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AND COMPLEXITY-SIMPLICITY.

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THE RELATIONSHIP BETWEEN REPRESSSION-SENSITIZATION
AND COMPLEXITY-SIMPPLICITY

by
Larry Pat Ogilvie

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DEPARTMENT OF PSYCHOLOGY
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GRADUATE COLLEGE

I hereby recommend that this dissertation prepared under my direction by Larry Pat Ogilvie entitled The Relationship Between Repression-Sensitization And Complexity-Simplicity be accepted as fulfilling the dissertation requirement of the degree of Doctor of Philosophy.

Dissertation Director Date

After inspection of the final copy of the dissertation, the following members of the Final Examination Committee concur in its approval and recommend its acceptance:

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This approval and acceptance is contingent on the candidate's adequate performance and defense of this dissertation at the final oral examination. The inclusion of this sheet bound into the library copy of the dissertation is evidence of satisfactory performance at the final examination.
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SIGNED: [Signature]
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Deserving of the most appreciation is my wife, Dian, who after many years of untiring support, encouragement, and tolerance can relax a bit while her husband finally goes to work.
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ABSTRACT

In recent years the research into the personality correlates of the two dimensions of repression-sensitization and complexity-simplicity has uncovered some very similar findings. Sensitizers and "complex" people as compared to repressors and "simple" people have been found to be: (1) more unstable and more impulsive, (2) more anxious, (3) more likely to attribute hostility to themselves, (4) more negative in their self-concept, and (5) more likely to perceive differences between themselves and others rather than similarities. These findings suggested that the two dimensions were very similar and, in fact, almost identical.

An attempt was made to interrelate these two dimensions by intercorrelating two measures of each dimension. The two measures of repression-sensitization used were Byrne's Repression-Sensitization Scale and a perceptual defense measure devised by Shannon. The two measures of complexity-simplicity were the Barron-Welsh Art Judgment Scale and a group form of Kelly's Role Construct Repertory Test.

The results were ambiguous. The only significant correlation was between the two complexity-simplicity measures. On the basis of the results it was hypothesized that the complexity-simplicity dimension is the more uniform
one across different domains of content. One nearly significant correlation between the two dimensions was hypothesized to have been the result of similar content and task requirements for the two measures involved. Several hypotheses for the lack of correlation between the two repression-sensitization measures were put forth. Suggestions for changes in the experimental design for future research were made.
INTRODUCTION

In the 1940's considerable research was done on perception and its relationship to various personality variables. Growing out of one area of this research, mainly that of perceptual defense, was the continuum of repression-sensitization (R-S). This personality continuum was found to differentiate between those individuals who had difficulty in perceiving threatening stimuli and those who perceived threatening stimuli with relative ease. Further it was found that those individuals who had perceptual difficulty also gave evidence of blocking, repression, and avoidance when responding to conflictual stimuli in other contexts as well (Byrne, 1964). On the other hand, those who were accurate perceivers of threatening stimuli responded in other situations with intellectualization, sensitization, and general approach behavior (Byrne, 1964). Gordon (1957) was the first to call those individuals placed on the repression end of the continuum "repressors" and those on the sensitization end "sensitizers." In addition to repression, the defense mechanisms of denial and many types of rationalization were attributed to the repressor. Obsessive behaviors and ruminative behavior besides intellectualization were said to be characteristic of the sensitizer (Byrne, 1964). In time the body of research on
personality correlates of the repressor and sensitiz
er swelled. Soon the terms repressor and sensitiz
er no longer
strictly designated modes of perception, but rather they
came to indicate individuals who differed with respect to
their position on various personality dimensions. An early
stumbling block to research on R-S as a dimension of
personality was the lack of a widely accepted standard for
measurement. Ullmann (1962) and Altrocchi, Parsons, and
Dickoff (1960) attempted to devise empirical questionnaire-
type measures of R-S. However, Byrne's (1961) measure
consisting of 156 items from the MMPI became the standard
for differentiating repressors and sensitizers. Byrne
later revised the scale, shortening it and improving its
split-half reliability (Byrne, Barry, and Nelson, 1963).
With the impetus of a standard measure of R-S which enabled
investigators to compare their research, studies in this
area began to flourish anew.

Another segment of the perception-personality
research area led to studies of complexity-simplicity.
Initially the continuum of complexity-simplicity pertained
to the stimulus materials a subject viewed. Eventually,
however, people came to be described as being either
"complex" or "simple." Welsh (1949) was one of the first
to define this dimension. In his attempt to develop a
figure preference test as a psychodiagnostic instrument, he
found that some people characteristically preferred complex
figures while others almost always preferred simple figures. Barron and Welsh (1952) later developed an Art Judgment Scale which more reliably differentiated between these two types of people. Eysenck (1941a, 1941b) independently arrived at a complexity-simplicity dimension in his studies of aesthetic judgment. He found that a preference for the complex figure went along with preferences for subtle odors and for poems with relatively loose and variable rhyming schemes. A preference for simple figures went along with preferences for strong, obvious odors and poems with definite, unvarying rhythm and obvious rhyming schemes. Eventually Barron (1953) came around to studying complexity-simplicity as a personality dimension. Until 1955 complexity-simplicity was primarily measured by the Figure Preference measure. However, in 1955 Bieri introduced Kelly's (1955) Role Construct Repertory (REP) test as a measure of complexity-simplicity. Bieri also refined the dimension, calling it cognitive complexity-simplicity. His theory assumed certain differences in the cognitive structure of the complex as opposed to the simple person, whereas Barron did not explicitly state such assumptions. Bieri (1961) defines cognitive complexity as follows:

Cognitive complexity is a concept which is intended to reflect the relative differentiation of the person's construct system. It will be recalled that this system is presumed to mediate the perception of others and the anticipation of their behavior. The cognitively complex person is assumed to have available a greater number of
personal constructs to construe the behavior of others, while the cognitively simple person has available relatively few personal constructs (p. 359).

At this point the measurement of complexity-simplicity moved from assessing differences in the perception of objects to assessing differences in the perception of people. Sechrest and Jackson (1961) decided to see if these two ways of measuring complexity could be correlated. They correlated scores from Barron's (1953) Art Judgment Scale, the REP test, and two other measures of complexity-simplicity. They found the correlation among the measures to be low. This finding prompted Crockett (1965) to state that it was premature to assume that cognitive complexity existed as a general factor across domains of content. Crockett hypothesized,

Owing to constant individual differences in capacity, a modest correlation might be expected between measures of cognitive complexity taken from domains of events whose content was widely different. Nevertheless, other things equal, differences in cognitive complexity between two individuals should be found with respect to some domain when the events in that domain are differentially functional for the two people concerned. Similarly, a particular individual should show more or less complexity with respect to different domains depending upon the extent of his experience with the events they contain (p. 54).

On the surface it would appear that a dimension of emotional defense would not be closely related to one of cognitive style. However, research into the personality correlates of these two dimensions (repression-sensitization
and complexity-simplicity) has turned up some striking similarities.

One area in which there have been similar findings is that of interpersonal perception. Gordon (1957) asked a group of students to list those traits descriptive of their partners in a discussion group. He divided the group into repressors and sensitizers on the basis of the Wisconsin Inventory, a test battery containing a number of MMPI subscales and a variety of other measures thought to discriminate among individuals along the R-S continuum. On the basis of the results of his study, Gordon concluded,

Repressors tend to be more accurate in perceiving similarities between themselves and others, although they err in ascribing similarities when they don't exist. Sensitizers, on the other hand, tend to ascribe to others reactions different from their own; they are more accurate in perceiving differences, although this group errs in ascribing differences where they do not exist. . . . Neither group possesses overall superiority in predicting; the superiority of repressors in perceiving similarities is balanced by superiority of sensitizers in perceiving differences (p. 695).

In another study, Altrocchi (1961) found similar results. Bieri (1955), in his study of interpersonal perception, found that cognitive complexity as measured by the REP test was related more to the accurate prediction of differences between oneself and others than to the prediction of similarities. Also the simple person tended to perceive unwarranted or inaccurate similarities between himself and others.
These findings, that repressors and simple persons perceive people in one way and sensitizers and complex persons perceive people in another way, suggest that the R-S continuum and the complexity-simplicity continuum may parallel each other, at least along a dimension of interpersonal perception. Whether or not repression and simplicity would group on one end of a dimension of object perception, as opposed to one of interpersonal perception, while sensitization and complexity would group on the other end has yet to be demonstrated. Repressors have been shown to be "levelers" in a schematizing experiment in perception (Holzman and Gardner, 1959; Gardner, Holzman, Klein, Linton, and Spence, 1959). "Leveler" refers to that individual who seems to prefer to ignore, deny, or suppress differences between the size of squares in the schematizing experiment. Use of the defense of isolation, a defense used by sensitizers, was shown by the same authors to be related to "sharpening," that is, the appreciation and notation of change in the size of squares. Therefore the greater tendency to perceive similarities or to perceive differences between objects depends on whether a person is a repressor or a sensitizer, respectively. As far as the author knows no equivalent experiment has compared complex with simple persons. In any case, the interpersonal perception of the sensitizer seems to be similar to that of the complex person while that of the repressor is similar to the perception of
the simple person. A comparable relationship is suggested with regard to object perception but is as yet unproven.

One area in which there has been considerable correspondence between the findings for these two continua is that of correlated personality traits. In 1953 Barron did an extensive summary of his investigations of the personality correlates of complexity-simplicity as measured by the Barron-Welsh Art Judgment Scale. His subjects in these investigations were all college students. His article will be used as the main reference in this area of comparison. Byrne (1964) summarized most of the findings of studies utilizing the R-S scale. However, studies not included in his summary will be mentioned where relevant. The subjects used in these studies were either college students or psychiatric patients, both inpatients and outpatients.

Barron discovered that several scales of the MMPI correlated significantly with his measure of cognitive complexity. These scales and their correlation coefficients are as follows:

<table>
<thead>
<tr>
<th>Scale</th>
<th>Correlation Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masculinity-femininity (MF)</td>
<td>.18</td>
</tr>
<tr>
<td>Schizophrenia (Sc)</td>
<td>.37</td>
</tr>
<tr>
<td>Psychopathic deviant (Pd)</td>
<td>.36</td>
</tr>
<tr>
<td>Hysteria (Hy)</td>
<td>-.30</td>
</tr>
<tr>
<td>Welsh anxiety (special scale)</td>
<td>.34</td>
</tr>
<tr>
<td>F-scale (a validity scale)</td>
<td>.36</td>
</tr>
</tbody>
</table>

Weinberg (1964) in a factor analytic investigation using the R-S scale as one of the variables found that the Pd scale
correlated highly with the R-S scale. Joy (1963) found the following significant correlations between MMPI scales and the R-S scale:

- Hysteria: -.53
- Masculinity-femininity: .50
- F-scale: .62

Thus it appears that repressors and simple persons would score in a similar direction of the MMPI. Complex persons and sensitizers would score in the same direction with both appearing to have a more feminine orientation (positive correlation with Mf), to be more rebellious and resentful (positive correlation with Pd), to be less cheerful and enthusiastic (negative correlation with Hy), and to be more likely to have a set of socially deviant opinions (positive correlation with F).

Weinberg in the study referred to above found that in addition to the Pd scale, the R-S scale also correlated highly with emotional instability and impulsiveness. Barron found that complex persons described themselves on the Gough Adjective Checklist as being unstable, emotional, pleasure-seeking, distractable, and temperamental. Simple persons described themselves as stable, responsible, conscientious, patient, deliberate, and serious. Lomont (1965) found sensitizers to be more anxious than repressors. Barron also found this to be a trait complex persons applied to themselves; in addition he found that complex persons appeared more anxious on an objective measure of anxiety. Altrocchi,
Shrauger, and McLeod (1964) discovered that sensitizers attributed more hostility to themselves than did repressors. In Barron's study the complex persons described themselves as irritable, sarcastic, and bitter; whereas the simple persons viewed themselves as being peaceable, timid, and gentle. Grigg and Thorpe (1960) found that in general sensitizers had a more negative self-concept than did repressors. Looking back over the terms complex persons used to describe themselves, it appears that they, in general, have a more negative self-concept than do simple persons. In summary of these various findings, it appears that sensitizers and complex people as compared to repressors and simple people are: (1) more unstable and more impulsive; (2) more anxious; (3) attribute more hostility to themselves; and (4) in general, have a more negative self-concept. These four characteristics suggest that sensitizers and complex persons would appear more maladjusted. Byrne (1964) concluded this about sensitizers and Barron concluded this about complex persons. However, both Byrne and Barron noted that the evidence in this area was conflicting and suggested further research.

Another point of similarity in these two dimensions is sense of humor. O'Connell and Peterson (1964) found that sensitizers had a greater appreciation of humor on a humor test composed of 17 jokes and anecdotes. Barron found a
correlation of .39 between a rating scale of sense of humor and his measure of complexity-simplicity.

These studies point to a high degree of similarity between repressors and simple persons and between sensiti-zers and complex persons. Are there any personality traits with which the R-S and complexity-simplicity dimensions correlate differently? Apparently there are two, intelligence and ethnocentrism. Barron found that complexity was correlated .92 with rated intellect. However, Byrne (1964) in his review of studies correlating R-S with intelligence scales found only low, insignificant correlations, some in the positive direction and some in the negative direction. He concluded that the R-S scale and measures of intelligence were independent. Concerning ethnocentrism, Barron found that the Levinson-Sanford scale of ethnocentrism correlated -.27 with complexity. However, Joy (1963) reported a correlation of .55 between the R-S scale and the MMPI prejudice scale.

These two areas of discrepancy between the two dimensions suggest that further research is needed. Possibly these discrepancies may result from the fact that different scales were used to correlate with the two dimensions in both cases.

The fact that these two dimensions have so many of the same correlates is intriguing. However, before they can be related, the R-S scale and at least two major measures of
complexity-simplicity (Bieri's and Barron's) should be shown to be intercorrelated while using the same subject population. Also since several people have questioned the validity of the R-S scale (Feder, 1967; Silber and Grebstein, 1964) an additional measure of repression and sensitization should be intercorrelated. The type of measure which is still used for many repression-sensitization studies despite the controversy surrounding it is perceptual defense. Usually this consists of obtaining a threshold difference measure between the threshold for "neutral" words and the threshold for "conflict," "emotional," or "taboo" words, which are presented tachistoscopically. The rationale behind this measure is that repressors will have a higher threshold for taboo words as compared to neutral words, whereas sensitizers will have a lower threshold or at least a threshold equal to that of the neutral words.

The primary purpose of this study was, therefore, to intercorrelate these four measures (two of repression-sensitization and two of complexity-simplicity). In addition to a minimal significant correlation between most of the four measures the following findings were expected.

1. Since Sechrest and Jackson (1961) found a low correlation between the REP test and Barron-Welsh Art Judgment Scale, that finding was to be replicated here.
2. A high correlation was expected to exist between the R-S scale and the REP test and also the Art Judgment Scale. However, the R-S-REP correlation was expected to be higher than the R-S-Art Scale correlation because of the differences in scale content. In other words, the R-S and REP tests were expected to have higher correlations because these tests were apparently more influenced by the way in which a person perceives people, whereas the Art Scale was apparently more influenced by the way in which a person perceives objects. This prediction stemmed from Crockett's (1965) suggestion that the domain of content makes a difference in whether or not a person is judged to be complex or simple.

3. Since Tempone (1964) found a relationship between the R-S scale and a P-D measure, it was expected that the R-S scale and the P-D measure used here would correlate highly.
METHOD

Subjects

The subjects were fifty male psychiatric patients at the Veterans Administration Hospital, West Haven, Connecticut. The patients ranged in age of from 19 to 68 years old. They fitted into most diagnostic classifications with a mixture of character disorders, neurotics and psychotics being included in the sample. At the time of testing, 39 were inpatients and 11 were outpatients. Of the inpatients, some had been hospitalized up to 11 months, whereas others had only been hospitalized for one week. None had any significant organic pathology. All had good vision, although some wore glasses. Most were on moderate doses of medication, although some were on no medication. They appeared to be a heterogenous population with the exceptions that they were all males, and they were all being treated psychiatrically.

Instruments

R-S Scale

This scale was the revised one by Byrne et al. (1963). The items on the scale were taken from the Minnesota Multiphasic Personality Inventory (Hathaway and McKinley, 1951). Items from the Depression, Psychisthenia,
and Welsh Anxiety scales were selected as measures of sensitization. Items from the Lie, K or defensiveness, and Hysteria scales were selected as measures of repression. The R-S scale has a corrected split-half reliability of .94 and a test-retest reliability of .82 after three months. The scale was scored in a direction such that a high score indicated a tendency toward sensitization whereas a low score indicated a tendency toward repression.

P-D Measure

This measure was a variant of one devised by Shannon (1962). It consisted of ten neutral and ten conflict words, presented via a slide projector. (Shannon used 15 conflict and 15 neutral words.) The twenty words were matched for frequency of usage by means of the Thorndike-Lorge frequency tables (Thorndike and Lorge, 1944). The words are listed below:

<table>
<thead>
<tr>
<th>Conflict</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>strangle</td>
<td>straggle</td>
</tr>
<tr>
<td>stab</td>
<td>stew</td>
</tr>
<tr>
<td>smash</td>
<td>short</td>
</tr>
<tr>
<td>shoot</td>
<td>sheep</td>
</tr>
<tr>
<td>kill</td>
<td>king</td>
</tr>
<tr>
<td>cock</td>
<td>coot</td>
</tr>
<tr>
<td>cunt</td>
<td>curd</td>
</tr>
<tr>
<td>whore</td>
<td>whelp</td>
</tr>
<tr>
<td>erection</td>
<td>eyesight</td>
</tr>
<tr>
<td>penis</td>
<td>pence</td>
</tr>
</tbody>
</table>

The words were photographed on 2" x 2" slides and projected onto a 40" x 46" cloth screen eight feet from the subject. The procedure started with the projecting of three practice
slides—the words, "and," "the," and "before." This part of the procedure was necessary to stabilize the recognition threshold. In the experiment proper, each slide was presented once, gradually increasing the illumination, from a point well below the recognition threshold until correct identification was reported. The subject was instructed to report as soon as he could see the word—"even before you are sure" and "even if the word seems foolish or unusual, because some are unusual." The score for each subject was the mean difference between the thresholds for the neutral words and the matched conflict words. The threshold for a word was measured in terms of the number of volts registered on the rheostat regulating illumination when the subject correctly identified it. A high or positive score indicated a sensitizer, while a low or negative score indicated a repressor.

Art Scale

This is an 86 item scale developed by Barron and Welsh (1952). It consists of black and white figures to which the subject simply responds "like" or "dislike." The figures differ in that some are highly complex, asymmetrical, and free-hand rather than ruled, while others are relatively simple, often symmetrical, and predictable. According to the authors, the complex person prefers the complex figures whereas the simple person prefers the simple figures. The
scale was scored in the complex direction with a high score indicating complexity and a low score indicating simplicity.

REP Test

Essentially, the test required the subject to name a way in which two people were similar and at the same time different from a third. This comparison was repeated fifteen times with fifteen triads of people known to the subject. Each "way" and its opposite also named by the subject were taken as a construct and a contrast respectively. The combination of the construct and the contrast was seen as defining a verbal dimension. The score for cognitive complexity was the number of different verbal dimensions given by the subject on the fifteen comparisons. A repetition was counted if either or both ends of a dimension were identically repeated on a subsequent sort. Thus a subject could receive a complexity score from 1 to 15, with one indicating most simple and fifteen indicating most complex (after Bieri and Messerley, 1957). A copy of the group form of the REP test (Kelly, 1955) used in this study appears in the Appendix.

Procedure

The R-S scale, the Art Scale, and the REP test were administered in that order to groups of from three to five patients at a time. After the patients had been given the
three paper-and-pencil measures, they were then individually administered the P-D measure.
RESULTS

Table 1 shows the means, medians, and range of scores for each of the four measures. Table 2 shows the product-moment correlation coefficients for the four measures. Only one of the correlations is significant (p < .01), that of REP with the Art Scale. The REP test and P-D measure correlation approaches significance at p < .10.

The prediction that there would be at least a minimal significant correlation between each of the four measures was not supported. A low correlation was expected between the REP test and the Art Scale. However, the correlation between these two measures was the highest obtained. Between continua the correlations were all low or zero. The R-S scale had little or no correlation with either of the two complexity-simplicity measures. There were two unexpected findings. The R-S—P-D correlation was very low and in a negative direction. Secondly, the second highest correlation among these six low correlations was between the P-D measure and the REP test. At the outset it was uncertain as to how these two latter measures would correlate.
Table 1. The Means, Medians, and Ranges of Scores for the Measures

<table>
<thead>
<tr>
<th></th>
<th>R-S</th>
<th>Art Scale</th>
<th>P-D</th>
<th>REP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>62.1</td>
<td>16.9</td>
<td>.31</td>
<td>10.5</td>
</tr>
<tr>
<td>Median</td>
<td>63.0</td>
<td>13.0</td>
<td>.30</td>
<td>10.7</td>
</tr>
<tr>
<td>Range</td>
<td>5-101</td>
<td>2-53</td>
<td>-2.1+2.9</td>
<td>4-15</td>
</tr>
</tbody>
</table>

Table 2. The Product-Moment Correlations for the Measures

<table>
<thead>
<tr>
<th></th>
<th>R-S</th>
<th>Art Scale</th>
<th>P-D</th>
<th>REP</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-S</td>
<td>.000</td>
<td>-.021</td>
<td>-.060</td>
<td></td>
</tr>
<tr>
<td>Art Scale</td>
<td>.034</td>
<td>.387*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-D</td>
<td></td>
<td>.226</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .01.
DISCUSSION

The results are equivocal at best. The R-S scale not only does not correlate with the two complexity measures, it does not even correlate with the other repression-sensitization measure.

One possible explanation for this lack of correlation may be that the R-S scale does not measure the continuum of repression-sensitization. Tempone and Lamb (1967) suggest that the R-S scale is more a measure of sensitization than of repression-sensitization. If this is the case, then the range of scores obtained only indicated more or less of a tendency toward sensitization rather than whether or not a person was more of a repressor or more of a sensitizer. On the other hand, the P-D measure did give evidence of repression and sensitization. Over 34 per cent of the sample had a higher average threshold for the conflict words than for the neutral words. Fifty-eight per cent had a higher average threshold for the neutral words than for the conflict words. If, indeed, the R-S scale was only measuring half of the repression-sensitization continuum, then it would explain the lack of a significant correlation between the R-S scale and the P-D measure.

Still, there is a study (Tempone, 1964) which indicates that the use of perceptual defense is related to
scores on the R-S scale. However, in Tempone's study subjects were first made anxious, and then given a perceptual defense measure containing words that were relevant to their anxiety. In this study the subjects were not presumed to have been made anxious about the words just prior to having them presented. This study counted on a person exhibiting his particular defensive style in response to perceiving words which were considered to be universally conflictual, rather than in response to perceiving words which were relevant to some anxiety-provoking task the person had just completed. Consequently, it is conceivable that a repressor or a sensitizer (as determined by the R-S scale) was made anxious by all of the words or by none of the words. In such a case, then, the range of scores on the P-D measure may have been the result of the subjects' responding on the basis of some other, non-emotional, characteristic of the words. This would then explain the lack of correlation between the two measures.

A third hypothesis for the lack of correlation between these two measures of repression-sensitization stems from the fact that a psychiatric population was used. Tempone and Lamb (1967) have suggested that being in psychiatric treatment may indicate that the mechanism of repression has, to some extent, broken down, and that the individuals have become sensitizers. However, in the population used here there were people who obtained scores
on both the repressing and sensitizing extremes or both repression-sensitization measures. In fact, the total range of scores used in this study is greater than the range of scores of some studies using normals, with the lower end of the range (repressing end) being lower in this study than in others (Byrne, Steinberg, and Schwartz, 1968; Merbaum and Kazaoka, 1967). Of the three previous hypotheses, the second appears to be the most plausible and to receive the most support from other results of this study. It will be further developed later in this discussion. In any case, however, the finding that the R-S scale and P-D measure did not correlate suggest strongly that the dimension of repression-sensitization is not a uniform one across different measures.

The results indicate a different situation for the measures of complexity-simplicity. Contrary to Sechrest and Jackson's (1961) findings the REP test and Art Scale are significantly correlated. Even though the correlation is low, there is an indication that the complexity-simplicity continuum is more uniform across different measures.

In regard to the correlations between the repression-sensitization and complexity-simplicity continua, the results are also mixed. The R-S scale correlations with the P-D measure, Art Scale, and REP test are at or near zero. However, the P-D measure correlates higher with the Art Scale and almost significantly with the REP test.
Perhaps the reason why one measure of repression-sensitization correlates with the measures of complexity-simplicity and one does not lies in the differences in content between the two repression-sensitization measures and the similarities in content between the P-D measure, Art Scale, and REP test.

As was mentioned earlier, subjects may have been responding to the P-D measure on the basis of some non-emotional characteristic of the words. One of these characteristics may have been familiarity. In studying the words in the conflict and neutral lists one might hypothesize that in 1970 most people would be more familiar with these conflict words than they would with these neutral words. If a person was more familiar with the words used, he might then recognize the words at a lower level of illumination than would a person who was less familiar with the words. In a word perception study using visual duration thresholds as the measure rather than illumination threshold, Soloman and Howes (1951) suggested that word frequency (positively correlated with familiarity) can account for raised visual duration thresholds without recourse to concepts such as perceptual defense or perceptual selectivity. Although the conflict and neutral words in this study were matched for frequency on the basis of the Thorndike-Lorge word count (Thorndike and Lorge, 1944) there was no matching on the basis of the familiarity of the
words. The only way to have done this would have been to have each subject rank *a priori* the words on the basis of how familiar he was with them.

One *a posteriori* indicator of an individual subject's familiarity with the total set of words, however, could be the mean threshold of all the words (both neutral and conflict) for the subject. Using this measure then one might expect that there would be a negative correlation between mean thresholds and the P-D difference scores. This prediction is based on the reasoning that a person with a greater familiarity with all the words (lower mean threshold) also has an even greater familiarity with the conflict words as opposed to the neutral words (larger P-D difference score). A product-moment correlation coefficient of -.425 was found to exist between mean threshold and P-D difference scores.

Continuing this line of thought, if one assumes that those who had lower mean thresholds were, in fact, those who were more familiar with the words used and furthermore that these same people are the ones with larger vocabularies with which to label their experience then one has an explanation for the P-D measure-REP test correlation.

A high score on the REP test depends on the number of different dimensions a person uses to compare and contrast people in his life. A person's ability to come up with different dimensions certainly depends to some extent
on the size of the vocabulary he has at his disposal. Consequently, a person with a larger vocabulary should have a higher score on both the REP test and P-D measure, whereas a person with a smaller vocabulary should have a lower score on both the REP test and the P-D measure. A person's vocabulary may then be an important factor in the correlation of these two measures.

Perhaps one reason why the P-D measure-REP test correlation was not even higher than it was rests on the difference between being familiar with words (recognizing them quickly) and having a large vocabulary (recalling words). Recognition and recall are correlated but not perfectly. Also, whereas a familiarity factor is considered to be an important influence on the P-D test performance, the existence of a defensive factor influencing performance has not been ruled out.

The P-D measure-Art Scale correlation was lower than the P-D measure-REP test correlation but a little higher than two others. Since the former correlation was very low, hypotheses are of course very tenuous indeed. Nevertheless, two possible explanations will be put forward here. One of these invokes the Whorfian hypothesis (Whorf, 1956), which is in essence that language influences perception. It might be expected on this basis that a person with a larger vocabulary would be able to make finer discriminations between the designs on the Art Scale than would one who has
a smaller vocabulary. This might consequently increase the number of designs that a person with a higher vocabulary would place in the "like" category—including more of the complex designs—as compared to a person who had a smaller vocabulary. In fact, Barron found that scores on the Art Scale correlated .92 with a student's intellect as rated by his professors.

However, another possible explanation involves exposure to art. A person who has a larger vocabulary might also be expected to have been to college or to have been exposed to a variety of "broadening experiences." In such a case it might be expected that such a person would have acquired a "liking" for more "abstract" or "complex" art.

Unfortunately, the results of this study do not lend support to one or the other of these hypotheses. Only future research may be able to provide adequate data for a decision.

In summary, the repression-sensitization continuum appears to be an uncertain one, mainly because of the uncertain nature of its measures. It is not clear what the R-S scale or the P-D measure or, in fact measuring. On the other hand, however, the complexity-simplicity continuum appears to be more stable across measuring instruments or domains of content. As to the purpose of this study, that of demonstrating a relationship between repression-sensitization and complexity-simplicity, all that can be
asserted is that no clear relationship was found. Perhaps the finding of a relationship was masked by the strong influence of a person's vocabulary on his responses on some of the measures. Perhaps no relationship was found because the instruments were not valid measures of their respective constructs. Future research will have to control for vocabulary in the experimental design. Had vocabulary been controlled, perhaps the results would have been clearer. However, even before design revisions, exactly what these instruments are measuring should be made clear.

In light of all the similarities between the two dimensions uncovered in the Introduction, it is difficult, at this point, to give up the hypothesis that the two dimensions are related.
APPENDIX

ROLE CONSTRUCT REPERTORY TEST--GROUP FORM

Part A: Role Title List

Instructions:

Write the name of each of the persons indicated in the blanks provided on the next page.

If you cannot remember the name, but do remember the person, simply make a check mark or some other note of identification.

If you cannot remember the person, substitute the name of a person whom the role title suggests to you.

Do not repeat names. If a role title appears to call for a duplicate name, substitute the name of another person whom the second role title suggests to you.
1. Your mother or the person who has played the part of a mother in your life. 
2. Your father or the person who has played the part of a father in your life. 
3. Your brother nearest your age. If you have no brother, the person who is most like one. 
4. Your sister nearest your age. If you have no sister, the person who is most like one. 
5. A teacher you liked or the teacher of a subject you liked. 
6. A teacher you disliked or the teacher of a subject you disliked. 
7. Your closest girl (boy) friend immediately before you started going with your wife (husband) or present closest girl (boy) friend. 
8. Your wife (or husband) or closest present girl (boy) friend. 
9. An employer, supervisor, or officer under whom you served during a period of great stress. 
10. A person with whom you have been closely associated, who for some unexplainable reason, appeared to dislike you. 
11. The person whom you have met within the past six months whom you would most like to know better. 
12. The person whom you would most like to be of help to, or whom you feel most sorry for. 
13. The most intelligent person whom you know personally. 
14. The most successful person whom you know personally. 
15. The most interesting person whom you know personally.
Part B: Construct Sorts

Name: ______________________
Date: ______________________

Instructions:

The sets of three numbers in the following sorts refer to the numbers 1 to 15 inclusive in Part A.

In each of the following sorts three numbers are listed. Look at your Part A sheet and consider the three people whom you have listed opposite these numbers.

In what important way are two of these people alike and, at the same time, essentially different from the third?

After you have decided what that important way is, write it in the blank opposite the sort marked CONSTRUCT.

Next encircle the numbers corresponding to the two people who are alike.

Write down what you believe to be the opposite of the construct in the blank marked CONTRAST.
<table>
<thead>
<tr>
<th>Sort</th>
<th>Part A</th>
<th>Construct</th>
<th>Contrast</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>10, 11, 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>6, 13, 14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>6, 9, 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>3, 14, 15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>4, 11, 13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>2, 9, 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>5, 7, 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>9, 11, 15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>1, 4, 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>3, 5, 13</td>
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<td>8, 12, 14</td>
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</tr>
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<td>2, 3, 7</td>
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<tr>
<td>15.</td>
<td>1, 6, 10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

After Kelly (1955).
REFERENCES


Eysenck, H. J. "Type" factors in aesthetic judgments. British Journal of Psychology, 1941, 31, 262-270. (b)


