique is not ideally appropriate to a question framed in this way, the mean ratings between the Physical and Group categories appear to be positively correlated for succeeding class and age levels rather than inversely related as was implied by Murphy.

It may be concluded that with refinement this experimental self-rating schedule can be made sufficiently reliable to warrant its use. Its validity, as an instrument in revealing the self-structure, may then be investigated. Some results of this study tended to corroborate what theory might have indicated, and this partially, at least, attests to its validity. The main advantage of this schedule is its ease of administration and simplicity, but, on the other hand, it is limited because it is useful only with a college population. Further research with other populations and behavioral validation in experimentally controlled situations are indicated.

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APPENDIX

Experimental Schedule

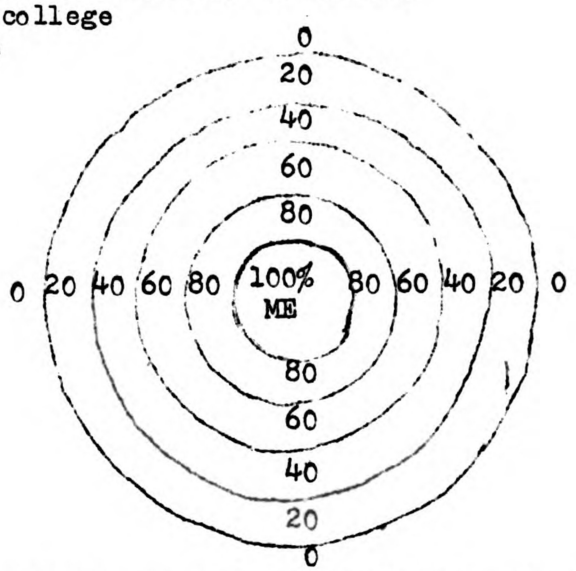
This is a study of your SELF. You are asked to report what things, objects, and groups are considered part of yourself and what you consider foreign to you. The scale of closeness to You runs from 100% for something which is entirely part of you, like your nervous system, to 0% for something that has nothing to do with you, like the moon. Use the six percentages as shown in the diagram: 100%, 80%, 60%, 40%, 20%, 0%. Example: "My shoes" If you think of your shoes as part of you, as being very close to the real you, rate them high, perhaps 60% or 80%. If you feel that your shoes have very little to do with you, and could just as well be part of someone else, rate them low, perhaps 20% or 40%. The question is <u>not</u> how much you like these things nor how good they are but how intimately these things are included in your concept of your self. Would you be a different person if these things were different? Rate all items.

Fill in identifying data on top of test sheet.

Name:_____Class_____Major:_____

Age: _____ Sex:_____

..1. The blood in my veins
..2. Blood spilled on the floor from a cut in my hand.
..3. My hair
..4. Hair on the floor which has just been cut from my head.
..5. The neighborhood I played in as a child
..6. President Hannah's success as Assistant Secretary of Defense
..7. My immediate circle of friends in college
...8. My command of the English language
...9. My high school's football team
..10. My IQ
..11. My height
..12. Beaumont Tower
..13. My fingernails
..14. My old high school
..15. My "brains"
..16. My hometown
...17. Michigan State College
...18. A photograph of myself
...19. My family
...20. My bedroom at home
...21. My notebook
...22. College students in general
...23. My grade point average



Remember. The question is not how good these things are but how intimately these things are included in your concept of your self.

....24. The clothes I am wearing now
....25. MSC's library
....26. My complexion
....27. The reputation of MSC in the Big Ten
....28. My reputation on the campus as a student
....29. The color of my hair
....30. My high school's senior prom
....31. My reflection in a mirror
....32. A term paper in my major subject
....33. My high school's teachers
....34. MSC's football team
....35. My present educational plans
....36. My appearance in a bathing suit
....37. My old high school chums
....38. The textbook in my favorite course.
....39. My eyebrows
....40. The name of Michigan State College when it appears in a national magazine or on the radio
....41. My belief in free speech
....42. My nose
....43. The officers of my class
....44. My high school's newspaper