Psychological study of values

Harold Paulson
The University of Montana

Follow this and additional works at: https://scholarworks.umt.edu/etd
Let us know how access to this document benefits you.

Recommended Citation
Paulson, Harold, "Psychological study of values" (1940). Graduate Student Theses, Dissertations, & Professional Papers. 5015.
https://scholarworks.umt.edu/etd/5015

This Thesis is brought to you for free and open access by the Graduate School at ScholarWorks at University of Montana. It has been accepted for inclusion in Graduate Student Theses, Dissertations, & Professional Papers by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.
A

PSYCHOLOGICAL STUDY

of

VALUES

by

Harold Paulson

B. A., Luther College, Decorah, Iowa, 1937

Presented in partial fulfillment of the
requirement for the degree of Master of
Arts.

Montana State University

1940

Approved:

J. O. Smith

Chairman of Board
of Examiners

W. G. Bateman

Chairman of Committee
on Graduate Study
Table of Contents

I. Introduction. ........................................... 1
   A. Statement of the Problem

II. The Meaning of Values. ................................. 3

III. The Measurement of Values. ........................... 12
    A. Five Commonly Accepted Methods
    B. Techniques Used for Measuring Adolescent Personality
    C. Questionnaire Method
    D. Method of Paired Comparisons
    E. Technique Described by Likert
    F. Thurstone's Personality Schedule
    G. Rommer's Generalized Attitude Scales

IV. Allport's Interpretation and Use of the Term Values. 20

V. The Correlation of Values with Intelligence. ........ 26

VI. Mean Scores on Allport's Values Test. ............... 31

VII. Summary and Conclusions. ............................ 34

Bibliography
Tables and Graphs

Table

I. Correlations Between Values and Intelligence Obtained from 350 University Men and Women........ 27

II. Means and Standard Deviations Obtained from 350 University Men and Women on Allport's Values Scale................................. 27

III. Correlations Between Values and Intelligence Obtained from the 20 University Men and Women Who Scored Lowest on the Otis Test........ 28

IV. Correlations Between Values and Intelligence Obtained from the 20 University Men and Women Who Scored Highest on the Otis Test................................. 28

V. Means and Standard Deviations Obtained from the 20 Lowest Scoring University Men and Women on the Otis Test......................... 29

VI. Means and Standard Deviations Obtained from the 20 Highest Scoring University Men and Women on the Otis Test................................. 29

VII. Mean Scores on Allport's Scale as Reported by Author, Obtained from 463 Male and 313 Female College Students and Adults (unselected)................................. 31

VIII. Mean Scores on Allport's Scale Obtained from 204 Male and 157 Female University Students................................................................. 31

IX. Mean Scores on Allport's Scale Obtained from 65 Seniors, 87 Juniors, 127 Sophomores, and 77 Freshmen, all University Men and Women......................................................... 32

Graph

1. Frequency Distribution of Scores Obtained from 350 University Men and Women on Otis Test................................................................. 28a
Part I. Introduction

I do not propose in this paper to settle the questions as to the reality and meaning of values. The primary purpose of my thesis is to make a study of the correlation between values and intelligence.

My aim in Part II is to present a few interpretations of some leading philosophers, educators, and psychologists on the subject of values in order to help us better to understand the varied meaning of the term "values."

An analysis of the complete philosophy represented by each point of view has not been attempted for it is beyond the scope and purpose of this paper. Neither has an attempt been made to represent all points of view. Only a small sample of several points of view as to the meaning of values in general, and more specifically several conflicting points of view on some zero definite aspects of values have been described in Part II in order to bring out the scope and varied usage of the term end to show how complex and involved can become a discussion on a single aspect (perhaps at first a seemingly simple and obvious aspect) of the meaning of values. (This in turn will help us to appreciate more some of the problems involved in the measurement of values, and will show us the limitations of a single test or scale for the measurement of values.)

It is very difficult, if not impossible, to speak of values without using the words worth, want, effect, cognition, personality traits, interests and attitudes, since they are so intricately bound together with the term values; hence I have used all of these terms rather indiscriminately throughout the paper.
When possible, I have used quotations quite freely so as to avoid
misinterpretation and misrepresentation.

Vernon and Allport's Study of Values is only one of many different
methods and techniques used in measuring values. In Part III I have
briefly described a few of the other methods used.

Part IV is meant to give us some insight into Vernon and Allport's
basic philosophy of 'traits', attitudes, interests and values, and the
interpretation of their measuring scales, Study of Values.

Part V is concerned with the work done on correlating values with
intelligence.

A few tables constitute Part VI of this study. It seemed desirable
to include the norms of the values test obtained from the present study
so as to compare them with the norms reported by Vernon and Allport. The
last table shows the norms representing each class of the 350 university
students tested.
Part II. The Meaning of Values

A sociologist has said that attitudes are mirrors of actual or potential activity, and that a value is what an attitude toward something is.

Thurstone writes, "Attitude is the effect for or against a psychological object."

"Psychologically a value is anything that any individual desires for any reason whatever," says Freeman.

"If we mean by value the capacity of objects to afford satisfaction to individuals, there is then no doubt that values exist. They have this satisfactoriness in virtue of the complex or pattern of different qualities they present. There is no question of the existence of values in this sense: every individual may verify it for himself. But the objectivity of values means more than this. It means that objects by virtue of their distinctive nature (resolvable into terms of their component qualities and constituent relations) are able to yield characteristic satisfactions in which intelligent individuals can share. Now it is obvious that this cannot be said of objects in immediate experience. In this case their satisfactoriness depends upon conditions peculiar to the individual who realizes them, upon his psycho-physical constitution, his past experiences and his present circumstances. Those conditions produce different interests and desires, different capacities for enjoyment and appreciation, in different individuals. Hence, while values indubitably exist, in the

2, Freeman, Social Psychology, p. 123 to 234; Henry Holt and Company, N. Y. 1933
sense that objects by virtue of their intrinsic qualities are able to
afford satisfaction to intelligent individuals, these values appear in
many, if not in all, cases, to be subjective, that is, relative to
the desires and tendencies of individuals. 3

One school of value philosophy, represented recently by Perry, 4
Pratt, and Pepper, finds the definition of intrinsic value in the
affective-volitional relation of interest. Those writers conceive
value to have a psychological basis in feeling and to designate relations
between an individual and objects or acts liked or disliked. The other
school, defended ably in America by Urban, finds value asserted in a
unique type of judgment, and defines it as a category of being. In
Urban's own words his point of view is "objective, non-psychological." 5
A third point of view is that presented by Moore and Russell, that value
is a quality.

"The exponents of a relational value-theory maintain that value
defined as a relation of interest is a sufficient description of value
wherever it occurs." 6

Picard states that Urban believes a relational definition of
value leaves out an essential (to Mr. Urban the essential) mark of
value: "Why," asks Urban, "should fulfillment of interest be a good?
Why should pleasure confer a value? In all such definitions valueableness
is already assumed—as an intrinsic quality of pleasure or of
fulfillment, as the case may be." Recognizing that all included under
the word value cannot be defined as affective-volitional relations of

interest, Picard says that there is one class of values, sometimes
spoken of as immediate, which can be defined adequately in such terms.
One may like or dislike given objects or acts apart from any reflection.
A bright color, for example, or a warm breeze may arouse in one a thrill
of pleasure. To defend the application of the term value to such expe-
riences, he says it is necessary only to indicate that it has a clear
meaning when so used.

"Then I speak of my likings and dislikes as having to do with
value. I use the term to designate relations between a feeling individu-
al and certain objects or acts. Value is not assumed to be "an
intrinsic quality of pleasure," for the relations are between a pleased
or displeased individual and liked or disliked objects or acts. "Interest"
may be used in almost the same meaning, although "interest" frequently
emphasizes the first term and "value" the second term of the same
relation."

As to the relational value-theory Urban says further, "The
value of an object consists, it is said, in its satisfaction of desire,
or more broadly, fulfillment of interest. But it is always possible
to raise further questions which show conclusively that the value
concept is already presupposed. Is the interest itself worthy of being
satisfied? Is the object worthy of being of interest? In other words,
the fact of intrinsic value requires us to find the essence of value
in something other than this type of relation."

"To defend the adequacy of a relational definition of immediate

values, I may point out that such a definition is adequate because
the questions raised by Dr. Urban are not a part of the experience.
They need not be answered because they are not asked. My liking for a
hot bath may have no reflective basis. Reflection might convince me
that the worth of a hot bath, at the time it was taken, was entirely
negative. Surely we are not compelled to analyze our feelings in
order to have them, and I can see no objection to calling the relations
that come into being when things are liked or disliked, relations of
immediate value. 9

Being of like opinion on this point, Prall says, "Judgment, while
it may be instrumental in our coming to the point of assuming the attitude
of liking toward one thing rather than another, never itself constitutes
that attitude. The liking is all we have. We may be able to inquire
why we like; but when we do thus inquire, we only analyze our liking
into its respective parts or else show that one judgment of value
implies the existence of another value than the one judged. 10

We may say, then, that on the one hand those who define all
values in affective-volitional terms resort that the valuing individual
is related to the objects or acts valued through feeling. On the other
hand, those writers who maintain that this type of definition leaves
out the essential element of value find their essential element in
judgment. However, those who hold this latter view consider that
feeling plays a part in the value-experience, so it may be said that
they describe the individual on both knowing and feeling in the
experience of value.

---

10 Prall, J. Philo. Vol. 19, p. 479
Mr. Fisher denies that value itself is apprehended by the
cognitive aspect of consciousness, although he holds that the complex
"value-of-an-object" may thus be apprehended. Fisher accepts, therefore,
one horn of Perry's delims ("the attitude of interest either constitutes
values or it cognizes them"), and denies that worth can be cognized at
all.

Picard's suggested solution of the problem lies in the direction
of maintaining that there are two broad types of value one of which
may be defined adequately as affective-volitional relations of interest,
the other as worth which lies wholly within the realm of cognition. He
says that the judgment of worth of an object should be distinguished
from worth itself which is "apprehended" through feeling. His article
attempts to prove that intrinsic value never properly designates the
relation of objects to both aspects of conscious activity at once, and
that we can say of no conscious state that it contains a blend of feeling
and cognition that defies analysis into two distinct aspects.

"To separate the two kinds of interest, it is only necessary to
reflect that immediate value may be positive while at the same time
cognitive worth is negative, and vice versa. I may continue to like a
certain picture that my newly acquired aesthetic taste condemns. I
may heartily dislike music that I knew and recognize to be 'good.'"

To this Proll answers "that the taste has not been acquired, or
that taste simply means ability to perceive that the picture fulfills
certain requirements. This is indeed purely a matter of judgment, and
the judgment is one of fact, not one of value. But even if it is a correct judgment, the aesthetic worth of the picture depends on the picture's conforming to the requirements, not on an observer's knowing that it does so conform."

The above statement seems clearly to imply an attempt to establish values objectively. Perhaps anticipating the probability of such an inference the author defends himself by stating that "this does not make the worth or value of the picture objective and independent, or constituted otherwise than in a subject-object relation. For the standard is of course the formula drawn up by someone in accordance with likes and dislikes, whether of the formulator himself or of someone whose likes and dislikes he was attempting to satisfy or to define. And conformity to the standard (an objective fact which any properly trained person may note) means being of such sort that when the subject comes along whose likes the standard names, this subject will like the work of art, the picture. It will be for him immediately valuable."

Nevertheless Prall's dichotomizing (when he states that "the aesthetic worth of the picture depends on the picture's conforming to the requirements, and not on an observer's knowing that it does so conform") seems strange and inconsistent especially since in the same breath he points out how the standard is formulated. Perry likewise dichotomizes when he states that "the attitude of interest either constitutes values or it cognizes them."

---

Prall, J. Philo. Vol. 20, p. 129

Perry, J. Philo. Vol. 20, p. 129

See footnote 12
We cannot say that the worth of the picture lies either in "the picture's conforming to the requirements," or an "an observer's knowing that it does so conform." Neither one of these two factors by itself constitutes the worth of the picture; they are interchangeably indispensable—both together constituting the worth. It is obvious that there can be no worth unless there are requirements which help establish it; likewise there can be no worth without a person's cognition of it. Both parts of the above statement demonstrate that either constituent of worth depends upon the other for its existence.

Just as inadequate have been other attempts to establish values as being either subjective or objective. To say, for example, that the experience of a hot shower is an immediate value may be justifiable, but to say without reservation that it is subjective is too narrow a view; the fact being that without the objective aspect of the experience—the shower, there could be no subjective aspect—the affective state. Together they constitute the value.

Likewise, to say that values are objective and to describe them as being intrinsic qualities of objects or things is also inadequate. I say, for example, that an apple is good. To say that the good is an intrinsic quality of the apple and hence objective, is not entirely correct because another person may taste the apple and report that it is very bad. However, for anything to be good it must have an element of goodness within it, the same as for anything to be desired it must be desirable. As indicated by the above example, the fact that the apple has an element of goodness within it does not preclude a similar report
of taste from different subjects.

To further illustrate the last point, a piece of music liked by one person and not liked by another regardless of its "conforming to the requirements." For example, a classical piece of music may be liked by one person and not by another, whereas a jazz piece may be liked by the latter person but not by the former. A third piece of music may be liked by both persons, even though the degree to which they like it may not be so great as their individual choice noted above. This third piece of music, then is at least partially "conforming to the requirements" which are obviously representing two different standards of value.

Hence we may logically say that the worth of an object depends as much upon a person's reaction to the object as it does to the objects conforming to a number of set requirements as determined by a standard.

Briefly enumerated, the four above discussed viewpoints of worth are:

1. Worth may be determined wholly by feeling-relationships.
2. Worth may lie within feeling when it is not determined wholly by feeling-relationships.
3. Worth may be apprehended in the value-judgment which is the cognitive aspect of a whole experience of value in which cognition and feeling are blended.
4. Worth may be cognized only, and this worth-experience may be quite distinct from the feeling-relationship of value between the individual who has the worth-experience and the object esteemed.
I think that we might consider not one or the other of these viewpoints as being exclusively correct but rather all of them as being logical explanations and descriptions of value. They are all dependent upon the definition of the situation. None of them are broad enough to include definitions of all situations; hence, we must consider each viewpoint correct from its own approach.

The definition of a situation and the interpretation of the worth of anything may vary with:

1. the same individual in the same situation;
2. different individuals in different situations;
3. the same individual in different situations; and
4. different individuals in the same situation.

In conclusion, I would say that values are a resultant product of the relationship between the subject and the object, and reside wholly neither in the subject nor wholly in the object. (This does not mean that a relationship between the same subject and the same object will produce the same value in each case. The value is subject to the variable listed above.) Instead of saying that value is an intrinsic quality of an object, I think it could be more nearly correct to say that values is an intrinsic potentiality of an object; the form it takes, therefore, depends also upon the contribution to its constituency of the subject in relation to the object.

Perhaps, as Dewey says, "there are no such things as values" (meaning that things are never values). Nevertheless, "there are such entities, such realities, such individual forms as values." They have being and reality.

---

18. Prall, J. Phil. Vol. 21, p. 118
There are five commonly accepted methods of measuring interest. The most common and least valuable is probably some instrument which asks people what they are interested in. There is something of an improvement in the measures which get at interest indirectly through a series of likes and dislikes, the purport of which is not obvious to the person answering. Report by an individual of what he actually does is sometimes used as an indication of interest. The fourth type of measure is an information test based on the assumption that those who know most in a given area must have the most interest in it. Actual observation of the individual's behavior is the last and best measure.  

A program for the measurement of adolescent personality at the University of California Institute of Child Welfare provides for the cumulative investigation of the same group of 200 children over a period of six years beginning in pre-adolescence and running through the early adolescent years. Measurements of physical growth, physiological function, motor performance, and intellectual ability have been made in the hope that concomitant variables may be discovered which are significant for personality. In a more direct approach such techniques as are usually referred to as "personality measurements" have been employed with the hope of achieving some valid criteria of personality changes. Group tests include self-report inventories, interest and attitude questionnaires and associates' ratings. Observations in a variety of situations are

recorded by means of ratings on such personality traits as self-expression, social prestige, poise, and by means of time-frequency records of talking, smiling, and the like.

From an interest questionnaire, adolescent boy and girl interests in things to see, things to do, magazines to read, places to go, and what to do when grown up are analyzed; selected items show significant relationship to such other variables as intelligence test scores, psychologists' ratings of social prestige and physical attractiveness, and to the child's popularity in terms of classmates' estimates. Alternative interpretations are possible to account for the relationship between intelligence and interests; whatever the initial cause of relationship, the tendency of the children of different intelligence levels to respond selectively to their environments may be regarded as a developmental factor of some consequence. Similarly the rate of interests is significant in relation to a child's social standing.

An example of the Method of Paired Comparisons for social values is Thurstone's experiment in measuring the seriousness of different crimes or offenses. A list of nineteen offenses were arranged in pairs so that every one of them was paired with every other one, thus making a total of 171 pairs of offenses. For each comparison the subject decides which of the two is the stronger. From the results is determined the mean magnitude for the group of each offense.

An interesting and very significant statement which may be applied to the measurement of values in general may well be quoted here. The present study, says Thurstone, shows that qualitative judgments of a rather intangible sort, loaded usually with personal opinion, bias, and
even strong feelings and regarded generally as the direct antitheses of quantitative measurement are nevertheless amenable to the type of quantitative analysis which is associated historically with psycho-physiology. It is of some interest to see that a set of numerical values can be established by which the 171 observed proportions of judgments about crime and offenses can be summarized in generalized form.\(^5\)

Another method used in the measurement of attitudes in the technique described by Likert. The problem was to study five major "attitude areas" international relations, race relations, economic conflict, political conflict, and religion. A questionnaire was constructed on the basis of a survey made of the questionnaires already administered by other psychologists for these purposes.

The kind of questionnaire material falls into four main classes:
1. Questions to be answered by a Yes, a question mark, or a No.
2. A series of multiple-choice questions in which one of five possible answers was to be selected.
3. A series of propositions to be responded to by the words:
   (a) strongly approve
   (b) approve
   (c) undecided
   (d) disapprove
   (e) strongly disapprove
4. A series of abbreviated newspaper narratives about social conflicts terminating in a sentence describing the outcome of this conflict, the student being asked to indicate his

\(^5\) Likert, Archives of Psychology, Vol. 22, pp. 5-55
response to this outcome.

(a) the same set of five responses as used under 3 are
used here.

The percentage of individuals that checked a given position on a
particular statement was converted into sigma values. The sigma
deviations were always taken from the mean and the positive value was
assigned to the end which seemed to favor internationalism, the negative
being assigned to the end which favored nationalism. The sigma values
were computed from percentages obtained from a sample of 100 cases, all
male, selected from one particular university.

Although the sigma technique seemed to be quite satisfactory for
the intended use, it was decided to try a simpler technique to see if it
gave results comparable with the sigma technique. The simpler technique
involved the assigning of values of from 1 to 5 to each of the five
different positions on the five-point statements. The CIE end was always
assigned to the negative end of the sigma scale, and the FIVL end to
the positive end of the sigma scale.

After assigning in this manner the numerical values to the possible
responses, the score for each individual was determined by finding the
average of the numerical values of the positions that he checked. Actually,
since the number of statements in the same for all individuals, the sum
of the numerical scores rather than the mean was used. (The reliability
of odds vs. evens for this method yielded essentially the same values
as those obtained with the sigma method of scoring.)

The steps in the construction of Thurstone's \textit{Personality Schedule}
briefly enumerated are:

1. Specification of the attitude variable to be measured.
   
   (a) First requirement in specifying the attitude variable
   is that it should be so stated that one can speak of
   it in terms of "more" and "less."

2. Collection of a wide variety of opinions relating to the specified
   attitude variable.
   
   (a) Editing this material for a list of about one hundred
   brief statements of opinion.
   
   (1) This list of statements should be expressive of
   attitudes covering as far as possible all
   gradations from one end of the scale to the
   other.

3. Sorting the statements into an imaginary scale representing the
   attitude variable.
   
   (a) About three hundred subjects are asked to arrange the
   statements in eleven piles ranging from opinions most
   strongly affirmative to those most strongly negative.
   
   (1) Only the two ends and the middle pile are labelled.
   The middle pile is indicated for neutral opinions.

4. Calculation of the scale value of each statement.
   
   (a) The unit of measurement for the scale of attitudes is
   the standard deviation of the dispersion projected on
   the psychological scale of attitudes by a statement
   of opinion, chosen as a standard.

5. Elimination of some statements by the criterion of ambiguity.
6. Elimination of some statements by the criterion of irrelevance.

7. Selection of a shorter list of about twenty statements evenly graduated along the scale.

The final list of statements is presented to the group to be studied with the request that they check with plus signs all the statements with which they agree and with minus signs all the statements with which they disagree. The score for each person is the average scale value of all the statements that he has indorsed.

Four types of description by means of a scale of attitudes should be possible says Thurstone. These are:

1. the average or mean attitude of a particular individual on the issue at stake;

2. the range of opinion that he is willing to accept or tolerate;

3. the relative popularity of each attitude of the scale for a designated group as shown by the frequency distribution for that group; and

4. the degree of homogeneity or heterogeneity in the attitudes of a designated group on the issue as shown by the spread or dispersion of its frequency distribution.

Being motivated seemingly by the realization of several limitations of the scaling technique developed by Thurstone, Homans has developed some principles for generalized attitude scales.

The method is a modification of Thurstone's techniques, and aims to retain the primary theoretical advantages of his scaling techniques but at the same time enable the measurement of many more attitudes with

no increase in labor.

The method, so far as scaling is concerned, is based on the
close theory as that upon which the attitude scales constructed
by Thurstone and his students are based; namely, on the psycho-
physical theorem that equally-often-observed differences are equal.

The essential difference of the method from that developed
by Thurstone lies in the assumption that attitude toward any one
of a large group or class of objects can validly be measured on
a single scale. For example, instead of having separate scales
for measuring attitudes toward members of different nationalities,
Bemmar's contention is that it should be perfectly possible to find
or invent a sufficiently large and varied number of affective state-
ments which when scaled would accurately measure the attitude of
individuals or groups toward any one or all of the racial or national
categories in question; it being necessary only to define a particular
national or racial group for measurement purposes by having the
subjects write in at the top of the completed scale the name of the
group toward which attitude is to be measured. The procedure would
result in what might be called a series of master scales for classes
of objects, situations, institutions, ideas, etc.

An example of such a master scale is one constructed by Ella
Silence under Bemmar's direction.

The scale purports to measure student attitude toward any high-
school subject. One hundred fifty affective statements were collected
from the following sources:

1. approximately 100 college freshman themes written on school
   subjects liked or disliked
2. textbooks on methods of teaching and other educational
literature; and
3. statements written by Miss Silence.

These statements were microphotographed on slips of paper and
sorted by 189 college and high-school students and scaled accord­
ing to the equally-often-noticed-difference principle. Of the
189 sortings 39 were rejected on the basis of two criteria. (1) If a student had more than one-fifth of all statements in one
of the eleven scale categories, this was taken as evidence of
careless sorting. (2) A few students misunderstood the instruction, in that they assumed that they must think of some particular subject
which they had studied and must sort the statements as a measure of
their own attitude toward this hypothetical subject.

On the basis of the 150 sortings, two equivalent forms, A and
B, of the attitude scale were constructed by selecting 45 pairs of
opinions of which the experimental scale values (medians) and
measures of variability (interquartile ranges) were as nearly as
possible identical.

The subject is directed to "place a plus sign (+) before
each statement with which you agree, and a minus sign (-) before
each statement with which you disagree with reference to each of
the subjects listed at the left of the statements."

Part IV. Allport's Interpretation and Use of the Term Values

"The doctrine of attitudes, which has almost completely captured and refashioned the science of social psychology, requires clarification. Historical considerations make it necessary to include a wide range of subjective determining tendencies among attitudes; yet it is possible and desirable to distinguish between attitudes and many correlative forms of readiness-for-response. Attitudes may be driving or directive, specific or general, common or individual. They characteristically have a material or conceptual object of reference, and are 'pointed' in some direction with respect to this object. If so generalized that the object and the direction are not identifiable they merge into the 'traits' of personality. Common attitudes can be roughly classified and measured, and when abstracted from the personalities which contain them they constitute the 'socius' which is that portion of the unique personality of special interest to social science. Though attitudes are inferred rather than observed, they must be admitted as real and substantial ingredients in human nature for without them it is impossible to account satisfactorily either for the consistency of any individual's behavior or for the stability of any society." 1

1 A trait of personality is a characteristic form of behavior more generalized than the single reaction or simple habit." It should probably be regarded both as a generalized habit (more general

than it has hitherto been customary to consider) and as a prominent "determining tendency" in behavior.

The concept of trait in this sense, says Allport, provides for a rapprochement between the older atomistic conceptions of personality and the contentions of the modern German schools which abjure analysis. They point out how during analysis the patent unities in personality are lost among the disjecta membra of reflexes, conditioned reflexes, habits, etc. If, however, we view traits as "form-qualities" pervading to a considerable extent the single adjustments of the individual, important unities are preserved in the analysis.

In order to get a broader view of Allport's interpretation of the term "traits," I shall briefly enumerate a few points from his article "The Study of the Undivided Personality." 3

1. The way in which traits are joined together is as much a part of the personality as are the traits themselves. (a) This form of combination, or form-quality, is irretrievably lost in any scheme for the analysis of personality.

2. The form-quality being as it is an attribute of the entire integrated personality, is manifest in every act of the individual (so long as it is not a "disassociated act") but certain behavior and certain products of behavior are more susceptible to investigation than others.

3. In practical life we gain a knowledge of personality without conscious reference to any of the signs by which the perception is mediated.

(a) Herein is implied intuitive knowledge by which we may be given to understand that personality is constituted by something plus simply a sum-totality of the individual's traits.

4. A really thoroughgoing comprehension of personality entails a sympathetic understanding of the individual's driving interests and sentiments, and of the way in which these interests and sentiments are organized and expressed in his habitual adjustments to the major problems of life.

(a) This understanding is gained through a kind of "empathy," the genitive nature of which is not entirely clear, but which undoubtedly enables us to experience sympathetically the form-quality in the personality of an associate without observing our apprehension of his total personality by an undue emphasis upon single traits.

Vernon and Allport's Study of Values scale is founded upon the following definitive set of methodological and theoretical postulates:

1. The isolation and measurement of single habits, traits, or capacities within personality give an incomplete and frequently misleading picture. It is evident that in some fashion, though we do not know how, the significance...
of these single factors is dependent upon the total personality in which they are set.

2. Unfortunately for science, the total personality which contains these elements is a unique system. Since our unique system is never strictly comparable with any other unique system it is difficult to see how the total personality can ever be studied by the method of measurement.

3. If measurement is to be employed at all, and if at the same time, the really significant levels of personality are to be approached, the investigator must find within a personality broad functions that are common to all personalities. Those functions must not be so narrow as to be meaningless nor so inclusive as to be unique and unaccessible; and they must be universal enough to provide a basis for the comparison of one person with another.

4. The field of values and interests seems best to fulfill those requirements, and so to be a suitable ground upon which to construct a scale.

5. An inventory of some of the basic human values common to all men is a prerequisite to a scale for their measurement. Previous tests of interests have been based on inadequate classifications: the interests selected have been too trivial, too heterogeneous or entangled with the ulterior objectives of vocational guidance.

6. The most reasonable and convincing a priori analysis of the values experienced by man seems to the authors to be that of Edward Spranger (in his "Types of Men"). It is his brilliant work that suggested the present scale. Only two of the tenets of Spranger's school of thought, however, have been adopted here; namely, the view that men are best known through a study of their subjective values, and the six-fold classification of such values.

Spranger's six-fold classification endorsed by the authors of Study of Values are as follows:

1. The theoretical. The dominant interest of the theoretical man is the discovery of truth. He takes a "cognitive" attitude: one that divests itself of judgments regarding the beauty or utility of objects, and seeks only to observe and to reason.

2. The economic. The economic man is characteristically interested in what is useful. This type is thoroughly "practical" and conforms well to the prevailing conception of the average American business man.

3. The aesthetic. The aesthetic man sees his highest value in form and harmony. Each single experience is judged from the standpoint of grace, symmetry, or fitness. He regards life as a manifold of events; each single impression is enjoyed for its own sake.

4. The social. The highest value for this type is love of people, whether of one or many, whether conjugal, filial, ...
friendly or philanthropic.

5. The political. The political man is primarily interested in power. His activities are not necessarily within the narrow field of politics, but he wishes above all else for personal power, influence, and renown.

6. The religious. The highest value for the religious man may be called unity. He is mystical and seeks to comprehend the cosmos as a whole, to relate himself to its embracing totality.

Spranger does not imply that a given man belongs exclusively to one or another of these types of values. In every personality there exists all of these six values, although frequently in varying degrees of prominence. The Study of Values is designed to determine the relative prominence of each of these six values in a given personality.

Spranger himself inclines to consider his types as merely ideal. The applicability of his classification to concrete personalities is of only incidental interest to him, whereas it constitutes the entire problem of the Study of Values.
Part V. The Correlation of Values with Intelligence

This correlation study is based on the results obtained from 350 university students, representing all four classes and graduate students.

The two measures used for this study were: Higher Examinations—Form A of "Otis Self-Administering Tests of Mental Ability," and Vernon and Allport's "A Study of Values."

These tests were administered during regular class periods to students registered in the fall and winter quarters of the current year in the following courses: General Psychology, Child Psychology, Advanced Sociology, Abnormal Psychology, and Educational and Vocational Guidance.

Otis reports the reliability coefficient of correlation for this test to be .92. The validity coefficient of correlation between the Higher Examination and the Army Alpha was found to be .72 ± .05.

The split half reliability of Allport's values test is fairly satisfactory. For 776 subjects of both sexes a reliability of + .72 was obtained. In one investigation repeat reliabilities of the total test approximate + .82. Allport states that the validity of the scale cannot be established adequately by the use of rating methods, since the unfamiliarity of most raters with the conceptual nature of the values makes for low reliability in their judgments. Considering the test as a whole, however, correlations of + .45 to + .59 with ratings have been obtained (if corrected for attenuation, these figures would indicate an agreement of about + .63).
The correlations between intelligence and the six values in Allport’s scale, as obtained from 350 university students, are negligible.

See Table 1.

<table>
<thead>
<tr>
<th>Correlation</th>
<th>Theoretical</th>
<th>Economic</th>
<th>Aesthetic</th>
<th>Social</th>
<th>Political</th>
<th>Religious</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.092</td>
<td>0.115</td>
<td>0.142</td>
<td>0.083</td>
<td>0.140</td>
<td>0.020</td>
</tr>
<tr>
<td>$r$</td>
<td>0.036</td>
<td>0.035</td>
<td>0.035</td>
<td>0.036</td>
<td>0.035</td>
<td>0.036</td>
</tr>
</tbody>
</table>

Table 1: Correlations (with probable error) between intelligence, as measured by the Otis scale, and the six values in Allport’s scale, based on results obtained from 350 university men and women.

There is no correlation between intelligence and each of the three values, theoretical, social, and religious, as measured by the two above mentioned scales.

A negative correlation of $0.145 \pm 0.035$ was found between intelligence and the economic value. There is a correlation of $0.142 \pm 0.035$ for the aesthetic value. And for the political value, a negative correlation of $0.140 \pm 0.035$ was found.

Table 2 shows the means and standard deviations of the six values in Allport’s scale.

<table>
<thead>
<tr>
<th></th>
<th>Theoretical</th>
<th>Economic</th>
<th>Aesthetic</th>
<th>Social</th>
<th>Political</th>
<th>Religious</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>20.39</td>
<td>31.52</td>
<td>26.95</td>
<td>31.17</td>
<td>32.63</td>
<td>30.43</td>
</tr>
<tr>
<td>$S_0 \Delta_0$</td>
<td>0.72</td>
<td>7.03</td>
<td>7.93</td>
<td>5.96</td>
<td>7.08</td>
<td>20.13</td>
</tr>
</tbody>
</table>

Table 2: Means and standard deviations of the six values in Allport’s scale, based on results obtained from 350 university men and women.

It is interesting to note that the standard deviation for the
religious value is 20.13 while for the other five values the standard deviation varies only from 5.96 (social) to 7.92 (aesthetic). This is especially significant in view of the fact that the distribution range is about the same for all six values. The means vary only from 26.85 (aesthetic) to 32.63 (religious).

The scores on the Otis test range from 34 to 75. The mean is 57.98 while the standard deviation is only 8.23. This shows, as indicated by graph 1, that the scores are clustered heavily about the mean and above. 212 of the 350 scores may be found within the mean or above; this is almost two-thirds of all the cases.

Taking the 20 cases which scored the highest and the 20 cases which scored the lowest on the Otis test, seven correlations above .20 were found. See tables 3 and 4.

<table>
<thead>
<tr>
<th></th>
<th>Theoretical</th>
<th>Economic</th>
<th>Aesthetic</th>
<th>Social</th>
<th>Political</th>
<th>Religious</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlation</td>
<td>.274</td>
<td>.098</td>
<td>.307</td>
<td>-.204</td>
<td>.143</td>
<td>.032</td>
</tr>
<tr>
<td>P. E.</td>
<td>.139</td>
<td>.149</td>
<td>.137</td>
<td>.144</td>
<td>.148</td>
<td>.151</td>
</tr>
</tbody>
</table>

Table 3: Correlations (with probable error) between intelligence, as measured by the Otis test, and the six values in Allport's scale, based on the results obtained from the 20 university men and women who scored lowest on the Otis test.

<table>
<thead>
<tr>
<th></th>
<th>Theoretical</th>
<th>Economic</th>
<th>Aesthetic</th>
<th>Social</th>
<th>Political</th>
<th>Religious</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlation</td>
<td>-.057</td>
<td>.022</td>
<td>.209</td>
<td>-.244</td>
<td>-.578</td>
<td>.269</td>
</tr>
<tr>
<td>P. E.</td>
<td>.151</td>
<td>.151</td>
<td>.144</td>
<td>.142</td>
<td>.100</td>
<td>.340</td>
</tr>
</tbody>
</table>

Table 4: Correlations (with probable error) between intelligence, as measured by the Otis test, and the six values in Allport's scale, based on the results obtained from the 20 university men and women who scored
GRAPH I.

FREQUENCY DISTRIBUTION OF SCORES REPRESENTING
300 UNIVERSITY MEN AND WOMEN ON OTIS TEST.
highest on the Otis test. Of these correlations, however, are offset by the high probable error due to the small number of cases sampled.

Based on the 20 cases scoring the highest on the Otis test, a negative correlation of $r = -.578$ was found for the political value.

Tables 5 and 6 show the means and standard deviations of the six values in Allport's scale. They represent the 20 lowest scoring cases and the 20 highest scoring cases on the Otis test.

<table>
<thead>
<tr>
<th></th>
<th>Theoretical</th>
<th>Economic</th>
<th>Aesthetic</th>
<th>Social</th>
<th>Political</th>
<th>Religious</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>27.85</td>
<td>31.25</td>
<td>24.70</td>
<td>31.35</td>
<td>33.20</td>
<td>31.65</td>
</tr>
<tr>
<td>S. D.</td>
<td>5.32</td>
<td>5.36</td>
<td>4.52</td>
<td>5.09</td>
<td>5.17</td>
<td>1.43</td>
</tr>
</tbody>
</table>

Table 5: Means and standard deviations of the six values in Allport's scale, based on the results obtained from the 20 lowest scoring university men and women on the Otis test.

<table>
<thead>
<tr>
<th></th>
<th>Theoretical</th>
<th>Economic</th>
<th>Aesthetic</th>
<th>Social</th>
<th>Political</th>
<th>Religious</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>27.30</td>
<td>30.65</td>
<td>27.85</td>
<td>32.65</td>
<td>29.30</td>
<td>31.75</td>
</tr>
<tr>
<td>S. D.</td>
<td>6.18</td>
<td>6.39</td>
<td>7.10</td>
<td>5.37</td>
<td>0.65</td>
<td>22.36</td>
</tr>
</tbody>
</table>

Table 6: Means and standard deviation of the six values in Allport's scale, based on the results obtained from the 20 highest scoring university men and women on the Otis test.

Again it is true that while the standard deviations for five of the values, representing the 20 lowest scoring cases on the Otis test, vary only between 4.52 (aesthetic) and 5.36 (economic), the standard deviation for the religious value is 1.43.

Likewise for the 20 highest scoring cases the standard deviation for the religious value is 22.36, while for the other five values the standard
deviations vary only from 5.37 (social) to 8.65 (political).

The 20 highest scores on the Otis test ranged from 70 to 75. The mean is 71.70 with a standard deviation of 1.45. The 20 lowest scores ranged from 34 to 45. The mean is 40.60 with a standard deviation of 2.94.

The means on the values scale representing the 20 lowest scoring cases on the Otis test vary from 24.70 (aesthetic) to 33.20 (political). The means representing the 20 highest scoring cases vary from 27.80 (theoretical) to 32.65 (social).
Part VI. Mean Scores on Allport's Values Test

Table 7 shows the mean scores on the six values in Allport's scale as reported by him. The scores represent 463 male and 313 female college students and adults.

Table 8 shows the mean scores on the six values in Allport's scale based on the results obtained from 204 male and 157 female university students in the present study.

<table>
<thead>
<tr>
<th></th>
<th>Theoretical</th>
<th>Economic</th>
<th>Aesthetic</th>
<th>Social</th>
<th>Political</th>
<th>Religious</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>31.49</td>
<td>31.28</td>
<td>27.61</td>
<td>29.68</td>
<td>31.86</td>
<td>28.07</td>
</tr>
<tr>
<td>Women</td>
<td>28.04</td>
<td>28.72</td>
<td>32.47</td>
<td>31.42</td>
<td>28.00</td>
<td>31.37</td>
</tr>
</tbody>
</table>

Table 7: Mean scores on the six values in Allport's scale as reported by the author. The scores represent 463 male and 313 female college students and adults (unselected).

<table>
<thead>
<tr>
<th></th>
<th>Theoretical</th>
<th>Economic</th>
<th>Aesthetic</th>
<th>Social</th>
<th>Political</th>
<th>Religious</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>29.36</td>
<td>33.83</td>
<td>23.77</td>
<td>29.89</td>
<td>31.35</td>
<td>28.68</td>
</tr>
<tr>
<td>Women</td>
<td>21.71</td>
<td>28.66</td>
<td>30.74</td>
<td>32.67</td>
<td>30.65</td>
<td>32.61</td>
</tr>
</tbody>
</table>

Table 8: Mean scores on the six values in Allport's scale based on the results obtained from 204 male and 157 female university students in the present study.

Tables 7 and 8 indicate that the men are more interested than the women in the theoretical, economic, and political values, whereas the women are more interested than the men in the aesthetic, social and religious values.
Comparing Tables 7 and 8, it may be noted that the group measured in the present study scored higher in the social, political, and religious values, while the group measured by Allport scored higher in the theoretical and aesthetic values. The men in the present study scored higher in the economic value than those measured by Allport, while the women in Allport's study scored slightly higher in the economic value than the women measured in the present study.

Table 9 shows the mean scores on the six values in Allport's scale representing each class of the 350 university students tested.

<table>
<thead>
<tr>
<th></th>
<th>Theoretical</th>
<th>Economic</th>
<th>Aesthetic</th>
<th>Social</th>
<th>Political</th>
<th>Religious</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seniors</td>
<td>27.77</td>
<td>29.86</td>
<td>30.66</td>
<td>31.72</td>
<td>30.97</td>
<td>31.01</td>
</tr>
<tr>
<td>Juniors</td>
<td>27.44</td>
<td>31.55</td>
<td>27.60</td>
<td>31.53</td>
<td>31.54</td>
<td>30.37</td>
</tr>
<tr>
<td>Sophomores</td>
<td>26.50</td>
<td>31.70</td>
<td>28.61</td>
<td>30.75</td>
<td>33.45</td>
<td>30.58</td>
</tr>
<tr>
<td>Freshmen</td>
<td>27.20</td>
<td>33.31</td>
<td>29.09</td>
<td>30.30</td>
<td>31.47</td>
<td>30.49</td>
</tr>
</tbody>
</table>

On the one hand, interest in the economic value decreases each year from 33.51 in the freshman year to 28.66 in the senior year. Likewise, interest in the political value decreases from 34.47 in the freshman year to 30.97 in the senior year.

On the other hand, interest in the aesthetic value increases from 25.09 in the freshman year to 28.66 in the senior year. Likewise, interest in the social value increases from 30.30 in the freshman year to 31.72 in the senior year.
Table 9 also shows the tendency for interest to increase in the theoretical value from the freshman year to the senior year. Interest in the religious value shows no consistency in progression or regression.
Part VII. Summary and Conclusions

1. Four logical viewpoints of worth:
   a. Worth may be determined wholly by feeling-relations.
   b. Worth may lie within feeling when it is not determined wholly
      by feeling-relations.
   c. Worth may be apprehended in the value-judgment which is the
      cognitive aspect of a whole experience of value in which
      cognition and feeling are blended.
   d. Worth may be cognized only, and this worth-experience may be
      quite distinct from the feeling-relation of value between
      the individual who has the worth-experience and the object
      esteemed.

2. Instead of saying that value is an intrinsic quality of an object, it
   would be more nearly correct to say that value is an intrinsic
   potentiality of an object; the form it takes, therefore, depends
   also upon the contribution to its constituency of the subject in
   relation to the object.

3. Values are a resultant product of the relationship between the subject
   and the object, and reside wholly neither in the subject nor wholly
   in the object.

4. The correlation between intelligence, as measured by the Otis scale, and
   the six values in Allport’s scale are negligible.

5. A possible explanation for the lack of correlation between intelligence
   and values in the present study is the fact that almost two-thirds
   of the cases lie within and above the mean on the Otis test.
On Allport's values test, the men score higher than the women in the theoretical, economic, and political values. The women score higher than the men in the aesthetic, social, and religious values.

This study shows that:

a. interest in the economic and political values is less for each class from the freshmen to the seniors.

b. interest in the aesthetic and social values progressively increase from the freshman to the senior class.

c. there is a tendency also toward an increase in interest in the theoretical value from the freshman class to the senior class.

d. interest in the religious value is expressed about equally by each of the four classes, and by both the intelligent and unintelligent.
BIBLIOGRAPHY


