The objective of this study was to identify and compare the personal and interpersonal values held by junior and senior college students in elementary and secondary education programs. Identification of the personal and interpersonal values of students was made through use of the Gordon Survey of Personal Values and the Gordon Survey of Interpersonal Values. The sample in this study included a random selection of four groups of 150 each: junior elementary, senior elementary, junior secondary, and senior secondary students. The dependent measures were analyzed using multivariate analysis of variance. Significant differences were revealed between elementary and secondary majors as well as between junior and senior students. (Author)
DIFFERENCES BETWEEN PERSONAL AND INTERPERSONAL VALUES OF ELEMENTARY AND SECONDARY EDUCATION MAJORS

By

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Background and Instrumentation

The objective of this study has been to identify and compare the personal and interpersonal values held by junior and senior college students in elementary and secondary teacher education programs. The aim of the objective was to provide additional knowledge of education students' value systems; for the purpose of aiding in improving institutional formulation and evaluation of related curricular considerations.

Each elementary and secondary education major is of primary concern to every college and university for in addition to being the focus of the educational program, the role each plays in society after he leaves college helps create the image the public has of the institution and the development of the profession as a whole. At this time of increasing accountability, these concerns are crucial. The more that is known about students, their characteristics, their experiences, their successes and failures, both in and after college, the better can an institution formulate and evaluate its policies, programs, and procedures. Studies of student value systems offer potential insights to such institutional development (Brumbaugh, 1960).

Identification of the personal and interpersonal values of students was made through use of the Gordon Survey of Personal Values and the Gordon Survey of Interpersonal Values. The Gordon instruments identified: personal values -- achievement, decisiveness, goal orientation, orderliness, practical mindedness,
variety (Table 1); interpersonal values -- benevolence, conformity, independence, leadership, recognition, support (Table 2). Each value was expressed by Gordon in terms of the individual's need for that value. Each value was operationally defined in terms of the score received on the Gordon instrument.

The Survey of Interpersonal Values is an instrument which measures values that indicate "the individual's relationships to other people or their relationships to him" (Gordon, 1960). Yielding six discrete scores, the Survey of Interpersonal Values (1960) measures the areas of benevolence, conformity, independence, leadership, recognition, and support.

A review by Lee J. Cronbach (Buros, 1965) in the Sixth Mental Measurements Yearbook stated that the instrument was unpretentious and competently presented, and would provide suitable scores on six aspects of self-report that can be given a common sense interpretation, in a format that eliminates the social desirability and acquiescence sets from the score. A further review by John K. Hemphill (Buros, 1965) in the Sixth Mental Measurements Yearbook stated that the Survey of Interpersonal Values was a third sibling in the family of tests issued by Gordon. And like its predecessors, the Gordon Personal Profile and the Gordon Personal Inventory, it uses a forced choice format and is based upon the results of a factor analysis.

To measure values that "determine the manner in which an individual copes with the problems of everyday living," Gordon
developed the **Survey of Personal Values**. This more recent survey (1967) also projects six discrete scores, one each for achievement, decisiveness, goal orientation, orderliness, practical mindedness, and variety.

**Reliability**

Test-retest reliability coefficients for the **Survey of Interpersonal Values** scales were determined from scores obtained by administering the scales twice to a group of seventy-nine college students, with a ten-day interval between administrations. Reliabilities were also estimated by the Kuder-Richardson formula (Case 111) on data based on a sample of 186 college students. This formula tends to yield underestimates of reliabilities obtained by other methods. These two sets of reliabilities are presented in Table 3 (Gordon, 1960). These reliabilities permit interpretation of **Survey of Interpersonal Values** scores for individual use.

Leonard D. Goodstein (Buros, 1965) reviewed the **Survey of Interpersonal Values** in the Sixth Mental Measurements Yearbook and stated:

The test-retest reliability coefficients for the six value scores range from .78 to .89 with a median r .84. The Kuder-Richardson reliability estimates range from .71 to .86 with median r .82. Both sets of reliability data suggest adequate reliability, comparable to that reported for other forced choice personality inventories, e.g., Edwards Personal Preference Schedule.

Test-retest reliability coefficients for the scales of the **Survey of Personal Values** were determined by administering the **Survey of Personal Values** twice to a sample of ninety-seven
college students (fifty-eight male and thirty-nine female) with a seven to ten-day interval between administrations. Kuder-Richardson (Case 111) reliabilities, based on 167 college students, are presented in Table 3 (Gordon, 1967). This type of reliability tends to underestimate reliabilities obtained by other methods. These reliabilities permit interpretation of Survey of Personal Values scores for individual use.

Validity

Both the Survey of Interpersonal Values and the Survey of Personal Values were developed through the use of factor analysis. Insofar as the obtained factors confirm those found in other factor analyses, the two value scales may be considered to represent reliably, discrete categories and, in this sense, can be said to have factorial validity. This claim is strengthened by the fact that, subsequent to the factor analysis, the scales on both tests maintained their internal consistency through repeated item analyses, for samples of various composition (Gordon, 1960).

Another approach in assessing the validity of a personality instrument is to determine the reasonableness of relationships between it and other measures. If these relationships conform to expectations, are logical and consistent, or confirm findings of other studies, added confidence in the practical utility of that instrument accrues. Data gathered on varied groups during the latter part of the development of the Gordon scales support the construct validity of the scales.
Gordon (1960) stated:

SIV intercorrelations among the six scale scores and correlations of the scores with measures of intelligence, other tests of personality, and with scores from the Study of Values do not correlate substantially with scores from the College Qualification Test. Relationships with scores from the Gordon Personal Inventory and the Gordon Personal Profile are moderate and the relationships are regarded as logical and ones to be expected.

The Survey of Personal Values intercorrelations among the six scale scores and correlations of the scores with measures of intelligence, and other tests of personality, do not correlate substantially with scores of the Multi-Aptitude Test. Relationships with scores from the Gordon Personal Inventory, the Gordon Personal Profile, the Allport-Vernon-Lindzey Study of Values (Allport, et al., 1951), and the Work Environment Preference Schedule (WEPS, Gordon, 1966) are reasonable and the relationships are regarded as logical and expected.

Data Collection and Methods

Northern Illinois University offers a four-year baccalaureate program in professional elementary and secondary education. The university is situated west of Chicago, Illinois, and attracts potential teacher candidates in teacher training from diverse backgrounds, areas, and socio-economic levels. Students from Chicago, the suburban, and rural areas of northern Illinois, and the immediately adjacent states made up the population of the baccalaureate program. The sample consisted of junior and senior college students enrolled in elementary and secondary education.
programs at Northern Illinois University, DeKalb, Illinois.

The sample of junior and senior students enrolled in Education 303, 476, 477, 478, and 486 at Northern Illinois University the fourth nine-week quarter of the 1970-71 academic school year was selected for the study. The cooperation of all instructors teaching sections of those courses at that time was solicited. Students enrolled in Education 302 at Northern Illinois University during the Summer Session of 1971 were selected in the same manner.

Those students enrolled in Education 302 and 303 were considered representative of students entering their junior year in the professional education sequence at Northern Illinois University. Those students completing Education 476, 477, 478, and 486 were considered representative of students completing their senior year in the professional education sequence.

Students entering Education 302 comprise a group beginning the first course of the Secondary Professional Education sequence. Those completing Education 303 comprise a group of elementary education majors comparable to the secondary education majors at the junior year level. Those completing Education 476, 477, 478, or 486 comprise a group representative of elementary and secondary education majors who have completed the entire undergraduate professional education sequence. The sample in this study included a random selection of four groups of 150 each (N=600): junior elementary, senior elementary, junior secondary, and senior secondary students.
The dependent measures were analyzed utilizing multivariate analysis of variance.* The model for the procedure is \( X = A \beta + \varepsilon \) where \( X \) is the vector of cell means, \( A \) is the appropriate design matrix corresponding to the presence of a particular effect, \( \beta \) represents the parameters to be tested, and \( \varepsilon \) is the matrix of error variates. The analysis was conducted according to the specification of single degree of freedom planned orthogonal contrasts. The comparisons were ordered so that interaction effects were examined prior to the junior/senior, elementary/secondary main effects. Multivariate and univariate F ratios were computed for the planned comparisons.

**Results**

The multivariate F ratio for the interaction contrast (1.29, D.F. of 12 and 585) exhibited an associated probability of less than .22 (Table 4). This non-significant result allowed inspection of the main effect comparisons. The multivariate F for the junior/senior comparison (2.150, D.F. of 12 and 585) with a \( P < .012 \) revealed a significant value difference between those two groups (Table 5). Based on the univariate F's, seniors scored significantly higher on "achievement" than did juniors. The multivariate F for the elementary/secondary comparison (5.898, D.F. of 12 and 585) with a \( P < .0001 \) revealed a significant value difference between those two groups (Table 6). Based on the univariate F's: elementary majors scored significantly

* Multivariance
higher on the values of "leadership" and "achievement."

Discussion

The observed value differences on the variable "achievement" for the junior/senior comparison was an expected difference (Table 5). Gordon defined "achievement" as the need "to work on difficult problems, to have a challenging job to tackle, to strive to accomplish something significant, to set the highest standards of accomplishment for oneself, to do an outstanding job in anything one tries." It would seem professionally desirable for education majors to develop an increasingly positive need for "achievement," as defined by Gordon, during the course of their formal academic training.

The observed value differences on the variables "support," "benevolence," "variety," "leadership," and "achievement" for the elementary/secondary comparison seemed to support rather traditional stereotypes of elementary and secondary teacher education candidates (Table 6). Gordon defined these values as follows: "support - being treated with understanding, receiving encouragement from other people, being treated with kindness and consideration; benevolence - doing things for other people, sharing with others, helping the unfortunate, being generous; variety - to do things that are new or different, to have a variety of experiences, to be able to travel a great deal, to go to strange or unusual places, to experience an element of danger; leadership - being in charge of other people, having
authority over others, being in a position of leadership or power." These rather counterpose values suggest a necessity for tempering and bolstering, as appropriate, the value needs of both elementary and secondary education majors for the purpose of producing professionals having more balanced needs systems.
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Harris, D. "Group Differences in Values Within a University", Journal of Abnormal and Social Psychology, 29:94-102, April, 1934.


Webster, Harold "Change in Attitudes During College", The Journal of Educational Psychology, 49:109-17, June 1958


C. PAMPHLETS, MANUALS, INSTRUMENTS


D. UNPUBLISHED MATERIALS


TABLE 1

Personal Values as Defined by Gordon in the Survey of Personal Values:

P-Practical Mindedness: To always get one's money's worth, to take good care of one's property, to get full use out of one's possessions, to do things that will pay off, to be very careful with one's money.

A-Achievement: To work on difficult problems, to have a challenging job to tackle, to strive to accomplish something significant, to set the highest standards of accomplishment for oneself, to do an outstanding job in anything one tries.

V-Variety: To do things that are new and different, to have a variety of experiences, to be able to travel a great deal, to go strange or unusual places, to experience an element of danger.

D-Decisiveness: To have strong and firm convictions, to make decisions quickly, to always come directly to the point, to make one's position on matters very clear, to come to a decision and stick to it.

O-Orderliness: To have well-organized work habits, to keep things in their proper place, to be a very orderly person, to follow a systematic approach in doing things according to a schedule.

G-Goal Orientation: To have a definite goal toward which to work, to stick to a problem until it is solved, to direct one's attention toward clear-cut objectives, to know precisely where one is headed, to keep one's goals clearly in mind (Gordon, 1967).
TABLE 2

Interpersonal Values as Defined by Gordon in the Survey of Interpersonal Values:

**S-Support:** Being treated with understanding, receiving encouragement from other people, being treated with kindness and consideration.

**C-Conformity:** Doing what is socially correct, following regulations closely, doing what is accepted and proper, being a conformist.

**R-Recognition:** Being looked up to and admired, being considered important, attracting favorable notice, achieving recognition.

**I-Independence:** Having the right to do whatever one wants to do, being free to make one's own decisions, being able to do things in one's own way.

**B-Benevolence:** Doing things for other people, sharing with others, helping the unfortunate, being generous.

**L-Leadership:** Being in charge of other people, having authority over others, being in a position of leadership or power (Gordon, 1960).
TABLE 3

Reliabilities of Scales of the Survey of Interpersonal Values

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<thead>
<tr>
<th></th>
<th>S</th>
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<th>R</th>
<th>I</th>
<th>B</th>
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<td>.78</td>
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<td>26</td>
<td>32</td>
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<td>32</td>
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</table>

S = Support
C = Conformity
R = Recognition
I = Independence
B = Benevolence
L = Leadership

Reliabilities of Scales of the Survey of Personal Values

<table>
<thead>
<tr>
<th></th>
<th>P</th>
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<th>V</th>
<th>D</th>
<th>O</th>
<th>G</th>
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<tr>
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<td>.74</td>
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<td>.84</td>
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<tr>
<td>Kuder-Richardson</td>
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<td>.76</td>
<td>.92</td>
<td>.81</td>
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P = Practical mindedness
A = Achievement
V = Variety
D = Decisiveness
O = Orderliness
G = Goal orientation
<table>
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<th>VARIABLE</th>
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<td>1. Support</td>
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<td>2. Conformity</td>
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<td>0.8390</td>
</tr>
<tr>
<td>3. Recognition</td>
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<td>4. Independence</td>
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<td>5. Benevolence</td>
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<td>6. Leadership</td>
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<td>7. Practical Mindedness</td>
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<td>8. Achievement</td>
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<td>9. Variety</td>
<td>1.2624</td>
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<td>10. Decisiveness</td>
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<tr>
<td>11. Orderliness</td>
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<tr>
<td>12. Goal Orientation</td>
<td>0.3705</td>
<td>0.5431</td>
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TABLE 5

JUNIOR - SENIOR
F-RATIO FOR MULTIVARIATE TEST OF EQUALITY OF MEAN VECTORS = 2.1521
D.F. = 12. AND 585.0000  P LESS THAN 0.0127

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<tbody>
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<td>3. Recognition</td>
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<td>6. Leadership</td>
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<td>8. Achievement</td>
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<td>9. Variety</td>
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<td>10. Decisiveness</td>
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<td>11. Orderliness</td>
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<td>12. Goal Orientation</td>
<td>3.9066</td>
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### TABLE 6

**ELEMENTARY - SECONDARY**

F-RATIO FOR MULTIVARIATE TEST OF EQUALITY OF MEAN VECTORS = 5.8982

D.F. = 12 AND 585.0000 P LESS THAN 0.0001

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<td>Independence</td>
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<td>Achievement</td>
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<td>Goal Orientation</td>
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