The investigation described in this study was a two part procedure which attempted to answer the general question: "Do the constructs of indecision and indecisiveness adequately describe disadvantaged individuals who experience difficulties in making a career decision?" The sampling was from a population of disadvantaged high school and college students. The first part of the study, which tested the effectiveness of the University of Utah Counseling Center's Career Planning Workshop as a treatment for vocational undecidedness in a disadvantaged population, did not yield statistically reliable differences between the experimental and control groups. The second segment of the study was an exploratory rather than definitive investigation of the general question given above: The subjects had all experienced the Career Planning Workshop; one group showed an increase in degree of career decidedness subsequent to workshop treatment, while the second group did not show an increase. Both groups were given the Vocational Development Inventory and the State-Trait Anxiety Inventory. Although differences between the groups were not statistically reliable, the group which had increased in decidedness exhibited greater vocational maturity and less state- and trait-anxiety than the group which had not shown an increase in decidedness. References are included. (Author/SES)
A CAREER DEVELOPMENT WORKSHOP FOR
ECONOMICALLY DISADVANTAGED STUDENTS

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American Psychological Association Hawaiian Convention
September 2, 1972
ABSTRACT

Sampling from a population of disadvantaged high school and college students, this investigation was undertaken as a two part procedure which attempted to answer the general question: "Do the constructs of indecision and indecisiveness adequately describe disadvantaged individuals who experience difficulties in making a career decision?"

The first part of this study tested the effectiveness of the University of Utah Counseling Center's Career Planning Workshop as a treatment for vocational undecidedness in a disadvantaged population. A three groups design which controlled for the reactive effects of the initial testing was used in making this test. The results of a "gains" analysis of Ss scores on the Career Assessment Form indicated that, although those Ss who experienced the workshop treatment showed more substantial increases in their degree of career decidedness than Ss who did not experience it, the differences between the groups were not statistically reliable. Thus, the effectiveness of the Career Planning Workshop as a treatment for vocational undecidedness was not confirmed.

Given the failure to demonstrate the effectiveness of the Career Planning Workshop as a treatment for vocational undecidedness, the second segment of the study was seen as exploratory rather than definitive in attempting to answer the general question given above. The procedure that was used in this part of the investigation was to divide the Ss who had experienced the Career Planning Workshop into two groups on the basis of their Career Assessment Form scores. Ss who showed an increase in their degree of career decidedness subsequent to experiencing the workshop treatment were assigned to the first, or indecision, group. Ss who did
not show an increase in their degree of career decidedness were assigned
to the second, or indecisive, group.

On the basis of the formulations of Goodstein (1965) and Crites (1969),
it was predicted that the indecision group would be significantly more
vocationally mature; would exhibit significantly lower levels of state-
anxiety; and would exhibit significantly lower levels of trait-anxiety
than the indecisive group. "t" tests of differences between means for the
two groups on the Vocational Development Inventory, and State-Trait Anxiety
Inventory were performed to test these predictions. Although the differences
between the groups were not statistically reliable, the trend of the data
was in the predicted directions. The indecision group exhibited greate:\nmore homogeneous with respect to its levels of vocational maturity
and state- and trait-anxiety than the indecisive group. In addition, there was evidence to suggest that the indecision
group was more homogeneous with respect to its levels of vocational maturity
and state- and trait-anxiety than the indecisive group.

These findings are interpreted as lending limited support to the
indecision and indecisive constructs when applied to a group of vocationally
uncommitted disadvantaged students. They also suggest a need to develop
more effective approaches in treating the problem of career undecidedness
across different populations.
A CAREER DEVELOPMENT WORKSHOP FOR ECONOMICALLY DISADVANTAGED STUDENTS

Clarke G. Carney
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The increasing diversity and change in American education and labor demand that high school and college students learn effective and efficient methods of making career decisions. For a large number of students these decisions are difficult and confusing, often resulting in their taking a negative view of themselves and the world around them. This is particularly true for economically disadvantaged students whose career patterns are shaped by many complex and, oftentimes, competing social-cultural forces.

Recently, state and federal governments have invested a considerable amount of their resources in establishing guidance programs to help the disadvantaged. Several studies (cited by Hansen, 1970) have shown that many disadvantaged students are responsive to well-planned structured programs designed to give them information about educational-vocational opportunities and the process of career development. Despite these generally favorable findings, however, the question must be asked, "Why do some disadvantaged individuals benefit from educational-vocational guidance and others do not?" The answer to this question has strong

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Based on the author's doctoral dissertation entitled Anxiety in the Career Decision Process: An Experimental Test of Goodstein's Indecision and Indecisive Constructs. Department of Educational Psychology, University of Utah, Salt Lake City, Utah, 1972.
implications for developing and assessing future guidance programs aimed at helping disadvantaged individuals in making their career choices.

Two concepts developed by Goodstein (1965) and expanded by Crites (1969) may provide the beginnings of an answer to this question. Goodstein identifies two types of vocationally uncommitted individuals. The first experiences career indecision. He cannot make a career choice because he lacks both the appropriate developmental experiences and the occupational information for making such a decision. Because of social pressure to make a choice, he may become quite anxious about his inability to choose a career. Providing him with experience in decision making and appropriate information should have three consequences: (1) he will be able to make a career choice, (2) his high level of anxiety will be reduced, and (3) he should show a substantial gain in his level of vocational maturity. In the disadvantaged population he may be seen as the person who benefits from the types of programs mentioned above.

The second vocationally uncommitted individual is described by Goodstein as being indecisive. Because of a high level of anxiety associated with personal-social conflicts, the indecisive person has a difficult time making any decision even though he may possess the information to do so. His anxiety is attributable to a variety of competing factors, including for the disadvantaged individual a conflict between the non-competitive values of his cultural group and the achievement orientation of the broader society. The indecisive person will not benefit by an exposure to relevant career information. Indeed, such an experience will only serve to make him more anxious because it will reactivate conflicts associated with
decision making. Accordingly, his low level of vocational maturity will not be affected by an exposure to relevant occupational information.

Using a modification of the experimental design developed by Crites (1969) and sampling from a population of vocationally undecided high school and college students, this investigation was undertaken to evaluate the empirical utility of Goodstein's (1965) indecision and indecisive constructs. This purpose can be described by the general question: "Do the constructs of indecision and indecisiveness adequately describe disadvantaged individuals who experience difficulties in making a career choice?"

Research Design

The students were randomly assigned to treatment and no treatment groups prior to the initial testings. The workshop treatment was required of all Summer Aid and Neighborhood Youth Corps summer employees of the Ogden, Utah Office of Internal Revenue, including those who were vocationally committed prior to the experiment. The data for the vocationally decided students was eliminated from the data pool before statistical analyses were performed.

Of the remaining twenty-eight students used in this study, four were Caucasian, fifteen were Mexican-American, one was American Indian, and eight were Negro. Ten of the students were male and eighteen were female. The grade levels for the group ranged from high school freshman to college sophomore with the median age being eighteen years.

Three instruments were used in this study. They were: (1) the Career Assessment Form, CAF, (adapted from Goodson's, 1970, Student Information Sheet), a measure of career decidedness requiring respondents
to rate themselves on a continuum ranging from "no choice", to "tentative choice", to "final choice"; (2) the Vocational Development Inventory, VDI, (Crites, 1965), a measure of vocational maturity; and (3) the State-Trait Anxiety Inventory, STAI, (Spielberger et al, 1969), a measure of state anxiety, anxiety associated with specific transitory states, and trait anxiety, a general proneness to be anxious.

The University of Utah Counseling Center's Career Development Workshop for Entering New Students was used as the experimental treatment for this investigation. During the three hour workshop, the participants were involved in lectures, exercises, and discussions led by counselors from the University of Utah Counseling Center and the local State Employment Security Office. These procedures are designed to give participants information about the process of decision making, about themselves -- their interests, abilities, limitations, and values -- and about current educational-vocational trends in Utah. The workshop was presented in such a way that it would assist non-college bound as well as college bound students in actively exploring and setting their educational goals.

Due to the necessity for all students to receive the workshop treatment and difficulties associated with time commitments, a three group design that allowed all of the students to receive the workshop treatment at one time was developed. The resulting design is shown in Figure 1. As is shown in Figure 1, the tests were administered at one week intervals. The duration of the experiment from first testing to final testing was three weeks with the Career Development Workshop occurring on the same day as the second week's testing. The sequence of the administration of the different instruments is outlined in Table 1.
In the design shown in Figure 1 and Table 1 the first group (group 1) served as a control group. Students in this group were tested on all measures on two occasions separated by a one week interval. They did not receive the Career Development Workshop as part of this investigation.

The second group (group 2) served as the experimental group. It received an initial CAF testing during the first week but was not tested on the other measures. Several hours before they received the workshop treatment during the second week the students in this group were tested on the VDI and STAI. One week following the workshop students in group 2 were retested on all of the instruments.

The third group (group 3) was used as an additional control group testing for any reactive or sensitizing effects that might have occurred as a consequence of the initial VDI and STAI testing. Students in this group were given only the CAF during the first week's testing. They were not tested during the second week but were tested on all measures at the third week's testing.

The primary limitation of the design used in this investigation is that because the groups were tested at different intervals some control over history and maturation may have been lost. However, in questioning the students and their supervisors there did not seem to be any evidence to suggest that these conditions had differentially affected the three groups, especially with regard to the type or amount of occupational information they were exposed to.

Results

The first analysis determined if there were any significant differences between the three groups in their degree of career decidedness prior to the experiment. In making this assessment, an ANOV was performed on the
students' initial CAF scores. The results of this analysis indicated that the groups were not significantly different in their degree of career decidedness at the beginning of the experiment.

The second analysis was used to determine the effectiveness of the Career Development Workshop as a treatment for vocational undecidedness. An ANOV of student gain scores from initial testing to retest was used in performing the analysis. The null hypothesis was used in this study because it was not known if a three hour workshop in career planning would produce any significant changes in the students' levels of career decidedness, vocational maturity, and state- and trait-anxiety. In null form, the hypothesis to be tested in analyzing student gain scores on the CAF was stated as follows:

1. There are no significant differences in the degree of career decidedness of students who experience the Career Planning Workshop and those who do not.

The results of the initial and retestings of the three groups on the CAF are shown in Table 2. The results of the gain score analysis of this data, shown in Table 3, indicated that although students who experienced the workshop treatment showed substantially greater gains in their degree of career decidedness than students who did not experience the workshop treatment, the differences between the groups were not statistically reliable. Thus, null hypothesis one could not be rejected. The data also show that the initial VDI and STAI testings did not produce a significant reactive effect on students' scores on the CAF retest.

The third set of analyses was performed to test the empirical utility of the indecision and indecisive constructs. The rationale in making these statistical comparisons required that subsequent to exposing
vocationally undecided students to relevant career planning information, the outcomes must obtain: First, students in the treated groups (groups 2 and 3) must show significantly greater gains in their degree of career decidedness after experiencing the workshop treatment than students who did not experience it. If they did not, then changes in their degree of career decidedness from initial test to retest would have to be attributed to factors other than the effects of the workshop treatment. Second, within the treated groups there would have to be some individuals who showed a gain in their degree of career decidedness and some who did not. Those showing a gain would be persons who had problems of indecision, but who were able to resolve them given appropriate information. Those not showing a gain would be persons with problems of indecisiveness since they were unable to move in the direction of making a career decision even though they had relevant information.

The failure to empirically demonstrate the effectiveness of the Career Development Workshop as a treatment for vocational undecidedness limits any inferences that can be made from subsequent tests of the validity of the indecision and indecisive constructs. However, on the basis of the evidence indicating that the groups who received the workshop treatment showed more substantial gains in career decidedness than the untreated group, it was decided to follow through on the tests of the indecision and indecisive constructs. Given the limitation noted above the evidence gathered in this way is regarded as exploratory rather than definitive.

The small number of students in the experimental group (group 2 of the first analysis) made a statistical comparison of the indecision and indecisive individuals within it unfeasible. On the basis of the
evidence indicating that no reliable differences existed between the groups on the CAI initial and retest, the data of groups 2 and 3—both of which had experienced the workshop treatment—were pooled to form one group. Students within the pooled group were then divided into indecision and indecisive groups using the criteria given previously. "t" tests of differences between the indecision and indecisive groups indicated that although the two groups were statistically equivalent on the initial CAI testing they were statistically distinct on the CAI retest. This suggests that the indecision and indecisive groups can be viewed as being reliably different in their degree of career decidedness following an exposure to the workshop treatment.

Three null hypotheses were tested by "t" tests of differences between means in comparing the VDI data and STAI data of the indecision and indecisive groups. The critical region for all tests of significance was the .05 level.

The first null hypothesis to be tested in this way stated: There are no significant differences in the levels of vocational maturity of the indecision and indecisive groups. A comparison of the mean scores of the indecision and indecisive groups on the VDI retest, shown in Table 4, indicated that the directions of the differences between the two groups in their levels of vocational maturity was in accordance with Goodstein's (1965) model. However, the magnitude of the differences was not statistically significant. Thus, the null hypothesis could not be rejected. In comparing the standard deviations of the two groups, it appears that the indecision group was substantially less variable in its levels of vocational maturity than the indecisive group.
The null hypothesis to be tested in the second comparison stated: There are no significant differences in the levels of state anxiety of the indecision and indecisive groups. The data of Table 5 reveals that although the direction of the differences between the indecision and indecisive groups on the STAI - state retest conformed to Goodstein's model, the magnitude of the difference was not statistically reliable. Consequently, the null hypothesis could not be rejected. As with the VDI, a comparison of the standard deviations of the two groups on the STAI-state indicated that the indecision group showed considerably less variability in its levels of state anxiety than the indecisive group.

The third null hypothesis stated: There are no significant differences in the levels of trait anxiety of the indecision and indecisive groups. The results of the "t" test summarized in Table 6 indicate that this null hypothesis could not be rejected. As with the VDI and STAI-state data, the direction of the group mean differences was in accordance with Goodstein's model; however, the magnitude of the differences was not statistically reliable. Again, the indecision group showed considerably less variability than the indecisive group.

Discussion

The first segment of this investigation was designed to determine the effectiveness of the Career Development Workshop as a treatment for vocational undecidedness in a disadvantaged student population. From the results of the ANOV of CAF gain scores, it appears that the Career Development Workshop is not an effective means of treating vocational undecidedness in a disadvantaged student group.
Several factors may account for this result. First, the sample of students in this study cut across a broad range of educational, age, racial, and cultural characteristics. While a sample of this type may be representative of a broad spectrum of personal characteristics, its representativeness is also a limitation. There is evidence to suggest that individuals vary in their degree of career decidedness, vocational maturity, and state- and trait-anxiety at different age and grade levels (Crites, 1965; 1969; Spielberger et al, 1971). There is also evidence indicating that individuals vary in their exposure to occupational information, work seeking skills, and vocational maturity according to their racial-cultural backgrounds (Borrow, 1966, Blum and Rossi, 1969; Crites, 1971; Hilaski, 1971).

This suggests that the workshop experience may not have been developmentally timely for a substantial portion of the students. It also suggests a need to develop a better understanding of the career development processes of individuals in different racial and cultural groups. Once this new normative data is available we may be able to make more meaningful assessments of the effects of different career planning treatments.

A second concern raised by this study is that of how the condition of the workshop presentation affected the motivational set of the student participants. The workshop was presented as part of the students' summer work experience with the possible consequence that they may have seen their participation as being involuntary. This raises the question of how individuals respond to such conditions. Do they respond by active personal involvement or do they view it as a necessary but not personally relevant part of their work experience? The evidence from
this investigation suggests a strong need to consider these questions and to take the answers into account in planning future programs of this type.

Third, as it was presented in this study, the Career Development Workshop was of a one-shot form. Given the developmental nature of the career decision process, a more appropriate and effective format may be a series of workshops conducted over a protracted period of time which take into account the cultural-developmental characteristics of the recipients.

The second segment of this investigation attempted to answer the general question: "Do the constructs of indecision and indecisiveness adequately describe disadvantaged individuals who experience difficulties in making a career choice?"

None of the statistical comparisons yielded significant differences, indicating that the concepts of indecision and indecisiveness do not adequately describe vocationally uncommitted disadvantaged students. However, close inspection of the data suggests possible merit to the indecision and indecisive constructs when applied to a diverse sample of vocationally undecided disadvantaged students. In all comparisons the direction of the differences between the means of the indecision and indecisive groups was in the predicted direction. Thus, the trend of the data conformed to Goodstein's (1965) model. The indecision group exhibited greater vocational maturity and less state- and trait-anxiety than the indecisive group.

On each of the dependent measures, the indecision group showed substantially less variability than the indecisive group, suggesting that individuals who show an increase in their degree of career decidedness subsequent to experiencing the workshop treatment constitute a more homogeneous group than those who do not show such a change. Thus, in
accordance with Goodstein's model, individuals can be divided into indecision and indecisive categories after an exposure to occupational information. However, the differences between the two groups may be better assessed by pre-post comparisons of differences between variances than by tests of differences between means at post-test.

These findings indicate that future treatments for vocational undecidedness must be oriented toward the particular needs of the recipients. In some situations, it is better to treat the problem of vocational undecidedness as though it stemmed from information and skill deficiencies. In others, the personal-social concerns of the individual must be dealt with before vocational exploration is undertaken. What is needed now is a way of determining which form of difficulty the individual is experiencing prior to exposing him to treatment rather than after he has been treated.
REFERENCES


Goodson, G. A study to determine which approach to large vocational guidance groups is most effective in aiding the educational choice and vocational development of college students. Paper presented at the American Personnel and Guidance Association Convention, New Orleans, March, 1970.


Figure 1. Three groups design used in this study

Note: The workshop was given on the same day as the testing for groups 1 and 2

CAF = Career Assessment Form
R = random assignment to groups
0 = test observation
X = workshop treatment

TABLE 1

Testing Sequence Used in this Investigation.

<table>
<thead>
<tr>
<th>Group</th>
<th>1st Week</th>
<th>2nd Week</th>
<th>3rd Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CAF, VDI, STAI</td>
<td>CAF, VDI, STAI</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>CAF</td>
<td>VDI, STAI</td>
<td>CAF, VDI, STAI</td>
</tr>
<tr>
<td>3</td>
<td>CAF</td>
<td></td>
<td>CAF, VDI, STAI</td>
</tr>
</tbody>
</table>
### TABLE 2
Data of the Initial and Retestings of Groups 1, 2, and 3 on the Career Assessment Form

<table>
<thead>
<tr>
<th>Group</th>
<th>Condition</th>
<th>Initial Test</th>
<th>Retest</th>
<th>Difference $(\bar{X}_2 - \bar{X}_1)$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>no</td>
<td>N  $\bar{X}$</td>
<td>$\sigma$</td>
<td>N  $\bar{X}$</td>
</tr>
<tr>
<td>1</td>
<td>no</td>
<td>11  3.09</td>
<td>0.99</td>
<td>11  3.45</td>
</tr>
<tr>
<td>2</td>
<td>workshop</td>
<td>7  2.86</td>
<td>1.84</td>
<td>7  3.54</td>
</tr>
<tr>
<td>3</td>
<td>workshop</td>
<td>10  2.00</td>
<td>1.00</td>
<td>10  2.80</td>
</tr>
</tbody>
</table>

### TABLE 3
Results of a "gains" Analysis Comparing Groups 1, 2, and 3 on the CAF.

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>40.68</td>
<td>27</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Between</td>
<td>1.10</td>
<td>2</td>
<td>0.55</td>
<td>0.33*</td>
</tr>
<tr>
<td>Within</td>
<td>39.58</td>
<td>25</td>
<td>1.67</td>
<td></td>
</tr>
</tbody>
</table>

*P > 0.20
### TABLE 4
Results of a "t" Test of Differences Between the Indecision and Indecisive Groups on the VDI Retest.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>$\bar{X}$</th>
<th>$\sigma$</th>
<th>&quot;t&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indecision</td>
<td>8</td>
<td>32.63</td>
<td>3.15</td>
<td>0.93*</td>
</tr>
<tr>
<td>Indecisive</td>
<td>9</td>
<td>28.89</td>
<td>7.66</td>
<td></td>
</tr>
</tbody>
</table>

*df=15  $P>0.15$

### TABLE 5
Results of a "t" Test of Differences Between the Indecision and Indecisive Groups on the STAI-State Retest.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>$\bar{X}$</th>
<th>$\sigma$</th>
<th>&quot;t&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indecision</td>
<td>8</td>
<td>86.26</td>
<td>6.02</td>
<td>1.46*</td>
</tr>
<tr>
<td>Indecisive</td>
<td>9</td>
<td>93.78</td>
<td>14.57</td>
<td></td>
</tr>
</tbody>
</table>

*df=15  $P>0.10$

### TABLE 6
Results of a "t" test of Differences Between the Indecision and Indecisive Groups on the STAI-Trait Retest.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>$\bar{X}$</th>
<th>$\sigma$</th>
<th>&quot;t&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indecision</td>
<td>8</td>
<td>75.50</td>
<td>6.60</td>
<td>0.97*</td>
</tr>
<tr>
<td>Indecisive</td>
<td>9</td>
<td>81.33</td>
<td>16.06</td>
<td></td>
</tr>
</tbody>
</table>

*df=15  $P>0.15$