This study deals with the reverse transfer student population at Broward Community College. In a previous study 211 reverse transfer students out of a total population of 809 reverse transfer students were mailed a questionnaire which elicited responses in various areas, including demographic information and previous academic record. 134 responses were received. As a followup to this study, student responses regarding their GPA at the original four-year college were compared to their GPA as shown on official transcripts. Of the original group of 134 respondents, only 105 had transcripts on record, hence on the followup study, N=105. The mean GPA indicated by student response was between 2.4 and 2.5. This was significantly higher than their actual mean GPA, which was between 1.9 and 2.0. 42 of the respondents had correctly stated their GPA, 45 had overstated it, while only six had understated their previous record. Subclassifications of reverse transfer students were created to see if certain categories of student had more severe academic problems than others. These subclassifications included academic majors at four-year institutions, hours attempted at the four-year college, age, sex, and hours worked while attending the four-year college. No significant differences in previous academic success could be found between the various subclassifications. (AH)
A FOLLOW UP STUDY OF THE BCC REVERSE TRANSFER STUDENT QUESTIONNAIRE

BY

GLEN A. ROSE

BROWARD COMMUNITY COLLEGE

A PRACTICUM PRESENTED TO NOVA UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF EDUCATION

NOVA UNIVERSITY

MARCH 22, 1975
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>FORWARD</td>
<td>11</td>
</tr>
<tr>
<td>I. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>II. BACKGROUND AND SIGNIFICANCE</td>
<td>2</td>
</tr>
<tr>
<td>III. PROCEDURES AND RESULTS</td>
<td>2</td>
</tr>
<tr>
<td>IV. TABLE 1 Comparison and percentage distribution of actual grade point averages and stated grade point averages on the questionnaire</td>
<td>3</td>
</tr>
<tr>
<td>V. TABLE 2 Analysis of variance for grade point averages between original sample and a second randomly selected sample from the total population</td>
<td>5</td>
</tr>
<tr>
<td>VI. TABLE 3 Analysis of variance for grade point averages between reverse transfer students major fields of study</td>
<td>7</td>
</tr>
<tr>
<td>VII. TABLE 4 Analysis of variance for grade point averages between reverse transfer students who attempted different numbers of hours at the four-year institution</td>
<td>8</td>
</tr>
<tr>
<td>VIII. TABLE 5 Analysis of variance for grade point averages between reverse transfer students in different age groups</td>
<td>9</td>
</tr>
<tr>
<td>IX. TABLE 6 Analysis of variance for grade point averages between male and female reverse transfer students</td>
<td>10</td>
</tr>
<tr>
<td>X. TABLE 7 Analysis of variance for grade point averages between reverse transfer students with different time intervals between attending the four-year institution and BCC</td>
<td>11</td>
</tr>
<tr>
<td>XI. TABLE 8 Analysis of variance for grade point averages between reverse transfer students that worked different hours while attending the four-year institution</td>
<td>12</td>
</tr>
<tr>
<td>XII. RECOMMENDATIONS</td>
<td>15</td>
</tr>
<tr>
<td>XIII. APPENDIX A National Practicum Questionnaire</td>
<td>17</td>
</tr>
<tr>
<td>XIV. APPENDIX B Computer listing of National Practicum sample's responses from BCC and their actual GPA’s</td>
<td>21</td>
</tr>
<tr>
<td>XV. APPENDIX C GPA listing of second random sample from the total population of reverse transfer students enrolled term II 1973-74</td>
<td>26</td>
</tr>
<tr>
<td>XVI. BIBLIOGRAPHY</td>
<td>27</td>
</tr>
</tbody>
</table>
This practicum was modified from the original proposal. Because of my workload, the delay in receiving the original data and a complete disaster on my original MRP in September, many of the original sample had graduated or left Broward Community College and were unavailable for an interview by the time I could actively pursue this study. The change is that the researcher did a more thorough comparison of the original sample's actual grade point average by selecting six major variables from the original questionnaire and dividing the responses to these specific variables into subclassifications of reverse transfer students. These subclassifications were analyzed using an analysis of variance technique to check for significant differences between the many different subclassifications. The questions to be answered were:

1. What was the difference between the reverse transfer students stated grade point average and his actual grade point average?

2. Are there subclassifications of reverse transfer students who responded to the questionnaire that have significantly different grade point averages?

3. Was the original sample group of reverse transfer students representative of the total population of reverse transfer students enrolled term II, 1973-74?
INTRODUCTION

This study is a follow up to the National Practicum Task Force's study "The Reverse Transfer Student: The Four-Year College/University Student at Broward Community College". A wide range of data was collected and submitted to Nova as part of a national project. The Broward Community College sample appeared somewhat different than anticipated by the researchers and what one might expect from the current literature. (Kuznik 1971, Kuznik Maxey, and Anderson 1974) The researcher was very interested in the students stated grade point averages and decided that the grade point average question would be an excellent variable with which to do some further investigation. The questions that came to mind were:

1. Does BCC have a population of reverse transfer students atypical from some of the recent studies indicated in the literature?
2. Was the original sample representative of the population of reverse transfer students enrolled term II 1973-74?
3. What is the difference, if any, between the respondents stated grade point average and the students actual grade point average?
4. Are there subclassifications of reverse transfer students who responded to the questionnaire that have significantly different grade point averages?

Finding the answers to these questions will provide the college with a much clearer picture of their reverse transfer students and identify any subclassifications of reverse transfer students that may have severe grade point problems. This additional data should help the college better meet the needs of our itinerant students.
BACKGROUND AND SIGNIFICANCE

Broward Community College participated in a National Practicum concerning the reverse transfer student during term II, 1973-74. A random sample of \( n = 211 \) from a total population of \( N = 809 \) was selected and mailed a fifty-two item questionnaire. The data requested included demographic information, student perceptions of their own academic preparation, of their degree of success academically, of services offered at the previous institutions and Broward Community College and their educational objective at their previous institution, and now while attending Broward Community College. One hundred-thirty-four students responded or \( 63.5\% \) of the sample selected.

In the sample returned we found that the reverse transfer student attending term II 1973-74 appeared not to be in any grade point difficulty at their previous institution as suspected by the researcher's and as indicated by the literature. The sample mean grade point average was between a 2.4 and 2.5 on a 4.0 scale. This mean was calculated by tallying the number of responses within each item response. Each item response had a grade point average range and the student selected the item response within his grade point average. Only \( 26\% \) of the sample indicated they had less that a 2.0 grade point average at their previous four year institution and only \( 8\% \) of those indicated they had less than a 1.4 grade point average. This was less than the national sample totals which had \( 29\% \) indicating they had less than a 2.0 and \( 9\% \) indicating they had less than a 1.4 grade point average.

PROCEDURES AND RESULTS

The researcher then went to the students official academic record and recorded the students actual grade point average either from his BCC transcript or the original four year institutions transcript. Of the 134 students—

---
only 105 grade point averages were available at the time of this study. The remaining students had failed to submit a transcript from the previous four year institution and are still obligated for this record by BCC. Several had withdrawn during the term and apparently felt no need to submit an official transcript.

Below is the breakdown of grade point averages stated on the questionnaire and the students actual grade point average.

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>QUESTIONNAIRE N = 128</th>
<th>ACTUAL N = 105</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. per GPA range</td>
<td>% of N</td>
<td>GPA RANGES</td>
</tr>
<tr>
<td>11</td>
<td>8.2 %</td>
<td>1.4 (1)</td>
</tr>
<tr>
<td>25</td>
<td>18.7 %</td>
<td>1.5-1.9 (2)</td>
</tr>
<tr>
<td>31</td>
<td>23.1 %</td>
<td>2.0-2.4 (3)</td>
</tr>
<tr>
<td>27</td>
<td>20.1 %</td>
<td>2.5-2.9 (4)</td>
</tr>
<tr>
<td>23</td>
<td>17.2 %</td>
<td>3.0-3.4 (5)</td>
</tr>
<tr>
<td>10</td>
<td>7.5 %</td>
<td>3.5-3.9 (6)</td>
</tr>
<tr>
<td>1</td>
<td>0.7 %</td>
<td>4.0 (7)</td>
</tr>
</tbody>
</table>

The mean for the stated grade point average on the questionnaire was 3.4688 which would have the mean grade point average fall between 2.4 and 2.5. Using the same technique, the researcher placed the actual student grade point averages in the range where they fell on the questionnaire and then calculated the mean, which was 2.733. The reverse transfer students actual
grade point average then by this technique fell somewhere between 1.9 and 2.0. In checking their actual grade point average against their stated grade point average (when a match could be made) the researcher found that 42 correctly stated their grade point average, 45 had overstated their actual grade point average and 6 had underestimated their grade point average.

Of the 45 who overstated their actual grade point average the researcher tabulated the over statements in increments as follows:

overstated by 0.1 to 0.4 - 21
0.5 to 0.9 - 16
1.0 to 1.4 - 5
1.5 and above - 3

These findings will be discussed later.

To check on the validity of the original sample used in the national study, the researcher selected another random sample from the total population with an N2 = 90. The mean for N2 grade point average as taken from their official records was 2.06 as compared to the N1 mean actual grade point average of 2.02. Using an analysis of variance technique the researcher found the following in answer to the hypothesis: H0: N1 = N2 There is no significant difference in grade point average between the two random samples of reverse transfer students taken from the total population of RTS enrolled term II 1973-74.
TABLE 2

2 groups df = 2-1 = 1 \( \alpha = .05 \) The critical value of F is 3.84.

<table>
<thead>
<tr>
<th></th>
<th>( N_1 )</th>
<th>( N_2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \bar{x} )</td>
<td>2.02</td>
<td>2.06</td>
</tr>
<tr>
<td>( \bar{x}_c )</td>
<td></td>
<td>2.04</td>
</tr>
<tr>
<td>N</td>
<td>105</td>
<td>90</td>
</tr>
</tbody>
</table>

SQUARES OF DEVIATIONS WITHIN SETS \((x - \bar{x})_s^2\)

<table>
<thead>
<tr>
<th>((x - \bar{x})^2)</th>
<th>( N_1 )</th>
<th>( N_2 )</th>
<th>2 ((x - \bar{x})_s^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>56.1106</td>
<td></td>
<td>48.3827</td>
<td>104.4933</td>
</tr>
</tbody>
</table>

DEVIATIONS OF SET MEANS FROM GRAND MEAN \(d\)

<table>
<thead>
<tr>
<th></th>
<th>( N_1 )</th>
<th>( N_2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>d</td>
<td>-0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>d^2</td>
<td>0.0004</td>
<td>0.0004</td>
</tr>
<tr>
<td>nd^2</td>
<td>0.0420</td>
<td>0.0360</td>
</tr>
</tbody>
</table>

\[ 2d^2 = 0.0008 \]
\[ n^2d^2 = 0.0780 \]

THE TOTAL VARIANCE SUBDIVIDED INTO TWO COMPONENTS

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>df</th>
<th>SUM OF SQUARES</th>
<th>VARIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BETWEEN SETS</td>
<td>1</td>
<td>0.0780</td>
<td>0.0780</td>
</tr>
<tr>
<td>WITHIN SETS</td>
<td>193</td>
<td>104.4933</td>
<td>0.5414</td>
</tr>
</tbody>
</table>

\[ F = 0.144 \] The hypothesis is accepted.

There is no significant difference in GPA between \( N_1 \) and \( N_2 \).
From the above analysis of variance the researcher was reassured that his original sample, N₁, was indeed a representative sample of the total population of reverse transfer students enrolled term II 1973-74.

With both groups N₁ and N₂ having a mean of 2.0 or better on their grade point average the researcher decided to look at subclassifications of students and their grade point averages to determine if certain categories of reverse transfer students may have significantly different averages from each other and, also if certain categories of students have more severe academic problems than others.

The subclassification variables selected were:

1. academic major at four-year institution
2. hours attempted at four-year institution
3. age
4. sex
5. length of time between attending four-year institution
6. hours worked while attending four-year institution

Using the Analysis of Variance technique the researcher divided each specific question's response on the questionnaire related to the above variables into item number groups. Each item number within the specific question was identified as a special group. A mean was calculated for each special group and using a $1 \times N₁$ analysis of variance, F ratios were calculated to determine if there was a significant difference between means of the special groups. The desired level of significance in all six analysis was at the .05 level.

The tables and the results follow.
1. Academic major at four-year institution. \( H_0 \): There is no significant difference in actual grade point average between the major fields of the reverse transfer students in original sample \( N_1 \).

TABLE 3

\[ \alpha = .05 \] The critical value of \( F \) is 2.05

<table>
<thead>
<tr>
<th>THE OBSERVATIONS (X)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAJOR</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>( \bar{X} )</td>
</tr>
<tr>
<td>( \bar{X}_s )</td>
</tr>
<tr>
<td>( \bar{X}_t )</td>
</tr>
<tr>
<td>( N )</td>
</tr>
</tbody>
</table>

SQUARES OF DEVIATIONS WITHIN SETS \((X - \bar{X})_s^2\)

<table>
<thead>
<tr>
<th>MAJOR #</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>((X - \bar{X})_s^2)</td>
<td>4.2094</td>
<td>5.9140</td>
<td>12.9214</td>
<td>7.0430</td>
<td>0.0313</td>
<td>0.8779</td>
<td>3.19</td>
<td>9.8548</td>
<td>2.0704</td>
</tr>
</tbody>
</table>

\[ \Sigma (X - \bar{X})_s^2 = 46.1122 \]

DEVIATIONS OF SET MEANS FROM GRAND MEAN \((d)\)

<table>
<thead>
<tr>
<th>MAJOR #</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>(d)</td>
<td>-0.17</td>
<td>-0.20</td>
<td>-0.04</td>
<td>-0.36</td>
<td>-0.68</td>
<td>0.48</td>
<td>0.22</td>
<td>0.27</td>
<td>0.48</td>
</tr>
<tr>
<td>(d^2)</td>
<td>0.0289</td>
<td>0.0400</td>
<td>0.0016</td>
<td>0.1296</td>
<td>0.4624</td>
<td>0.2304</td>
<td>0.0484</td>
<td>0.0729</td>
<td>0.2304</td>
</tr>
<tr>
<td>(nd^2)</td>
<td>0.3179</td>
<td>0.2300</td>
<td>0.04</td>
<td>1.8144</td>
<td>0.9248</td>
<td>0.6912</td>
<td>0.9680</td>
<td>0.6561</td>
<td>1.6128</td>
</tr>
</tbody>
</table>

\[ \Sigma d^2 = 1.2446 \]
\[ \Sigma nd^2 = 7.3052 \]

THE TOTAL VARIANCE SUBDIVIDED INTO TWO COMPONENTS

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>df</th>
<th>SUM OF SQUARES</th>
<th>VARIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BETWEEN SETS</td>
<td>8</td>
<td>1.2446</td>
<td>0.1555</td>
</tr>
<tr>
<td>WITHIN SETS</td>
<td>89</td>
<td>7.3052</td>
<td>0.0820</td>
</tr>
</tbody>
</table>

\[ F = 1.39 \] The hypothesis is accepted. There is no significant difference in actual grade point average between majors of the RTS in sample \( N_1 \).
2. Hours attempted at four year institution. H₀: There is no significant difference in grade point averages between students who attempted different numbers of hours at a four year institution.

TABLE 4

<table>
<thead>
<tr>
<th>HRS. ATT</th>
<th>90 or &lt;</th>
<th>10-19</th>
<th>20-29</th>
<th>30-39</th>
<th>40-49</th>
<th>50-59</th>
<th>60-69</th>
<th>70 or &gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>30.97</td>
<td>31.31</td>
<td>41.46</td>
<td>52.91</td>
<td>17.42</td>
<td>12.12</td>
<td>4.76</td>
<td>12.22</td>
</tr>
<tr>
<td>X̄</td>
<td>2.21</td>
<td>1.84</td>
<td>1.88</td>
<td>2.30</td>
<td>2.17</td>
<td>2.02</td>
<td>1.58</td>
<td>2.12</td>
</tr>
<tr>
<td>N</td>
<td>14</td>
<td>17</td>
<td>22</td>
<td>23</td>
<td>8</td>
<td>6</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>THE OBSERVATIONS (X)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRS. ATT. 90 or &lt;</td>
<td>10-19</td>
<td>20-29</td>
<td>30-39</td>
<td>40-49</td>
<td>50-59</td>
<td>60-69</td>
<td>70 or &gt;</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>30.97</td>
<td>31.31</td>
<td>41.46</td>
<td>52.91</td>
<td>17.42</td>
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</tr>
<tr>
<td>X̄</td>
<td>2.21</td>
<td>1.84</td>
<td>1.88</td>
<td>2.30</td>
<td>2.17</td>
<td>2.02</td>
<td>1.58</td>
<td>2.12</td>
</tr>
<tr>
<td>N</td>
<td>14</td>
<td>17</td>
<td>22</td>
<td>23</td>
<td>8</td>
<td>6</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>

SQUARES OF DEVIATIONS WITHIN SETS \((X - \overline{X})^2_s\)

<table>
<thead>
<tr>
<th>HRS. ATT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>((X - \overline{X})^2_s)</td>
<td>11.90</td>
<td>6.766</td>
<td>10.2102</td>
<td>11.1475</td>
<td>3.5438</td>
<td>5.5348</td>
<td>0.0530</td>
<td>2.2376</td>
</tr>
</tbody>
</table>

\[ \sum (X - \overline{X})^2_s = 51.3929 \]

DEVIATIONS OF SET MEANS FROM GRAND MEAN \((d)\)

<table>
<thead>
<tr>
<th>HRS. ATT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>d</td>
<td>0.16</td>
<td>-0.21</td>
<td>-0.17</td>
<td>0.25</td>
<td>0.12</td>
<td>-0.03</td>
<td>-0.47</td>
<td>0.07</td>
</tr>
<tr>
<td>d^2</td>
<td>0.0256</td>
<td>0.0441</td>
<td>0.0289</td>
<td>0.0625</td>
<td>0.0144</td>
<td>0.0009</td>
<td>0.2209</td>
<td>0.0049</td>
</tr>
<tr>
<td>nd^2</td>
<td>0.3584</td>
<td>0.7497</td>
<td>0.6358</td>
<td>1.4375</td>
<td>0.1152</td>
<td>0.0054</td>
<td>0.6627</td>
<td>0.0294</td>
</tr>
</tbody>
</table>

\[ \sum d^2 = 0.4022 \]

\[ \sum nd^2 = 3.9976 \]

THE TOTAL VARIANCE SUBDIVIDED INTO TWO COMPONENTS

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>df</th>
<th>SUM OF SQUARES</th>
<th>VARIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BETWEEN SETS</td>
<td>7</td>
<td>3.9876</td>
<td>0.5696</td>
</tr>
<tr>
<td>WITHIN SETS</td>
<td>91</td>
<td>51.3929</td>
<td>0.5647</td>
</tr>
</tbody>
</table>

\[ F = 1.003 \text{ The hypothesis is accepted. There is no significant difference in grade point average between students who attempted different number of hours at a four-year institution.} \]
3. Age. \(^{H_0}\): There is no significant difference in grade point averages between different age groups of reverse transfer students.

TABLE 5

\(8\) groups \(df = 8-1 = 7\)

\(\alpha = .05\) The critical value of \(F\) is 2.12

within sets \(df = 99-8 = 91\)

<table>
<thead>
<tr>
<th>THE OBSERVATIONS ((X))</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE</td>
</tr>
<tr>
<td>2X</td>
</tr>
<tr>
<td>(X_s)</td>
</tr>
<tr>
<td>N</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SQUARES OF DEVIATIONS WITHIN SETS ((X - X_s)^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE #</td>
</tr>
<tr>
<td>((X - \bar{X})_s^2)</td>
</tr>
</tbody>
</table>

\(\sum (X - \bar{X})_s^2 = 51.3759\)

<table>
<thead>
<tr>
<th>DEVIATIONS OF SET MEANS FROM GRAND MEAN ((d))</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE #</td>
</tr>
<tr>
<td>(d)</td>
</tr>
<tr>
<td>(d^2)</td>
</tr>
<tr>
<td>(n d^2)</td>
</tr>
</tbody>
</table>

\(\sum d^2 = 0.6278\)

\(n \sum d^2 = 6.2104\)

<table>
<thead>
<tr>
<th>THE TOTAL VARIANCE SUBDIVIDED INTO TWO COMPONENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPONENTS</td>
</tr>
<tr>
<td>BETWEEN SETS</td>
</tr>
<tr>
<td>WITHIN SETS</td>
</tr>
</tbody>
</table>

\(F = 1.5716\) The hypothesis is accepted. There is no significant difference in grade point averages between different age groups of reverse transfer students.
4. Sex. H : There is no significant difference in grade point averages between male and female reverse transfer students.

<table>
<thead>
<tr>
<th>2 groups</th>
<th>df = 2-1 = 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>within sets</td>
<td>df = 102-2 = 100</td>
</tr>
</tbody>
</table>

The critical value of $F$ is $0.94$.

**The observations (X)**

<table>
<thead>
<tr>
<th>SEX</th>
<th>MALE</th>
<th>FEMALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZX</td>
<td>80.51</td>
<td>120.28</td>
</tr>
<tr>
<td>$\bar{X}_s$</td>
<td>1.82</td>
<td>2.07</td>
</tr>
<tr>
<td>N</td>
<td>44</td>
<td>58</td>
</tr>
</tbody>
</table>

**Squares of deviations within sets ($X - \bar{X}$)$_s^2$**

<table>
<thead>
<tr>
<th>SEX</th>
<th>MALE</th>
<th>FEMALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>($X - \bar{X}$)$_s^2$</td>
<td>22.2319</td>
<td>31.2738</td>
</tr>
</tbody>
</table>

$\sum ($($X - \bar{X}$)$_s^2$ $=$ $53.5057$)

**Deviations of set means from grand mean (d)**

<table>
<thead>
<tr>
<th>SEX</th>
<th>MALE</th>
<th>FEMALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>d</td>
<td>-0.14</td>
<td>0.11</td>
</tr>
<tr>
<td>$d^2$</td>
<td>0.0196</td>
<td>0.0121</td>
</tr>
<tr>
<td>$nd^2$</td>
<td>0.8624</td>
<td>0.7018</td>
</tr>
</tbody>
</table>

$\sum d^2 = 0.0317$

$\sum nd^2 = 1.5642$

**The total variance subdivided into two components**

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>df</th>
<th>SUM OF SQUARES</th>
<th>VARIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BETWEEN SETS</td>
<td>1</td>
<td>1.5642</td>
<td>1.5642</td>
</tr>
<tr>
<td>WITHIN SETS</td>
<td>100</td>
<td>53.5057</td>
<td>0.5350</td>
</tr>
</tbody>
</table>

$F = 2.86$ The hypothesis is accepted. There is no significant difference in grade point averages between male and female reverse transfer students.
5. Length of time between attending four-year institution and Broward Community College. $H_0$: There is no significant difference in grade point averages between groups of reverse transfer students with different time intervals between attending the four-year institution and Broward Community College.

$\text{8 groups } df = 8-1 = 7$

$\text{within sets } df = 100-8 = 92$

$\alpha = .05$ The critical value of $F$ is 2.12

<table>
<thead>
<tr>
<th>TIME INTERVAL</th>
<th>1 mo.</th>
<th>4-6 mo.</th>
<th>7-9 mo.</th>
<th>10-12 mo</th>
<th>13-15 mo</th>
<th>16-18 mo</th>
<th>19-21 mo</th>
<th>21 mo. or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\bar{x}$</td>
<td>24.1</td>
<td>28.4</td>
<td>13.6</td>
<td>1.9</td>
<td>8.8</td>
<td>8.5</td>
<td>4.1</td>
<td>111.4</td>
</tr>
<tr>
<td>$s_x$</td>
<td>2.41</td>
<td>2.18</td>
<td>1.94</td>
<td>0.95</td>
<td>2.2</td>
<td>2.12</td>
<td>2.05</td>
<td>1.92</td>
</tr>
<tr>
<td>N</td>
<td>10</td>
<td>13</td>
<td>7</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>58</td>
</tr>
</tbody>
</table>

Squares of deviations within sets $(x - \bar{x})_s^2$

<table>
<thead>
<tr>
<th>TIME INTERVAL</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>$(x - \bar{x})_s^2$</td>
<td>3.2100</td>
<td>6.4400</td>
<td>3.2200</td>
<td>4.01</td>
<td>1.6600</td>
<td>0.61</td>
<td>0.13</td>
<td>33.04</td>
</tr>
</tbody>
</table>

$\sum (x - \bar{x})_s^2 = 52.3200$

Deviations of set means from grand mean (d)

<table>
<thead>
<tr>
<th>TIME INTERVAL</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>d</td>
<td>0.41</td>
<td>0.18</td>
<td>-0.06</td>
<td>-1.05</td>
<td>0.20</td>
<td>0.12</td>
<td>0.05</td>
<td>-0.08</td>
</tr>
<tr>
<td>$d^2$</td>
<td>0.1681</td>
<td>0.0324</td>
<td>0.0036</td>
<td>1.1025</td>
<td>0.04</td>
<td>0.0144</td>
<td>0.0025</td>
<td>0.0064</td>
</tr>
<tr>
<td>$nd^2$</td>
<td>1.6810</td>
<td>0.4212</td>
<td>0.0252</td>
<td>2.2050</td>
<td>0.1600</td>
<td>0.0576</td>
<td>0.0050</td>
<td>0.3712</td>
</tr>
</tbody>
</table>

$\sum d^2 = 1.3699$

$\sum nd^2 = 4.9262$

The total variance subdivided into two components

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>df</th>
<th>SUM OF SQUARES</th>
<th>VARIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BETWEEN SETS</td>
<td>7</td>
<td>4.9262</td>
<td>0.7037</td>
</tr>
<tr>
<td>WITHIN SETS</td>
<td>92</td>
<td>52.3200</td>
<td>0.5686</td>
</tr>
</tbody>
</table>

$F = 1.23$ The hypothesis is accepted. There is no significant difference in grade point averages between groups of reverse transfer students with different time intervals between attending the four-year institution and Broward Community College.
6. Hours worked while attending four-year institution. $H_0$: There is no significant difference in grade point averages between reverse transfer student groups that worked different hours while attending the four-year institution.

<table>
<thead>
<tr>
<th>TABLE 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 groups df = 9-1 = 8</td>
</tr>
<tr>
<td>within sets df = 101-9 = 92</td>
</tr>
<tr>
<td>$\alpha = .05$ The critical value of $F$ is 2.05</td>
</tr>
</tbody>
</table>

**THE OBSERVATIONS ($X$)**

<table>
<thead>
<tr>
<th>HRS. WkD.</th>
<th>none</th>
<th>1-5</th>
<th>6-10</th>
<th>11-15</th>
<th>16-20</th>
<th>21-25</th>
<th>26-30</th>
<th>31-35</th>
<th>35</th>
</tr>
</thead>
<tbody>
<tr>
<td>EX</td>
<td>109.10</td>
<td>11.7</td>
<td>5.6</td>
<td>6.8</td>
<td>6.3</td>
<td>8.9</td>
<td>1.6</td>
<td>12.7</td>
<td>41.2</td>
</tr>
<tr>
<td>$\bar{X}_s$</td>
<td>2.02</td>
<td>1.95</td>
<td>1.86</td>
<td>2.26</td>
<td>1.05</td>
<td>2.22</td>
<td>1.6</td>
<td>2.54</td>
<td>2.16</td>
</tr>
<tr>
<td>$N$</td>
<td>54</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>19</td>
</tr>
</tbody>
</table>

**SQUARES OF DEVIATIONS WITHIN SETS ($X - \bar{X}$)**

<table>
<thead>
<tr>
<th>HRS. WkD.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>$(X - \bar{X})^2$</td>
<td>28.75</td>
<td>1.79</td>
<td>0.14</td>
<td>0.56</td>
<td>7.95</td>
<td>2.21</td>
<td>0.16</td>
<td>2.4</td>
<td>8.64</td>
</tr>
</tbody>
</table>

**DEVIATIONS OF SET MEANS FROM GROUP MEAN ($d$)**

<table>
<thead>
<tr>
<th>HRS. WkD.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>$d$</td>
<td>0.02</td>
<td>-0.05</td>
<td>-0.14</td>
<td>0.26</td>
<td>-0.95</td>
<td>0.22</td>
<td>-0.40</td>
<td>0.54</td>
<td>0.16</td>
</tr>
<tr>
<td>$d^2$</td>
<td>0.0004</td>
<td>0.0025</td>
<td>0.0196</td>
<td>0.0676</td>
<td>0.9025</td>
<td>0.0484</td>
<td>0.16</td>
<td>0.2916</td>
<td>0.0256</td>
</tr>
<tr>
<td>$nd^2$</td>
<td>0.0216</td>
<td>0.0150</td>
<td>0.0588</td>
<td>0.2028</td>
<td>5.4150</td>
<td>0.1936</td>
<td>0.1600</td>
<td>1.4580</td>
<td>0.4864</td>
</tr>
</tbody>
</table>

**THE TOTAL VARIANCE SUBDIVIDED INTO TWO COMPONENTS**

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>df</th>
<th>SUM OF SQUARES</th>
<th>VARIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BETWEEN SETS</td>
<td>8</td>
<td>8.01.2</td>
<td>1.0014</td>
</tr>
<tr>
<td>WITHIN SETS</td>
<td>92</td>
<td>52.6100</td>
<td>0.5718</td>
</tr>
</tbody>
</table>

$F = 1.75$ The hypothesis is accepted. There is no significant difference in grade point averages between reverse transfer student groups that worked different hours while attending the four-year institution.
On the six specific variables selected to determine if there were specific subclassifications of reverse transfer students that may have a more severe academic problem than others, in all cases the F ratio was not great enough to be significant. These six variables caused students to be classified in many different subclassifications and yet no significant differences were found.

From this analysis the researcher concludes that the reverse transfer student population enrolled term II 1973-74 was a very similar group and within subgroups in terms of grade point averages, despite their wide range of differences in background and demographic data.

The students actual grade point averages were lower than their stated grade point average. The researcher found of 105 he researched and documented from the sample of 134, that some 46.6% had less than a 2.0 compared to only 26.9% when they gave their grade point averages on the questionnaire. The largest discrepancy is when one looks at the 1.4 actual grade point average interval. The actual grade point average placed 22.8% of the reverse transfer students in this category as compared to only 8.2% when they stated their grade point average on the questionnaire. The only value the researcher founds from this descriptive comparison is that one must be cautious about generalizing about student stated grade point averages on a questionnaire, if for no other fact that, for whatever reasons in this questionnaire there were 51 of 105 or 48.5% who stated an incorrect grade point average.
Finding the means of the educational major grade point averages not to be significantly different was a surprise to the researcher. Colleges within universities have varied grade point averages within the same institution, why not when you merge 105 reverse transfer students together from institutions all over the country? Maybe the reverse transfer student group attending the community college term II 1973-74 represents a real cross-section of many colleges and universities and has a similar distribution in kinds of students for each of the subclassifications used for this study. This would seem probable but not likely as we have students coming from all over the country and not just from a few institutions where you might be able to depend on the same kinds of reverse transfer students coming term after term.

Although this study didn't answer the question of "Why the students left the four-year institution", the researcher feels that the study has dealt with a far more relevant issue in trying to identify any specific subclassifications of reverse transfer students that were enrolled term II 1973-74 that may have greater need for help than others in terms of identifying specific grade point differences between subclassification groups. In our urban multi-campus community college we seem to have reverse transfer students that are socially, economically and educationally advantaged people, who when looked at in many different ways don't appear to have any subclassifications within the group that are significantly different from other subgroups.
RECOMMENDATIONS

1. A replication of the original survey with a follow-up comparison of subclassifications within the total sample in terms of grade point average during term II of next year may give us a good indication of how our reverse transfer students are tracking. Will they be the same or will there be new trends because of the current economic situation and because of the enrollment crunch at the universities possibly forcing community colleges to put up barriers to transfer students in a desperate effort to cope with their native students? What will this mean to our reverse transfer student population?

2. The results of this study will be published through the news letter from our institutional research department for the edification of all faculty, guidance and counseling staff and administrators. Through a better understanding of our total student population the better equipped we are to make decisions for change within the institution. This data coupled with the National Practicum has brought the current phenomenon "the reverse transfer student" at Broward Community College out from under the cloud and stigma of being classified by many as "a university student who couldn't make it at the Big U", and into view as a student who is socially, economically and educationally advantaged, who is seeking his educational goals at another institution from his original choice that apparently meets his needs at this time.
BIBLIOGRAPHY


Kintzer, Fred. "Admission of Students to California Public Junior Colleges who are in Academic Difficulty at the University of California." College and University. Vol. 41, No. 2 Winter, 1966.


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APR. 18 1975
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