# AN ANALYSIS OF THE ATTITUDES OF ACCOUNTING GRADUATES OF THE KANSAS STATE TEACHERS COLLEGE TOWARD PUBLIC ACCOUNTING USING THE SEMANTIC DIFFERENTIAL



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by

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# CHAPTER I

## THE PROBLEM AND DEFINITIONS OF TERMS USED

### I. INTRODUCTION

Persons with bachelors degree's in business with an emphasis in accounting have the prerequisites for careers in many varied business careers. Many of these people continue with accounting as their career field. A portion of those choosing accounting as their career field initially enter public accounting.

Individuals and groups in public accounting are concerned with the percentage of people entering public accounting and the percentage of people that leave the field. What are some of the reasons that an individual might leave public accounting? The public accountants' primary job is the advising of their clients. This advising is based on analysis of accounting data and personal experience. Therefore, if an individual becomes interested in or especially proficient in a specific business, he may leave public accounting to use his abilities full time in the particular business.[1]

Public accounting is also an occupation in which the individual is dealing with numerous business clients. Some individuals do not have the desire or the temperament to be a partner or an employee under these circumstances.

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[1]Richard G. Williams, "Career Opportunities in Accounting," Haskins & Sells Selected Papers 1962 (New York: Haskins & Sells, 1963), pp. 48-50.

The above are examples of some of the reasons that cause individuals to leave public accounting that the public accounting profession has little or no control over.

The following are examples of reasons for leaving public accounting that could be controlled. The economic rewards for services are raising very rapidly in most areas of the economy. The public accounting field may not be raising the economic rewards both on an employee and partner level as rapidly as accounting or business management positions in related fields.

As public accounting is primarily the advising of clients, the public accountant is constantly communicating. The need for oral and written communication means that a person deficient in a communication skill will probably not be successful in public accounting.

There is also the area of employer-employee relations. There has been some comment on the economic aspect, there would also be the areas of supervision and leadership, fringe benefits outside the economic area, fellow-worker relations, the complex attitude necessary on the part of the employer to reflect both the employee and the professional roles of the employee, among other areas not specifically mentioned.

## II. THE PROBLEM

This study will attempt to evaluate the attitudes of accounting graduates of Kansas State Teachers College of Emporia, Kansas, on the aspects of accounting, and public accounting in particular.

As an indication of the national importance the American Institute of Certified Public Accountants places on this problem, the following is an excerpt of a letter received from Mr. Guy W. Trump, Director of Education of the American Institute of Certified Public Accountants. "Questions like the following need to be answered: Why do good employees quit public accounting?"

## STATEMENT OF THE PROBLEM

What are the attitudes of accounting graduates of the Kansas State Teachers College of Emporia, Kansas, toward public accounting? The problem will be studied through the hypotheses as stated in the following section. The attitudes of the graduates toward the particular concept or idea as stated in the hypotheses will be evaluated through the use of the semantic differential. The semantic differential is an instrument used to determine differences in attitude of individuals or groups toward a concept or concepts and is discussed in Chapter III, The Materials Used and Groups Studied.

## STATEMENT OF THE HYPOTHESES

There is no significant difference between accounting graduates that have not been employed in public accounting, that are employed in public accounting, and that have left public accounting employment in their attitudes in regard to the following aspects of public accounting: economic rewards of public accounting, undergraduate education, employer-employee relations in public accounting, oral communication abilities, written communication abilities, public accounting profession, and professional employees in public accounting.

PURPOSES OF THE STUDY

The purpose of this study is to determine, through the measurement device used, the attitudes of a cross section of people trained in accounting toward public accounting. An individual or institution desiring this type of information would have an additional source indicating whether there is a significant difference in the attitudes of different segments of the accounting field toward public accounting.

SIGNIFICANCE OF THE STUDY

If there is a significant difference in attitudes on the part of the respondents, a similar type study over a broader spectrum of the accounting field might be helpful to different interested parties.

Who might be interested in the attitudes of people engaged in accounting? Our colleges and universities train most of the accountants, and are vitally interested in the appropriateness of the academic program. An indication of the direction the institution's program should take may be indicated by this thesis.

As indicated in the initial paragraph of the problem section of this chapter, the professional societies in the accounting field are quite interested in the reasons behind people leaving public accounting. The attitudes that are represented in this study could indicate specific areas that should be studied further.

## III. DEFINITIONS OF TERMS USED

Accounting. "The art of recording, classifying, and summarizing in a significant manner and in terms of money, transactions and events

which are, in part at least, of financial character, and interpreting the results thereof."[2]

Public Accountant. A public accountant may be defined as an independent person who holds himself out as an expert in accounting procedures and practice.[3]

Private Accountant. The internal, or private, accountant is an employee of the business firm or nonprofit organization for which he works.[4]

Government Accountant. Accountants in Federal, state and local governments work as internal accounting executives or as auditors.[5]

Economic Benefits. Both direct and fringe benefits received by the employee.

## IV. DELIMITATIONS OF THE STUDY

This study was delimited to the accounting graduates of the Kansas State Teachers College of Emporia, Kansas, from 1960 through 1967. Accounting graduates refers to individuals receiving a bachelors degree in business with an emphasis in accounting or employed in an accounting position.

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[2] No. 1, Review and Resume, Accounting Research and Terminology Bulletins, Final Edition, (New York: American Institute of Certified Public Accountants, 1961), p. 9.

[3] Homer A. Black, John E. Champion, and R. Gene Brown, Accounting in Business Decisions, (Englewood Cliffs: Prentice-Hall, Inc., 1967), pp. 15-6.

[4] Ibid., p. 16.

[5] Ibid., p. 17.

# CHAPTER II

## REVIEW OF THE LITERATURE

### I. PROFESSIONAL LITERATURE

The question posed by this study deals with public accounting; therefore, a primary source for investigating the question would be literature sponsored by organizations interested in public accounting. The American Institute of Certified Public Accountant's The Journal of Accountancy is one such publication. In reviewing The Journal of Accountancy articles dealing with the hiring and retention of accounting personnel by certified public accounting firms were found. Recently, there was reported in The Journal of Accountancy the results of a survey made by Harry Simons of 1945-46 through 1956-57 U.C.L.A. accounting graduates. This survey asked by a questionnaire about present occupations, feelings about accounting, how much money they were making, and what they planned for the future. Approximately 30% of those answering the questionnaire were not in accounting positions. There was a high level of satisfaction with jobs where the respondents were employed. Some of the recommendations made by the respondents were: 1. change in accounting curriculum to greater quantity and quality and 2. greater inclusion of liberal arts including communication abilities.[1]

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[1]Harry Simons, "What Accountants Think of Accounting," The Journal of Accountancy, (August, 1960), pp. 35-44.

Many of the articles in The Journal of Accountancy point out the continuing interest in the content of the undergraduate educational background. One such article contained the following paragraph.

> Education for a learned profession involves the development of an ethical and cultured person aware of his responsibilities as a citizen and sufficiently motivated to educate himself so he may carry out these responsibilities; capable of clear and imaginative thinking in everyday activity, as well as in research coupled with the ability for effective oral and written communication; and possessing a technical knowledge derived from rigorous intellectual study which is of use to society generally.[2]

Other recent articles concerning the undergraduate educational background of certified public accountants may be found in the January, 1964, May, 1967, and April, 1968, issues of The Journal of Accountancy.

The Journal of Accountancy is a publication that is primarily aimed at people engaged in the profession of accounting. An article in the November, 1957, issue by William P. Hutchison is the most appropriate to use in reviewing the profession's position on professional training.

> I recognize the importance of technical staff training, but that is completely different from professional training and development.
>
> True professional development is a planned program that will offer a man the training and guidance in the necessary management skills, the encouragement to take time to participate in professional and community activities, and the desire to contribute to his profession, all of which are requisite to recognition and identification as a true professional man in the opinion of the public.
>
> The first factor is concerned with the identity and recognition of the man, not only on the job but in everyday life.

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[2]Norton M. Bedford, "Education For Accounting as a Learned Profession," The Journal of Accountancy, (December, 1961), p. 35.

> The second factor in our definition of professional development is internal executive and management training.
>
> The third factor in our definition of professional development is the encouragement by management of participation in all activities that affect the profession.
>
> The fourth factor in our definition of professional development is financial support so that staff members can participate in the many projects and activities that require expenditures which may seem substantial to a man on a staff salary.
>
> The fifth factor in the definition of professional development is the requirement that we must instill in each man a desire to make his contribution to the profession through committee service, writing articles, delivering speeches, or the technical research that is a minimum requisite in any profession.
>
> Two practical problems related to the above five factors are 1. retention of men in public accounting who leave because of the lack of a professional development program, 2. adequate compensation for staff men.[3]

Table I, page 9, was compiled from Felix P. Kollaritsch's study of accounting graduates of Ohio State University as reported by John Ashworth in The Journal of Accountancy. The table reports responses of the graduates toward their undergraduate education that is highly pertinent to this study. It shows very clearly the respondents feeling of deficiency in their undergraduate curriculum outside the business and accounting fields.[4]

The second major periodical dealing with accounting is the Accounting Review. It is the publication of the American Accounting Association, an association which is primarily concerned with accounting education.

A review of this literature will indicate to the reviewer that

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[3]William P. Hutchison, "Professional Development," The Journal of Accountancy, (November, 1957), pp. 31-6.

[4]John Ashworth, "A Must For Effective Recruiting: Mutual Understanding Between Students and the Accounting Profession," The Journal of Accountancy, (February, 1969), pp. 84-6.

TABLE I

RESPONSES OF ACCOUNTING GRADUATES TOWARD UNDERGRADUATE EDUCATION AREAS[5]

| AREA IN CURRICULUM | GOOD | UNDER-STRESSED | OVER-STRESSED | NO OPINION |
|---|---|---|---|---|
| English | 41.0% | 40.6% | 3.7% | 13.3% |
| Mathematics | 32.6 | 39.9 | 1.7 | 23.9 |
| Accounting | 90.7 | 3.8 | 3.3 | 1.1 |
| Business courses other than accounting | 71.7 | 15.6 | 7.2 | 4.0 |
| Liberal arts | 42.2 | 39.1 | 5.3 | 11.2 |

[5] Ibid.

this organization has not focused on the student after he obtains his first job. There are a few articles dealing with continuing education, but they deal primarily with learning new tools or techniques of accounting, not with aspects of the job situation.

Two articles in The Accounting Review appear to be pertinent to this study from the education viewpoint. The article in the October, 1963, The Accounting Review reported on the accounting curriculum in relation to postgraduate achievement. The conclusions reached by the study were as follows.

> 1. A study of accounting in college beyond the course load now required for the Baccalaureate degree at most schools tends to improve significantly performance in accounting employment.
> 2. The employment situations faced by most respondents suggest a need for a more specialized accounting education.[6]

An article by Herbert J. Weiser in the July, 1966, The Accounting Review referred to the need for oral and written communication abilities of the accountant.

> And since we think in word symbols to a large extent, it is not surprising that those who cannot choose their words precisely cannot order their thoughts in a clear and convincing manner. They are correspondingly handicapped in personal effectiveness.[7]

In Horizons For A Profession, underwritten in part by the America Institute of Certified Public Accountants, a positive statement of the need for establishment of a minimum threshold of written and spoken English is expressed. The authors felt so strongly on this

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[6]Hershel M. Anderson and Fred B. Griffin, "The Accounting Curriculum and Postgraduate Achievement," The Accounting Review, (October, 1963), p. 818.

[7]Herbert J. Weiser, "Accounting Education--Present and Future," The Accounting Review, (July, 1966), p. 519.

that they proposed setting guidelines for grading the CPA examination for English content. As this book is in effect a position paper for the profession this particular paragraph is of particular interest in this study.

> In one area germane to the humanities we have been specific. Whatever a CPA may do in behalf of his clients, the end results must always be communicated, usually in writing, sometimes orally. However communicated, it is essential that there be clarity and specificity, unblemished by incoherence, disunity or ambiguity, untarnished by grammatical, syntactical or rhetorical error. We have sought to recognize this essential role of written and spoken English by declaring that those who cannot perform above a minimum threshold should be denied admission to the profession.[8]

As executive director of the American Institute of Certified Public Accountants for many years and a non-CPA, Mr. John L. Carey's book The CPA Plans For The Future is required reading for CPA's. A portion of the book refers to the retaining of personnel by the CPA firm and is so appropriate to this study that the following paragraphs are quoted verbatim.

> It is one thing to recruit promising candidates and another thing to hold them. The turnover among young staff accountants is quite high. This has always been accepted as normal and inevitable, but the assumption should be challenged. The largest accounting firms employ hundreds of college graduates each year, with the conscious expectation that 40 per cent of them, more or less, will not be with the firms five years later. The recruiting, training and replacing of such large numbers of staff assistants involves an enormous hidden cost.
>
> The reasons for the turnover are several. Some firms may regard the early years of a staff man's experience as a kind of struggle for survival of the fittest. Those who do not measure up are eased out. This may be an effective policy from the firm's point of view. The experience will have been salutary

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[8]Robert H. Roy and James H. MacNeill, Horizons For A Profession (New York: American Institute of Certified Public Accountants, Inc., 1967), p. 15.

for the men, but those who are eased out may not be good advertisements for public accounting.

On the other hand, it is sometimes the best men who leave the accounting firms. Frequently this is because a client makes a man a better offer than the firm can make him. Here the larger firms are at some disadvantage. They must stick with their salary classifications or chaos will result. A smaller firm, however, can pay a man whatever they think he is worth. If he is worth more to some client than the average senior salary, for example, he is probably worth more also to the firm itself.

It is also considered an advantage to a CPA firm to have former staff members in the accounting departments of clients. Assuming that the relations of the former staff man with the firm are good, this is probably a helpful relationship. But if the assumption is correct that the profession is facing a severe shortage of topflight brains in the next decade or two, the advantage gained by strenthening relations with a single client could hardly compensate for the loss of a first-rate professional mind.

Another reason why some good men leave accounting firms is lack of challenge. A former senior partner of one of the largest firms has expressed great concern about this. Some of the best paid and most promising staff men, he said, have told him they were leaving simply because after a year or two on the audit staff they did not feel that they were using their abilities to the full extent. Without the exercise of great care, staff men can fall into a routine of repetitive procedures, without much opportunity for creative work.

Recognizing this, many firms have taken pains to diversify the work of the younger staff men, so that all will have some familiarity with auditing, tax and management services. Since it is the auditor who can uncover tax and management problems which reveal opportunities for constructive service, this approach seems highly desireable. Staff men also should be given the opportunity to participate in the solution of unusual problems that arise in connection with clients on whose work they are engaged.

The sense of participation, of being a part of the firm, is extremely important even to the youngest junior. Some smaller firms have meetings of the entire staff, from top to bottom, at which the problems of the firm itself, even its finances, are discussed freely, and new technical developments are explained. Junior staff men have an opportunity to ask questions of their seniors. Some smaller firms also treat their senior staff men as though they were partners; paying their dues in clubs and permitting them to deal directly with senior officers in client establishments.

Human relations are obviously a fundamental part of building an organization. Many CPAs mistakenly believe that good human relations can be achieved merely by a cheerful and friendly manner. But the subject is more complicated than that. The motivations and attitudes of the staff men must be understood,

and their natural aspirations must be satisfied, if they are to be happy and enthusiastic workers.[9]

## II. THE MEASURING INSTRUMENT

This study used the semantic differential to determine the attitudes of the respondents towards the hypothesis to be tested. The semantic differential was developed by Charles E. Osgood, George J. Suci, and Percy H. Tannenbaum as a way of measuring the connotative meaning of concepts. The connotative meanings reflect the attitude of the individual toward the concept. There are at least three factors involved in the semantic differential: an evaluative factor, an activity factor, and a potency factor.

The evaluative (attitudinal) factor (dimension) is the portion of the semantic differential that will be used in this study. The evaluative factor is readily identifiable, usually dominant and accounts for the largest proportion of the total variance.[10] When using a measuring instrument the objectivity, reliability, validity, and utility of the instrument must be considered.

### Objectivity

> The means of arriving at results, from the collection of checkmarks on scales to the location of concept-points in semantic space and production of conceptual structures, are completely objective--two investigators given the same collection of

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[9] John L. Carey, The CPA Plans For The Future (New York: American Institute of Certified Public Accountants, Inc., 1965), pp. 303-5.

[10] Charles E. Osgood, George J. Suci, and Percy H. Tannenbaum, The Measurement of Meaning (Urbana: University of Illinois Press, 1957), p. 190.

check-marks and following the rules must end up with the same meaning of concepts and patterns of conceptual structures.[11]

## Reliability

"A measuring instrument must be reliable--that is, it must be consistent in the measurement of whatever it measures."[12] Semantic differential scores are too consistent for a reliability coefficient to be used and the changing attitudes of individuals also limit the usefulness of the reliability coefficient.

> Since the reliability of concept meaning conceived as a point in the semantic space is completely dependent upon the reliabilities of the factor scores of which it is composed, no separate estimates need to be given here. The same holds for the reliability of semantic distances between concepts in the space, where the D formula is applied to paired arrays of factor scores. In both cases, the variables which determine the point in space of a single concept and over which the D is computed are assumed to be independent, and hence there can be no cancellation of errors in their combination. Therefore, concept meanings and distances between them will be just as reliably determined as the factor scores on which they are based.[13]

## Validity

"Validity refers to the extent to which an instrument measures what it purports to measure."[14] As there is no commonly accepted quantitative criterion of meaning, which is what we are measuring

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[11] Ibid., p. 125.

[12] George J. Mouly, The Science of Educational Research (New York: American Book Company, 1963), p. 99.

[13] Osgood, op. cit., p. 140.

[14] Mouly, op. cit., p. 100.

with the semantic differential, we must use face validity in judging the validity of the instrument.[15] Face validity refers to how the distinctions provided by the instrument correspond with those which would be made by most observors without the aid of the instrument. Osgood, et al. in their book The Measurement of Meaning provide various illustrations of the face validity of the semantic differential.[16]

Utility

Using the adjective pairs tested and assigned to their semantic space by Osgood, Suci and Tannenbaum the preparation of the instrument is relatively simple. However, prior to the use of computers the evaluation of the results would have been monumental. With the present day use of the computer the analysis may be made in a reasonable time period at a reasonable expenditure.

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[15] Osgood, loc. cit.

[16] Ibid., pp. 141-66

# CHAPTER III

## THE MATERIALS USED AND GROUPS STUDIED

### I. THE STATISTICAL INSTRUMENT USED IN THIS STUDY

This study was conducted to determine the attitudes of three groups of individuals. The semantic differential was chosen as the statistical instrument to use. When using the D-matrices of the semantic differential the investigator measures the distance in semantic space of the different words, ideas or concepts. According to Fred N. Kerlinger, the D-values found in computing the D-matrix may be used in the same manner as raw scores thereby validating the use of statistical procedures to the D-values.[1]

The meaning that any group places upon almost any concept can be measured by using the semantic differential. From factor analysis studies that have been done, several dimensions of semantic space have been identified. The evaluative factor is the dominant factor and was the only one to be considered in this study.

The semantic differential is an instrument that will allow a measurement of the attitudes of the groups under study and a comparison of the attitudes of the groups toward a series of phrases related to public accounting.

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[1]Fred N. Kerlinger, Foundations of Behavioral Research (New York: Holt, Rinehart, and Winston, Inc., 1964), p. 574.

## II. SELECTION OF SEMANTIC DIFFERENTIAL POLAR ADJECTIVES

The bipolar adjectives, or scales, used in this study were selected from Osgood, Suci and Tannenbaum's research analysis of adjective pairs.[2]

The ten scales that were used in this study were all evaluative and were chosen on the basis of appropriateness to the study with as high a loading factor toward the evaluative factor as possible.

In order to avoid tendencies of acquiesence and ". . . to counteract response bias tendencies."[3] a reversal of bipolar adjectives has been found to be effective. These reversals (scored from left to right with values of 1 through 7) were as follows:

Item 2: inferior-superior

Item 4: ungrateful-grateful

Item 6: untimely-timely

Item 9: dangerous-safe

The remaining six bipolar adjectives (scored from right to left with values of 1 through 7) have been listed below.

Item 1: good-bad

Item 3: kind-cruel

Item 5: optimistic-pessimistic

Item 7: successful-unsuccessful

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[2]Charles E. Osgood, George J. Suci, and Percy H. Tannenbaum, The Measurement of Meaning (urbana: University of Illinois Press, 1957), pp. 53-5.

[3]Kerlinger, op. cit., p. 571.

Item 8: assenting-dissenting

Item 10: congenial-quarrelsome

## III. SELECTION OF THE SAMPLE

To compare the attitudes of accounting graduates of the Kansas State Teachers College of Emporia, Kansas, from 1960 to 1967, a list of people fitting this qualification was compiled. There were two sources available and neither was complete. The method used was to obtain a list of accounting graduates from the accounting department and compare it to the files of the placement bureau of the college. After the comparison and obtaining the addresses, 193 individuals were available to whom the measuring instrument was sent.

## IV. ADMINISTRATION OF THE SEMANTIC DIFFERENTIAL

The data for this study was acquired by mailing the semantic differential material to the graduates. There were three steps in the mailing procedure. Starting in March, 1969, the original material (Appendix A, pp. 46-55) was sent. Approximately three weeks after the first set of material was sent, a postcard (Appendix B, pp. 56-7) was sent as a reminder. Approximately six weeks after the first set of material was sent a covering letter (Appendix C, pp. 58-68) was sent with a copy of the first set of material.

Twelve of the individuals asked to respond to the instrument indicated they would not participate. The breakdown into groups of the ninety-nine responses was as follows:

| | |
|---|---|
| Had not been employed in public accounting | 30 |
| Are employed in public accounting | 40 |
| Had left public accounting | 29 |

## V. MAJOR STEPS IN SEMANTIC DIFFERENTIAL ANALYSIS

Per the directions sent with the instrument, each respondent was asked to place an X in one of the seven spaces for each scale on each concept page.

The scoring process involved the assignment of the values for the scales as marked by the respondent. Each respondent would then have ten scales for each of the seven concepts or a total of seventy raw score values per respondent.

The raw scores were then tabulated according to the three groups under investigation by the mean scale values of each concept. The D-values were then computed for each group. As the D-values were to be used and this study was interested in comparison of groups rather than individuals, the D-values seemed the most appropriate to use.

### THE KENDALL COEFFICIENT OF CONCORDANCE (W)

When it is desired to determine the relationship among three or more sets of ranks the Kendall Coefficient of Concordance (W) may be used. The meaning of W was interpreted by Downie and Heath:

> The size of the coefficient of concordance ($W = .82$) indicates that there is a high agreement among these five judges in the ranking of the ten projects, perfect agreement is indicated by $W = 1$ and lack of agreement by a $W = 0$. The significance of a

coefficient of concordance may be tested by the use of tables developed by Kendall.[4]

## THE KRUSKAL-WALLIS "ANALYSIS OF VARIANCE" BY RANKS (H)

When the computation of Kendall's Coefficient of Concordance (W) yielded a significant difference, then the Kruskal-Wallis "Analysis of Variance" by Ranks (H) was used as a check measure and a second statistical test for purposes of comparison.

If H is significant, then you may reject the hypothesis that the samples are from the same population.[5]

## THE SPEARMAN RANK-ORDER COEFFICIENT ($r_s$)

The Spearman Rank-Order Coefficient is widely used for rank correlation methods with two sets and was used in this study to determine the correlation between the three possible pairings of the groups.

## THE DISTANCE CLUSTER ANALYSIS

In analyzing the data it was anticipated that there would be a highly positive reaction of the respondents in marking the scales. As the preponderance of respondents were in accounting, it was considered unlikely that they would downgrade their occupation.

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[4]N. M. Downie and R. W. Heath, Basic Statistical Methods (New York: Harper and Row, Publishers, 1965), p. 210.

[5]George A. Ferguson, Statistical Analysis in Psychology and Education (New York: McGraw Hill Book Company, 1966), p. 363.

Any difference in their means would likely be very slight; therefore, the investigator analyzed D-values on the data for possible discriminations.

As the D-values represent distance in semantic space a D-value of zero and a D-value of fourteen plus would represent the furthest points in the semantic space of this study.

# CHAPTER IV

## ANALYSIS OF DATA

### I. RESPONSE ANALYSIS

The data used to test the hypothesis in this study consisted of information derived from the administration of the semantic differential instrument to ninety-nine accounting graduates of the Kansas State Teachers College of Emporia, Kansas. A total of one hundred ninety-three instruments were mailed. A return of ninety-nine of the instruments represented a return of 51.3 percent.

As the statistical tests were to be used on the D-values, the mean scale values by concept had to be found (Appendix D, E, and F). The D-values were then found by the use of the following formula:

$$D_{ij} = \sqrt{\Sigma d_{ij}^2}$$

In this formula, D represents the linear distance between any two concepts, i and j, and d is the algebraic distance between the coordinates of i and j on the same factor (evaluative in this case).[1] As an example, respondents never employed in public accounting had the D-value $D_{AB}$ computed as follows:

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[1] Fred N. Kerlinger, Foundations of Behavioral Research (New York: Holt, Rinehart, and Winston, Inc., 1964), p. 573.

| SCALES | CONCEPT A | CONCEPT B | d | $d^2$ |
|---|---|---|---|---|
| 1 | 5.667 | 6.067 | .400 | .1600 |
| 2 | 5.300 | 5.667 | .367 | .1354 |
| 3 | 4.833 | 4.967 | .134 | .0180 |
| 4 | 5.033 | 5.333 | .300 | .0900 |
| 5 | 5.467 | 5.167 | .300 | .0900 |
| 6 | 4.633 | 5.400 | .767 | .5833 |
| 7 | 5.600 | 5.967 | .367 | .1354 |
| 8 | 5.267 | 5.233 | .033 | .0011 |
| 9 | 5.067 | 5.200 | .133 | .0177 |
| 10 | 4.733 | 5.367 | .634 | .4020 |
| | | | | $\Sigma d^2 = 1.6379$ |
| | | | | $D_{AB} = \sqrt{\Sigma d^2} = 1.2790$ |

The D-matrices for the three groups are represented in Tables II, III, and IV at pp. 24-6. The column and line letters refer to the concepts. The code used in relating a letter to a concept is as follows:

A = economic rewards of public accounting

B = undergraduate education

C = employer-employee relations in public accounting

D = oral communication abilities

E = written communication abilities

F = public accounting profession

G = professional employees in public accounting

TABLE II

D-MATRIX FOR RESPONDENTS WHO HAD NOT BEEN EMPLOYED IN PUBLIC ACCOUNTING (N=30)

| | Concept | | | | | | |
|---|---|---|---|---|---|---|---|
| Concept | A | B | C | D | E | F | G |
| A | -- | 1.2790 | 1.1442 | .9394 | 1.2211 | .5306 | 1.7825 |
| B | | -- | 2.0197 | 1.3714 | 1.6828 | 1.1973 | 1.1720 |
| C | | | -- | 1.0424 | .8507 | 1.0153 | .9489 |
| D | | | | -- | .7318 | .6848 | .6949 |
| E | | | | | -- | .9592 | .7334 |
| F | | | | | | -- | .5060 |
| G | | | | | | | -- |

A = economic rewards of public accounting

B = undergraduate education

C = employer-employee relations in public accounting

D = oral communication abilities

E = written communication abilities

F = public accounting profession

G = professional employees in public accounting

TABLE III

D-MATRIX FOR RESPONDENTS WHO ARE

EMPLOYED IN PUBLIC ACCOUNTING (N=40)

| | Concept | | | | | | |
|---|---|---|---|---|---|---|---|
| Concept | A | B | C | D | E | F | G |
| A | -- | 1.0083 | .9803 | 1.0867 | 1.3164 | 1.7069 | .8298 |
| B | | -- | 1.1376 | .9768 | 1.4207 | 1.4758 | .8203 |
| C | | | -- | .6928 | .9781 | 2.0229 | 1.0367 |
| D | | | | -- | .7100 | 2.2124 | 1.1445 |
| E | | | | | -- | 2.6413 | 1.6118 |
| F | | | | | | -- | 1.2404 |
| G | | | | | | | -- |

A = economic rewards of public accounting

B = undergraduate education

C = employer-employee relations in public accounting

D = oral communication abilities

E = written communication abilities

F = public accounting profession

G = professional employees in public accounting

TABLE IV

D-MATRIX FOR RESPONDENTS WHO HAD LEFT

PUBLIC ACCOUNTING EMPLOYMENT (N=29)

| | Concept | | | | | | |
|---|---|---|---|---|---|---|---|
| Concept | A | B | C | D | E | F | G |
| A | -- | 2.1631 | .8819 | 2.0166 | 1.0120 | 1.5466 | 1.5841 |
| B | | -- | 2.6282 | .5223 | 1.2850 | 1.0754 | .8386 |
| C | | | -- | 2.3778 | 1.4829 | 2.0273 | 2.0047 |
| D | | | | -- | 1.2105 | 1.1163 | .8851 |
| E | | | | | -- | .7474 | .6860 |
| F | | | | | | -- | .5784 |
| G | | | | | | | -- |

A = economic rewards of public accounting

B = undergraduate education

C = employer-employee relations in public accounting

D = oral communication abilities

E = written communication abilities

F = public accounting profession

G = professional employees in public accounting

## II. STATISTICAL TESTS

In order to determine if the hypothesis was to be accepted or rejected, the following tests were applied for the reasons given. The Kendall Coefficient of Concordance (W) was used to measure the tendency for each of the concepts to be ranked in the same way for each of the three groups. To provide a second statistical check the Kruskal-Wallis "Analysis of Variance" by Ranks (H) was used. If it was determined that there was a significant difference in the three-group comparisons, the Spearman Rank-Order Coefficient ($r_s$) was determined for the three pairings of the three groups. The distance-cluster analysis was then made to determine which concepts are similiar or differing in meaning.

### THE KENDALL COEFFICIENT OF CONCORDANCE (W)

Table V, p. 28, gives the D-values that were obtained for each concept pairing for each group and the rank values obtained for the Kendall (W) and the Kruskal-Wallis (H) methods. Table VI, p. 29, gives the distance between the means of the ranking to be used in finding W. The formula used in the computation of W is as follows:

$$W = \frac{12\Sigma D^2}{m^2(N)(N^2-1)}$$

where m = number of groups (3)

and N = number of concept pairings (21)

$$W = \frac{12(1796)}{(3)^2(21)(21^2-1)} = .259$$

TABLE V

D-MATRIX (D) VALUES, RANK VALUES FOR KENDALL (W) AND RANK VALUES FOR KRUSKAL-WALLIS (H) BY RESPONDENT GROUPING BY CONCEPT PAIRING

| Concept Pairing | Respondents Who Had Not Been Employed In Public Accounting | | | Respondents Who Are Employed In Public Accounting | | | Respondents Who Had Left Public Accounting Employment | | |
|---|---|---|---|---|---|---|---|---|---|
| | D | W | H | D | W | H | D | W | H |
| AB | 1.279 | 17 | 41 | 1.008 | 8 | 25 | 2.163 | 19 | 59 |
| AC | 1.144 | 13 | 34 | .980 | 7 | 24 | .882 | 6 | 17 |
| AD | .939 | 8 | 19 | 1.087 | 10 | 31 | 2.017 | 17 | 55 |
| AE | 1.221 | 16 | 39 | 1.316 | 14 | 43 | 1.012 | 8 | 26 |
| AF | .531 | 2 | 3 | 1.707 | 18 | 52 | 1.547 | 14 | 48 |
| AG | 1.783 | 20 | 53 | .830 | 4 | 14 | 1.584 | 15 | 49 |
| BC | 2.020 | 21 | 56 | 1.138 | 11 | 33 | 2.628 | 21 | 62 |
| BD | 1.371 | 18 | 44 | .977 | 6 | 23 | .522 | 1 | 2 |
| BE | 1.683 | 19 | 51 | 1.421 | 15 | 45 | 1.285 | 12 | 42 |
| BF | 1.197 | 15 | 37 | 1.476 | 16 | 46 | 1.075 | 9 | 30 |
| BG | 1.172 | 14 | 36 | .820 | 3 | 13 | .839 | 5 | 15 |
| CD | 1.042 | 12 | 29 | .693 | 1 | 7 | 2.378 | 20 | 61 |
| CE | .851 | 7 | 16 | .978 | 5 | 22 | 1.483 | 13 | 47 |
| CF | 1.015 | 11 | 27 | 2.023 | 19 | 57 | 2.027 | 18 | 58 |
| CG | .949 | 9 | 20 | 1.037 | 9 | 28 | 2.005 | 16 | 54 |
| DE | .732 | 5 | 10 | .710 | 2 | 9 | 1.211 | 11 | 38 |
| DF | .685 | 3 | 5 | 2.212 | 20 | 60 | 1.116 | 10 | 32 |
| DG | .695 | 4 | 8 | 1.145 | 12 | 35 | .885 | 7 | 18 |
| EF | .959 | 10 | 21 | 2.641 | 21 | 63 | .747 | 4 | 12 |
| EG | .733 | 6 | 11 | 1.612 | 17 | 50 | .686 | 3 | 6 |
| FG | .506 | 1 | 1 | 1.240 | 13 | 40 | .578 | 2 | 4 |
| | | | $\Sigma H = 561$ | | | $\Sigma H = 720$ | | | $\Sigma H = 735$ |

TABLE VI

COMPUTATION OF $\Sigma D^2$ FOR KENDALL COEFFICIENT OF CONCORDANCE

| Concept Pairing | A | B | C | A+B+C | D | $D^2$ |
|---|---|---|---|---|---|---|
| AB | 17 | 8 | 19 | 44 | 11 | 121 |
| AC | 13 | 7 | 6 | 26 | 7 | 49 |
| AD | 8 | 10 | 17 | 35 | 2 | 4 |
| AE | 16 | 14 | 8 | 38 | 5 | 25 |
| AF | 2 | 18 | 14 | 34 | 1 | 1 |
| AG | 20 | 4 | 15 | 39 | 6 | 36 |
| BC | 21 | 11 | 21 | 53 | 20 | 400 |
| BD | 18 | 6 | 1 | 25 | 8 | 64 |
| BE | 19 | 15 | 12 | 46 | 13 | 169 |
| BF | 15 | 16 | 9 | 40 | 7 | 49 |
| BG | 14 | 3 | 5 | 22 | 11 | 121 |
| CD | 12 | 1 | 20 | 33 | 0 | 0 |
| CE | 7 | 5 | 13 | 25 | 8 | 64 |
| CF | 11 | 19 | 18 | 48 | 15 | 225 |
| CG | 9 | 9 | 16 | 34 | 1 | 1 |
| DE | 5 | 2 | 11 | 18 | 5 | 25 |
| DF | 3 | 20 | 10 | 33 | 0 | 0 |
| DG | 4 | 12 | 7 | 23 | 10 | 100 |
| EF | 10 | 21 | 4 | 35 | 2 | 4 |
| EG | 6 | 17 | 3 | 26 | 7 | 49 |
| FG | 1 | 13 | 2 | 16 | 17 | 289 |
| | | | | $\Sigma A+B+C = 693$ | | $\Sigma D^2 = 1796$ |
| | | | | $\Sigma A+B+C \div 21 = 33$ | | |

W Rankings From Table V

The value of W = .259 would not be significant at the .20 level. This would be interpreted to mean that there was not a significant amount of agreement within each group on the ranking of these aspects of public accounting employment.

KRUSKAL-WALLIS "ANALYSIS OF VARIANCE" BY RANKS (H)

Table V, p. 28, gives the D-values that were obtained for each concept pairing for each group and the rank values obtained for the Kendall (W) and the Kruskal-Wallis (H) methods. The formula used in the computation of H is as follows:

$$H = \frac{12}{n(n+1)} \frac{\Sigma R_j^2}{N_j} - 3(n+1)$$

where n = total number of D-values ranked in this study (63)

where $\Sigma R_j^2$ = square of the sum of each column ranks (3 columns)

and where $N_j$ = number of ranks (21) in each column.

$$H = \frac{12}{63(63+1)} \frac{(561^2+720^2+735^2)}{21} - 3(63+1)$$

$$H = 4.68$$

The value of H = 4.68 would be significant at the .10 level. This would be interpreted to mean that the three separate groups tended to disagree although not to a marked degree.

Considering the expectancy of the groups to rate the concepts high, the results of the Kendall (W) and Kruskal-Wallis (H) indicate that a comparison of pairings of groups might yield furthur discriminations.

SPEARMAN RANK-ORDER COEFFICIENT ($r_s$)

Table V, p. 28, gives the rank values that may be used in computing the Spearman Rank-Order Coefficient ($r_s$). Table VII, p. 32, gives the ranks, the difference in the ranks (D) and the square of the difference ($D^2$) for the three groups. The formula used in the computation of $r_s$ is as follows:

$$r_s = 1 - \frac{6(D^2)}{N(N^2-1)}$$

where N = number of concept pairings (21).

In determining the correlation in rankings of persons who had not been employed in public accounting (A) and those who were employed in public accounting (B), the following values were inserted and $r_{s_{AB}}$ was obtained:

$$r_{s_{AB}} = 1 - \frac{6(1958)}{21(21^2-1)}$$

$$r_{s_{AB}} = -.27$$

Using a critical value table for the Spearman Rank Correlation Coefficient, the value of $r_{s_{AB}} = -.27$ is not significant at the .05 level. This would be interpreted to mean that there is not a correlation of ranking at the .05 confidence level. Tate states in interpreting the Spearman Rank-Order Coefficient that

> The importance of the relationship can be judged by squaring $r_d$. For example when $r_d$ is -.25, $r_d^2$ is .0625; and we may say that about 6 percent of the variation of either variable

TABLE VII

COMPUTATION OF $D^2$ FOR SPEARMAN RANK-ORDER COEFFICIENT FOR THREE PAIRINGS OF RESPONDENT'S D-VALUES

| Concept Pairing | Pairing of Group A and Group B | | | | Pairing of Group A and Group C | | | | Pairing of Group B and Group C | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $R_a$ | $R_b$ | D | $D^2$ | $R_a$ | $R_c$ | D | $D^2$ | $R_b$ | $R_c$ | D | $D^2$ |
| AB | 17 | 8 | 9 | 81 | 17 | 19 | 2 | 4 | 8 | 19 | 11 | 121 |
| AC | 13 | 7 | 6 | 36 | 13 | 6 | 7 | 49 | 7 | 6 | 1 | 1 |
| AD | 8 | 10 | 2 | 4 | 8 | 17 | 9 | 81 | 10 | 17 | 7 | 49 |
| AE | 16 | 14 | 2 | 4 | 16 | 8 | 8 | 64 | 14 | 8 | 6 | 36 |
| AF | 2 | 18 | 16 | 256 | 2 | 14 | 12 | 144 | 18 | 14 | 4 | 16 |
| AG | 20 | 4 | 16 | 256 | 20 | 15 | 5 | 25 | 4 | 15 | 11 | 121 |
| BC | 21 | 11 | 10 | 100 | 21 | 21 | 0 | 0 | 11 | 21 | 10 | 100 |
| BD | 18 | 6 | 12 | 144 | 18 | 1 | 17 | 289 | 6 | 1 | 5 | 25 |
| BE | 19 | 15 | 4 | 16 | 19 | 12 | 7 | 49 | 15 | 12 | 3 | 9 |
| BF | 15 | 16 | 1 | 1 | 15 | 9 | 6 | 36 | 16 | 9 | 7 | 49 |
| BG | 14 | 3 | 11 | 121 | 14 | 5 | 9 | 81 | 3 | 5 | 2 | 4 |
| CD | 12 | 1 | 11 | 121 | 12 | 20 | 8 | 64 | 1 | 20 | 19 | 361 |
| CE | 7 | 5 | 2 | 4 | 7 | 13 | 6 | 36 | 5 | 13 | 8 | 64 |
| CF | 11 | 19 | 8 | 64 | 11 | 18 | 7 | 49 | 19 | 18 | 1 | 1 |
| CG | 9 | 9 | 0 | 0 | 9 | 16 | 7 | 49 | 9 | 16 | 7 | 49 |
| DE | 5 | 2 | 3 | 9 | 5 | 11 | 6 | 36 | 2 | 11 | 9 | 81 |
| DF | 3 | 20 | 17 | 289 | 3 | 10 | 7 | 49 | 20 | 10 | 10 | 100 |
| DG | 4 | 12 | 8 | 64 | 4 | 7 | 3 | 9 | 12 | 7 | 5 | 25 |
| EF | 10 | 21 | 11 | 121 | 10 | 4 | 6 | 36 | 21 | 4 | 17 | 289 |
| EG | 6 | 17 | 11 | 121 | 6 | 3 | 3 | 9 | 17 | 3 | 14 | 196 |
| FG | 1 | 13 | 12 | 144 | 1 | 2 | 1 | 1 | 13 | 2 | 11 | 121 |
| $\Sigma D^2$ = | | | | 1958 | | | | 1160 | | | | 1818 |

Group A is respondents who had not been employed in public accounting
Group B is respondents who are employed in public accounting
Group C is respondents who left public accounting employment

is explained by its correlation with the other, while 94 percent is unexplained.[2]

Applying this to the $r_{s_{AB}} = -.27$, the interpretation would be that about 7 percent of the variation of A group is explained by its inverse correlation with the B group, while 93 percent is unexplained.

In determining the correlation in rankings of persons who had not been in public accounting (A) and those who had left public accounting (C) the following values were inserted and $r_{s_{AC}}$ was obtained:

$$r_{s_{AC}} = 1 - \frac{6(1160)}{21(21^2-1)}$$

$$r_{s_{AC}} = .25$$

Using a critical value table for the Spearman Rank Correlation Coefficient, the value of $r_{s_{AC}}$ is not significant at the .05 level. By squaring $r_{s_{AC}}$, it may be interpreted to mean that about 6 percent of the variation of A group is explained by its correlation with the C group, while 94 percent is unexplained.

In determining the correlation in rankings of persons employed in public accounting (B) and those who had left public accounting (C), the following values were inserted and $r_{s_{BC}}$ was obtained:

$$r_{s_{BC}} = 1 - \frac{6(1818)}{21(21^2-1)}$$

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[2]Merle W. Tate and Richard C. Clelland, Nonparametric and Shortcut Statistics (Danville: Interstate Printers and Publishers, Inc., 1957), p. 14.

$$r_{s_{BC}} = -.18$$

Using a critical value table for the Spearman Rank Correlation Coefficient, the value of $r_{s_{BC}} = -.18$ is not significant at the .05 level. By squaring $r_{s_{BC}}$, it may be interpreted to mean that about 3 percent of the variation of B group is explained by its inverse correlation with the C group, while 97 percent is unexplained.

THE DISTANCE-CLUSTER ANALYSIS

When an analysis of D-matrices (Tables II, III, and IV, pp. 24-6) was made, it was found that three clusters were formed in the semantic space with respect to the evaluative factor. Although the D-values were small, a fact which may be attributed to their common orientation, an inspection of Table VIII, at p. 35, evidenced the clustering of these concepts.

Table VIII illustrates the most significant relationships in attitude comparison of the respondents. An example taken from Table VIII would illustrate the interpretation. Persons who were employed in public accounting tend to feel concept C (employer-employee relations in public accounting) is most closely related to concept D (oral communication ability). However, the attitude toward Concept E (written communication ability) is furthest from their attitude toward concept F (public accounting profession).

In Tables XII, XIII, and XIV, Appendices G, H, and I, pp. 75-80, the complete row-by-row analysis of the three groups has been done to support the clustering of the concepts as presented in Table VIII.

TABLE VIII

CONCEPT CLUSTERS FORMED BY AN ANALYSIS OF SIGNIFICANT RELATIONSHIPS, ROWS A THROUGH G OF TABLES II, III, AND IV D-VALUES CALCULATED FOR THE RESPONDENTS

Respondents Who Had Not Been Employed In Public Accounting

A to D = .94
A to F = .53
C to E = .85
C to G = .95
D to E = .73
D to F = .68
E to F = .96
E to G = .73
F to G = .51
D to G = .69

B to C = 2.02

Respondents Who Were Employed In Public Accounting

A to C = .98
A to G = .83
B to D = .98
B to G = .82
C to D = .69
C to E = .98
D to E = .71

C to F = 2.02
D to F = 2.21
E to F = 2.64

Respondents Who Had Left Public Accounting Employment

A to C = .88
B to D = .52
B to G = .84
D to G = .89
E to F = .75
E to G = .69
F to G = .58

A to B = 2.16
A to D = 2.02
B to C = 2.63
C to D = 2.38
C to F = 2.03
C to G = 2.00

## DISCUSSION OF FINDINGS

Of the three statistical methods used, the Kruskal-Wallis H was the only statistic at a .10 significance level. The Spearman $r_s$ statistics indicated a tendency toward zero correlation of the comparison of the group pairings.

# CHAPTER V

## SUMMARY AND CONCLUSIONS

### I. PURPOSE OF THIS STUDY

The primary purpose of this study was to determine if any differences existed between the attitudes of accounting graduates toward certain aspects of public accounting. In order to use statistical measuring devices, the accounting graduates were divided into the three groups: those who had not been employed in public accounting, those who were employed in public accounting and those who had left public accounting employment.

From these groups the following hypotheses were studied: there is no significant difference between accounting graduates that have not been employed in public accounting, that are employed in public accounting and that have left public accounting employment in their attitudes in regard to the following aspects of public accounting: economic rewards of public accounting, undergraduate education, employer-employee relations in public accounting, oral communication abilities, written communication abilities, public accounting profession, and professional employees in public accounting.

### II. SUMMARY OF FINDINGS

Neither the Kendall W nor the Kruskal-Wallis H indicated a highly significant amount of agreement or disagreement of the attitudes of accounting graduates who had not been employed, were employed, or

had left public accounting. The Kruskal-Wallis H, a measure of disagreement between three or more groups, did indicate a .10 degree of significance between these three groups in the manner in which they ranked the aspects of public accounting.

As the three group statistical procedures were not highly significant, the groups were paired to determine if there was a significant degree of agreement or disagreement between any two of the groups. The Spearman $r_s$ was used for the two-group comparisons. The $r_s$ obtained in each of the pairings was low indicating there was not a significant degree of agreement in evaluating the aspects of employment. In the comparison of those who had not been employed in public accounting and those who were employed in public accounting and the comparison of those who were employed in public accounting and those who had left public accounting employment there were inverse $r_s$ obtained. Using the procedure indicated in Chapter IV, three to seven percent of the variation of the groups was explained by its positive or inverse correlation with the other group.

It would be concluded, that there is a tendency for accounting graduates to have similar attitudes toward the same aspects of public accounting, but these groups do differ from each other in their attitudes. A rejection of the null hypotheses would be most tenable.

As the D-values that were obtained in this study had a range of 2.135 out of a possible range in excess of twenty-two, this would indicate that the distance between the attitudes of the three groups toward the aspects of public accounting employment was not great. Two characteristics of the respondents may tend to make this distance

significant. The respondents received their education from the same educational institution. The respondents have a common interest in accounting which might lead them to view accounting in a favorable perspective which would reduce the probable range of D-values to nine plus.

Assuming that the range of D-values obtained in this study is significant, the following attitude comparisons would be significant.

The accounting graduates who were employed in public accounting indicated their attitude toward the public accounting profession was furthest from the other aspects of public accounting. However the accounting graduates, who had not been employed in public accounting, indicated their attitude toward the public accounting profession was relatively close to their attitudes to the other aspects of public accounting. The accounting graduates, who had left public accounting employment, indicated their attitude toward the public accounting profession was relatively close to their attitudes to the other aspects of public accounting except their attitude toward employer-employee relations in public accounting, and to a lesser degree economic rewards in public accounting.

The accounting graduates who were employed in public accounting had very similar attitudes on the aspects of employment except for the following. Their attitude toward the public accounting profession was not similar to their attitudes in regard to the other aspects of employment and their attitudes toward written communication abilities as opposed to professional employees in public accounting.

The accounting graduates who had not been employed in public accounting had very similar attitudes towards the aspects of public accounting with the exception of three comparisons. The exceptions were: economic rewards of public accounting as opposed to professional employees in public accounting, employer-employee relations in public accounting as opposed to undergraduate education, and written communication ability as opposed to undergraduate education.

The accounting graduates, who had left public accounting employment, had the largest number of differences in attitude. Their attitude toward employer-employee relations was relatively distant from the other aspects of public accounting except for the economic rewards of public accounting. Their attitudes toward the public accounting profession and professional employees in public accounting were relatively close to the other aspects of employment except for employer-employee relations in public accounting. As indicated in the row-by-row analysis, their attitudes toward the economic rewards and employer-employee relations were relatively close together while those two aspects of public accounting were relatively distant to their attitudes toward the other aspects of public accounting.

## III. CONCLUSIONS

As a result of this study, it would appear likely that accounting graduates regard aspects of public accounting in a dissimilar manner depending on their employment experience.

This study would support the consensus that employees who leave public accounting leave because of the economic rewards and the employer-employee relations.

## IV. RECOMMENDATIONS FOR FURTHUR RESEARCH

In constructing the D-matrix from the scalings by the respondents, it was apparent that some individuals did not agree with the group averages. In some of the instances, the variance would have been significant. This would indicate there may be further breakdowns in classifications that might reveal highly significant differences in attitudes. Some of these further classifications might be general ability as measured by some criteria, firm or type of firm employment, whether they had interned in public or private accounting, and length of time from graduation.

Determination of the reasons behind the attitudes expressed in this study could lead to an improved image for the public accounting profession and improved employer-employee relations.

A study of accounting graduates who do not enter public accounting and their reasons for not entering public accounting would interest the public accounting profession.

A study of individuals who leave public accounting to determine their reasons for leaving would interest the public accounting profession.

A study of individuals who enter and stay in public accounting would interest anyone concerned with the public accounting profession.

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# BIBLIOGRAPHY

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# APPENDIX A

Dear Graduate:

You are being asked to participate in a study on the attitudes of Kansas State Teachers College of Emporia accounting graduates toward public accounting and their education. This study will be used to prepare a thesis at the masters degree level at the college by the undersigned.

Enclosed is the survey which you are being asked to complete. If you follow the directions, we anticipate that it will take you approximately fifteen minutes to complete it. Using statistics, the information will be compiled and be presented in the form of tables with no individual information being presented.

After you have completed the survey, would you please mail it in the enclosed, stamped, self-addressed envelope.

Thank you for your cooperation.

Yours truly,

David V. Pool

Approved by:

Dr. R. B. Russell
Chairman, Business Department
Kansas State Teachers College
Emporia, Kansas

# INSTRUCTIONS

On each of the following pages there is a phrase for you to describe. Your descriptions will be made by marking the list of words on the page. Take a look below to see how this is done. Each pair of words forms a scale. By making an X along the scale you can indicate what you associate with the particular word or phrase.

If you feel that the phrase at the top of the page is very closely associated with one end of the scale, you would place an X as follows:

fair X : : : : : : unfair or fair : : : : : : X unfair

If you feel that the phrase at the top of the page is quite closely associated with one end of the scale, you would place an X as follows:

fair : X : : : : : unfair or fair : : : : X : : unfair

If you feel that the phrase at the top of the page is only slightly associated with one end of the scale, you would place an X as follows:

fair : : X : : : : unfair or fair : : : X : : : unfair

If you feel that the phrase at the top of the page is equally associated with each end of the scale, you would place an X as follows:

fair : : : X : : : unfair

Remember: Never put more than one check mark on any scale, be sure to check every item, and do not leave the line blank.

Do not spend more than a few seconds marking each scale. Your first impression is what we would like to learn about. We have found you can work quicker if you first form a picture in your mind of what the phrase describes at the top of the page, and then check each scale very rapidly.

When you finish one page, go on to the next. When you have finished with all of the pages, check to make certain you haven't skipped a page or scale, but do not change the rating you made.

Would you please check one of the following blanks:

___ I have not been employed in public accounting.
___ I am employed in public accounting.
___ I have left public accounting employment.

ECONOMIC REWARDS OF PUBLIC ACCOUNTING

good____:____:____:____:____:____:____bad

inferior____:____:____:____:____:____:____superior

kind____:____:____:____:____:____:____cruel

ungrateful____:____:____:____:____:____:____grateful

Optimistic____:____:____:____:____:____:____pessimistic

untimely____:____:____:____:____:____:____timely

successful____:____:____:____:____:____:____unsuccessful

assenting____:____:____:____:____:____:____dissenting

dangerous____:____:____:____:____:____:____safe

congenial____:____:____:____:____:____:____quarrelsome

PUBLIC ACCOUNTING PROFESSION

good____:____:____:____:____:____:____bad

inferior____:____:____:____:____:____:____superior

kind____:____:____:____:____:____:____cruel

ungrateful____:____:____:____:____:____:____grateful

optimistic____:____:____:____:____:____:____pessimistic

untimely____:____:____:____:____:____:____timely

successful____:____:____:____:____:____:____unsuccessful

assenting____:____:____:____:____:____:____dissenting

dangerous____:____:____:____:____:____:____safe

congenial____:____:____:____:____:____:____quarrelsome

WRITTEN COMMUNICATION ABILITIES

good____:____:____:____:____:____:____bad

inferior____:____:____:____:____:____:____superior

kind____:____:____:____:____:____:____cruel

ungrateful____:____:____:____:____:____:____grateful

optimistic____:____:____:____:____:____:____pessimistic

untimely____:____:____:____:____:____:____timely

successful____:____:____:____:____:____:____unsuccessful

assenting____:____:____:____:____:____:____dissenting

dangerous____:____:____:____:____:____:____safe

congenial____:____:____:____:____:____:____quarrelsome

ORAL COMMUNICATION ABILITIES

good____:____:____:____:____:____:____bad

inferior____:____:____:____:____:____:____superior

kind____:____:____:____:____:____:____cruel

ungrateful____:____:____:____:____:____:____grateful

optimistic____:____:____:____:____:____:____pessimistic

untimely____:____:____:____:____:____:____timely

successful____:____:____:____:____:____:____unsuccessful

assenting____:____:____:____:____:____:____dissenting

dangerous____:____:____:____:____:____:____safe

congenial____:____:____:____:____:____:____quarrelsome

UNDERGRADUATE EDUCATION

good____:____:____:____:____:____:____bad

inferior____:____:____:____:____:____:____superior

kind____:____:____:____:____:____:____cruel

ungrateful____:____:____:____:____:____:____grateful

optimistic____:____:____:____:____:____:____pessimistic

untimely____:____:____:____:____:____:____timely

successful____:____:____:____:____:____:____unsuccessful

assenting____:____:____:____:____:____:____dissenting

dangerous____:____:____:____:____:____:____safe

congenial____:____:____:____:____:____:____quarrelsome

PROFESSIONAL EMPLOYEES IN PUBLIC ACCOUNTING

good____:____:____:____:____:____:____bad

inferior____:____:____:____:____:____:____superior

kind____:____:____:____:____:____:____cruel

ungrateful____:____:____:____:____:____:____grateful

optimistic____:____:____:____:____:____:____pessimistic

untimely____:____:____:____:____:____:____timely

successful____:____:____:____:____:____:____unsuccessful

assenting____:____:____:____:____:____:____dissenting

dangerous____:____:____:____:____:____:____safe

congenial____:____:____:____:____:____:____quarrelsome

EMPLOYER-EMPLOYEE RELATIONS IN PUBLIC ACCOUNTING

good____:____:____:____:____:____:____bad

inferior____:____:____:____:____:____:____superior

kind____:____:____:____:____:____:____cruel

ungrateful____:____:____:____:____:____:____grateful

optimistic____:____:____:____:____:____:____pessimistic

untimely____:____:____:____:____:____:____timely

successful____:____:____:____:____:____:____unsuccessful

assenting____:____:____:____:____:____:____dissenting

dangerous____:____:____:____:____:____:____safe

congenial____:____:____:____:____:____:____quarrelsome

# APPENDIX B

Dear graduate:

Approximately a month ago, a questionnaire in regard to attitudes towards public accounting of Kansas State Teachers College graduates was mailed to you. As a completed questionnaire has not been received from you, I am wondering if it has reached you. In order to have a valid survey, I need your reply.

Thank you for your cooperation.

Yours truly,

David V. Pool

# APPENDIX C

Dear Graduate:

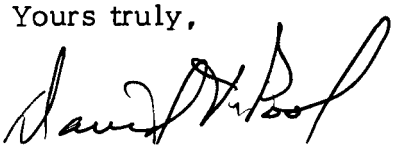
In hopes that you do wish to cooperate in a study to determine attitudes toward public accounting, I am sending you a second questionnaire. For a thesis using statistical data, a high percentage of replies from the sample population is needed.

If a large enough response is received to be representative, the study could indicate areas that the public accounting profession should improve or that is an asset to the profession.

This study is being made on the attitudes of graduates with training in accounting, not only of people that have entered public accounting.

Thank you.

Yours truly,



David V. Pool

Dear Graduate:

You are being asked to participate in a study on the attitudes of Kansas State Teachers College of Emporia accounting graduates toward public accounting and their education. This study will be used to prepare a thesis at the masters degree level at the college by the undersigned.

Enclosed is the survey which you are being asked to complete. If you follow the directions, we anticipate that it will take you approximately fifteen minutes to complete it. Using statistics, the information will be compiled and be presented in the form of tables with no individual information being presented.

After you have completed the survey, would you please mail it in the enclosed, stamped, self-addressed envelope.

Thank you for your cooperation.

Yours truly,

David V. Pool

Approved by:

Dr. R. B. Russell
Chairman, Business Department
Kansas State Teachers College
Emporia, Kansas

# INSTRUCTIONS

On each of the following pages there is a phrase for you to describe. Your descriptions will be made by marking the list of words on the page. Take a look below to see how this is done. Each pair of words forms a scale. By making an X along the scale you can indicate what you associate with the particular word or phrase.

If you feel that the phrase at the top of the page is very closely associated with one end of the scale, you would place an X as follows:

fair X : __ : __ : __ : __ : __ unfair or fair __ : __ : __ : __ : __ : X unfair

If you feel that the phrase at the top of the page is quite closely associated with one end of the scale, you would place an X as follows:

fair __ : X : __ : __ : __ : __ unfair or fair __ : __ : __ : __ : X : __ unfair

If you feel that the phrase at the top of the page is only slightly associated with one end of the scale, you would place an X as follows:

fair __ : __ : X : __ : __ : __ unfair or fair __ : __ : __ : X : __ : __ unfair

If you feel that the phrase at the top of the page is equally associated with each end of the scale, you would place an X as follows:

fair __ : __ : __ : X : __ : __ : __ unfair

Remember: Never put more than one check mark on any scale, be sure to check every item, and do not leave the line blank.

Do not spend more than a few seconds marking each scale. Your first impression is what we would like to learn about. We have found you can work quicker if you first form a picture in your mind of what the phrase describes at the top of the page, and then check each scale very rapidly.

When you finish one page, go on to the next. When you have finished with all of the pages, check to make certain you haven't skipped a page or scale, but do not change the rating you made.

Would you please check one of the following blanks:

___ I have not been employed in public accounting.
___ I am employed in public accounting.
___ I have left public accounting employment.

ECONOMIC REWARDS OF PUBLIC ACCOUNTING

good____:____:____:____:____:____:____bad

inferior____:____:____:____:____:____:____superior

kind____:____:____:____:____:____:____cruel

ungrateful____:____:____:____:____:____:____grateful

optimistic____:____:____:____:____:____:____pessimistic

untimely____:____:____:____:____:____:____timely

successful____:____:____:____:____:____:____unsuccessful

assenting____:____:____:____:____:____:____dissenting

dangerous____:____:____:____:____:____:____safe

congenial____:____:____:____:____:____:____quarrelsome

PUBLIC ACCOUNTING PROFESSION

good____:____:____:____:____:____:____bad

inferior____:____:____:____:____:____:____superior

kind____:____:____:____:____:____:____cruel

ungrateful____:____:____:____:____:____:____grateful

optimistic____:____:____:____:____:____:____pessimistic

untimely____:____:____:____:____:____:____timely

successful____:____:____:____:____:____:____unsuccessful

assenting____:____:____:____:____:____:____dissenting

dangerous____:____:____:____:____:____:____safe

congenial____:____:____:____:____:____:____quarrelsome

WRITTEN COMMUNICATION ABILITIES

good____:____:____:____:____:____:____bad

inferior____:____:____:____:____:____:____superior

kind____:____:____:____:____:____:____cruel

ungrateful____:____:____:____:____:____:____grateful

optimistic____:____:____:____:____:____:____pessimistic

untimely____:____:____:____:____:____:____timely

successful____:____:____:____:____:____:____unsuccessful

assenting____:____:____:____:____:____:____dissenting

dangerous____:____:____:____:____:____:____safe

congenial____:____:____:____:____:____:____quarrelsome

ORAL COMMUNICATION ABILITIES

good____:____:____:____:____:____:____bad

inferior____:____:____:____:____:____:____superior

kind____:____:____:____:____:____:____cruel

ungrateful____:____:____:____:____:____:____grateful

optimistic____:____:____:____:____:____:____pessimistic

untimely____:____:____:____:____:____:____timely

successful____:____:____:____:____:____:____unsuccessful

assenting____:____:____:____:____:____:____dissenting

dangerous____:____:____:____:____:____:____safe

congenial____:____:____:____:____:____:____quarrelsome

UNDERGRADUATE EDUCATION

good____:____:____:____:____:____:____bad

inferior____:____:____:____:____:____:____superior

kind____:____:____:____:____:____:____cruel

ungrateful____:____:____:____:____:____:____grateful

optimistic____:____:____:____:____:____:____pessimistic

untimely____:____:____:____:____:____:____timely

successful____:____:____:____:____:____:____unsuccessful

assenting____:____:____:____:____:____:____dissenting

dangerous____:____:____:____:____:____:____safe

congenial____:____:____:____:____:____:____quarrelsome

PROFESSIONAL EMPLOYEES IN PUBLIC ACCOUNTING

good____:____:____:____:____:____:____bad

inferior____:____:____:____:____:____:____superior

kind____:____:____:____:____:____:____cruel

ungrateful____:____:____:____:____:____:____grateful

optimistic____:____:____:____:____:____:____pessimistic

untimely____:____:____:____:____:____:____timely

successful____:____:____:____:____:____:____unsuccessful

assenting____:____:____:____:____:____:____dissenting

dangerous____:____:____:____:____:____:____safe

congenial____:____:____:____:____:____:____quarrelsome

EMPLOYER-EMPLOYEE RELATIONS IN PUBLIC ACCOUNTING

good____:____:____:____:____:____:____bad

inferior____:____:____:____:____:____:____superior

kind____:____:____:____:____:____:____cruel

ungrateful____:____:____:____:____:____:____grateful

optimistic____:____:____:____:____:____:____pessimistic

untimely____:____:____:____:____:____:____timely

successful____:____:____:____:____:____:____unsuccessful

assenting____:____:____:____:____:____:____dissenting

dangerous____:____:____:____:____:____:____safe

congenial____:____:____:____:____:____:____quarrelsome

# APPENDIX D

TABLE IX

MEAN SCALE VALUES BY CONCEPT OF RESPONDENTS WHO HAD NOT BEEN EMPLOYED IN PUBLIC ACCOUNTING (N=30)

| | Concepts | | | | | | |
|---|---|---|---|---|---|---|---|
| Scales | A | B | C | D | E | F | G |
| 1 | 5.667 | 6.067 | 5.200 | 5.367 | 5.267 | 5.517 | 5.400 |
| 2 | 5.300 | 5.667 | 5.100 | 4.867 | 4.967 | 5.172 | 5.300 |
| 3 | 4.833 | 4.967 | 4.833 | 5.167 | 5.000 | 4.793 | 4.833 |
| 4 | 5.033 | 5.333 | 4.333 | 5.000 | 4.767 | 4.897 | 4.767 |
| 5 | 5.467 | 5.167 | 5.233 | 5.267 | 4.833 | 5.448 | 5.033 |
| 6 | 4.633 | 5.400 | 4.567 | 5.000 | 5.133 | 4.966 | 5.033 |
| 7 | 5.600 | 5.967 | 5.100 | 5.467 | 5.100 | 5.586 | 5.600 |
| 8 | 5.267 | 5.233 | 4.967 | 5.100 | 4.967 | 5.000 | 5.100 |
| 9 | 5.067 | 5.200 | 4.700 | 4.833 | 4.767 | 5.103 | 5.000 |
| 10 | 4.733 | 5.367 | 4.900 | 5.200 | 4.933 | 4.931 | 5.033 |

# APPENDIX E

TABLE X

MEAN SCALE VALUES BY CONCEPT OF RESPONDENTS WHO ARE EMPLOYED IN PUBLIC ACCOUNTING (N=40)

| | Concepts | | | | | | |
|---|---|---|---|---|---|---|---|
| Scales | A | B | C | D | E | F | G |
| 1 | 5.275 | 5.675 | 5.300 | 5.100 | 4.775 | 6.225 | 5.625 |
| 2 | 5.025 | 5.325 | 5.125 | 4.925 | 4.700 | 6.075 | 5.325 |
| 3 | 4.950 | 4.825 | 5.225 | 5.025 | 4.750 | 5.075 | 5.125 |
| 4 | 5.000 | 5.150 | 4.550 | 4.950 | 4.625 | 4.975 | 4.825 |
| 5 | 5.750 | 5.100 | 5.125 | 4.925 | 4.950 | 5.875 | 5.625 |
| 6 | 4.875 | 5.175 | 4.850 | 4.950 | 4.925 | 5.575 | 5.100 |
| 7 | 5.475 | 5.725 | 5.150 | 5.400 | 5.200 | 6.050 | 5.825 |
| 8 | 5.250 | 5.125 | 4.900 | 4.750 | 4.725 | 5.275 | 5.075 |
| 9 | 5.350 | 5.000 | 5.175 | 4.925 | 4.975 | 5.475 | 5.025 |
| 10 | 5.075 | 4.950 | 5.225 | 5.175 | 4.825 | 5.275 | 5.375 |

# APPENDIX F

TABLE XI

MEAN SCALE VALUES BY CONCEPT OF RESPONDENTS WHO HAD LEFT PUBLIC ACCOUNTING EMPLOYMENT (N=29)

| | Concepts | | | | | | |
|---|---|---|---|---|---|---|---|
| Scales | A | B | C | D | E | F | G |
| 1 | 4.655 | 5.448 | 4.345 | 5.276 | 5.103 | 5.414 | 5.517 |
| 2 | 4.310 | 5.069 | 4.172 | 4.862 | 4.862 | 5.241 | 4.966 |
| 3 | 4.414 | 5.034 | 4.655 | 5.069 | 4.793 | 4.689 | 5.000 |
| 4 | 4.241 | 5.241 | 4.241 | 5.172 | 4.655 | 4.483 | 4.793 |
| 5 | 4.276 | 5.172 | 4.379 | 5.207 | 4.621 | 4.931 | 4.897 |
| 6 | 4.414 | 5.103 | 4.414 | 5.172 | 4.655 | 4.862 | 4.689 |
| 7 | 5.069 | 5.551 | 4.414 | 5.172 | 5.172 | 5.241 | 5.276 |
| 8 | 4.552 | 5.103 | 4.310 | 5.000 | 4.655 | 4.724 | 4.724 |
| 9 | 5.034 | 5.310 | 4.931 | 5.241 | 5.000 | 5.345 | 5.276 |
| 10 | 4.793 | 5.241 | 4.483 | 5.414 | 4.862 | 4.966 | 5.103 |

# APPENDIX G

TABLE XII

ROW-BY-ROW CLUSTER ANALYSIS OF RESPONDENTS WHO HAD NOT BEEN EMPLOYED IN PUBLIC ACCOUNTING

| | | |
|---|---|---|
| Row A: D-values of Concepts B through G from Concept A | | |
| --F = .53 | --B = 1.28 | --G = 1.78 |
| | --C = 1.14 | |
| | --D = .94 | |
| | --E = 1.22 | |
| Row B: D-values of Concepts C through G from Concept B | | |
| --F = 1.20 | --C = 2.02 | --G = 1.17 |
| | --D = 1.37 | |
| | --E = 1.68 | |
| Row C: D-values of Concepts D through G from Concept C | | |
| --F = 1.02 | --D = 1.04 | --G = .95 |
| | --E = .85 | |
| Row D: D-values of Concepts E through G from Concept D | | |
| --F = .68 | --E = .73 | --G = .69 |
| Row E: D-values of Concepts F through G from Concept E | | |
| --F = .96 | | --G = .73 |
| Row F: D-values of Concept G from Concept F | | |
| | | --G = .51 |

# APPENDIX H

TABLE XIII

ROW-BY-ROW CLUSTER ANALYSIS OF RESPONDENTS
WHO LEFT PUBLIC ACCOUNTING EMPLOYMENT

Row A: D-values of Concepts B through G from Concept A

| | | |
|---|---|---|
| --C = .88 | --F = 1.55 | --B = 2.16 |
| --E = 1.01 | --G = 1.58 | --D = 2.02 |

Row B: D-values of Concepts C through G from Concept B

| | | |
|---|---|---|
| --C = 2.63 | --F = 1.08 | --D = .52 |
| --E = 1.29 | --G = .84 | |

Row C: D-values of Concepts D through G from Concept C

| | | |
|---|---|---|
| --E = 1.48 | --F = 2.03 | --D = 2.38 |
| | --G = 2.00 | |

Row D: D-values fo Concepts E through G from Concept D

| | |
|---|---|
| --E = 1.21 | --F = 1.12 |
| | --G = .89 |

Row E: D-values of Concepts F through G from Concept E

| |
|---|
| --F = .75 |
| --G = .69 |

Row F: D-values of Concept G from Concept F

| |
|---|
| --G = .58 |

# APPENDIX I

TABLE XIV

ROW-BY-ROW CLUSTER ANALYSIS OF RESPONDENTS
WHO ARE EMPLOYED IN PUBLIC ACCOUNTING

| | | |
|---|---|---|
| Row A: D-values of Concepts B through G from Concept A | | |
| --B = 1.01 | --E = 1.32 | --F = 1.71 |
| --C = .98 | | |
| --D = 1.09 | | |
| --G = .83 | | |
| Row B: D-values of Concepts C through G from Concept B | | |
| --D = .98 | --E = 1.42 | --F = 1.48 |
| --G = .82 | | |
| --C = 1.14 | | |
| Row C: D-values of Concepts D through G from Concept C | | |
| --D = .69 | --E = .98 | --F = 2.02 |
| --G = 1.04 | | |
| Row D: D-values of Concepts E through G from Concept D | | |
| --G = 1.14 | --E = .71 | --F = 2.21 |
| Row E: D-values of Concepts F through G from Concept E | | |
| --G = 1.61 | | --F = 2.64 |
| Row F: D-values of Concept G from Concept F | | |
| --G = 1.24 | | |