25

A STUDY OF THE IMPORTANCE OF CERTAIN CRITERIA IN RECRUITING BUSINESS GRADUATES OF THE KANSAS STATE TEACHERS COLLEGE

A Thesis

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the Faculty of the Department of Business
and Business Education
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Master of Science

Jerry Verner Bradford
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CHAPTER I

INTRODUCTION

College recruitment provides a valuable source of manpower for American industry. Business considers recruitment, selection, and development of talent one of its primary administrative responsibilities. 1

With the rapid growth of the economy during the past twenty years, there has been a continued increase in company college recruiting activities. Approximately eight hundred companies in the United States were recruiting at colleges in 1939. In 1957 this figure grew to 7,500.

Endicott reported that of two hundred five companies surveyed, the typical concern visited forty-five colleges. 4

In a 1960 study of twenty-one companies, the average firm visited sixty-five campuses during the year. 5

¹Daniel Joseph Sullivan, Jr., "Selection Frocedures for Specific Management Trainee Programs in Twenty-one Companies," <u>Dissertation Abstracts</u>, 21:2200, February, 1961.

²G. L. Cullen, "Recruitment and In-Plant Training of College Graduates," <u>Personnel</u>, 23:388, May, 1947.

³A. E. Bach, "Recruiting on the College Campus," <u>Personnel Journal</u>, 36:286, January, 1958.

Frank S. Endicott, "Endicott Report," Journal of College Placement, 19:42, March, 1959.

⁵Sullivan, loc. cit.

During 1959 there was a 19 per cent increase over 1958 in number of men sought for business positions.

Odiorne and Hann stated:

Over 75 per cent of college students will obtain their first jobs through their placement office, according to a placement association report. From the company's viewpoint, its supply of high-talent manpower is tied closely to campus recruiting.

The modern corporation without a college recruiting program is giving itself a serious competitive disadvantage.8

The average recruiting cost for a non-engineering graduate is estimated at \$2,685.9 Employing a college graduate at twenty-one may mean the company has committed itself to an investment of over \$500,000, given an average lifetime salary of \$12,000.10

Odiorne and Hann presented a summary view of the present and future role of college recruiting:

Today there's little doubt that college recruiting is big business. The amounts of money spent on it,

⁶Endicott, log. cit.

⁷George S. Odiorne and Arthur S. Hann, Effective College Recruiting (Ann Arbor, Michigan: Bureau of Industrial Relations, The University of Michigan, 1961), p. v.

^{8&}lt;u>Ibid.</u>, p. 13.

⁹Robert N. McMurray, "How to Pick Capable Men," Nation's Business, 48:48, February, 1960.

¹⁰ Wesley C. Rowles, Jr., "Management Aims in Recruitment," Controller, 29:16, January, 1961.

the time and ingenuity applied to it and the systematic coverage of almost every college seeking able young men have continued almost unabated, in good times and in recession, since the end of World War II. . . . Whether this trend will continue and recruiting will be as important as in the past might be a matter of some concern. A study of manpower statistics and industry trends in manpower management would indicate that there will be more rather than less in the coming decade. I

College recruiters are important decision-makers in modern day business. Good recruiters use realistic criteria to assist them in making decisions concerning applicants. 12

They have definite factors by which they evaluate the interviewee. 13

A. S. Hann, Director of Placement at the University of Michigan Graduate School of Business Administration, reported that current business graduates who obtain the better opportunities are characterized by certain criteria. 14

¹¹ Odiorne and Hann, op. cit., p. 1.

¹²Ibid., p. 254.

¹³Lou Russell, "The Interview--Don't Look Now, But Your Attitudes are Showing," <u>College Placement Annual 1965</u> (Bethlehem, Pennsylvania: College Placement Council, 1964), p. 5.

¹⁴A. S. Hann, "Develop an Image of Executive Potential," <u>College Placement Annual 1964</u> (Bethlehem, Pennsylvania: College Placement Council, Inc., 1963), p. 5.

I. THE PROBLEM

Statement of the problem. It was the purpose of this study to determine the importance of certain criteria in recruiting business graduating seniors of the Kansas State Teachers College. Specifically, the study was directed at the following questions:

- 1. What criteria are considered to be most important in recruiting business graduating seniors?
- 2. What criteria are least pertinent in the recruiting of applicants?
- 3. What factors relating to a certain criterion do recruiters consider to be significant, and how important are they?
- 4. Are the standards being emphasized by the recruiters consistent with research results on this topic?

Importance of the study. Information revealing the factors which seem to be emphasized by college recruiters and companies in recruiting graduates for positions would be valuable for several reasons.

This information would be of value to faculty members in advising students about the relative importance of various collegiate experiences to job finding success.

Such data would be helpful to the interviewing companies in evaluating their college recruiting program. Comparisons could be made between what is emphasized by campus recruiters and what research results indicate should be stressed.

This information might assist students in planning their college lives and establishing their objectives. By being informed of the characteristics which business considers important, students may decide for themselves what benefits the graduates in terms of success in being interviewed.

II. DEFINITION OF TERMS USED

Company. The term "company" is used to mean a proprietorship, a partnership, or a corporation.

<u>Criteria</u>. This term denotes any standards used by recruiters to select students for company positions.

Interview. This term is used to mean the formal process of the student talking with the recruiter.

Recruiter. This term denotes a company representative who interviews.

III. LIMITATIONS AND DELIMITATIONS

The following limitations are apparent:

- 1. The study was limited to recruiters of businesses who contacted the Kansas State Teachers College Placement Bureau, Emporia, Kansas, from October, 1963, to September, 1964.
- 2. The study was focused on non-teaching business students interviewed by recruiters.
- 3. The study applies only to the Kansas State Teachers College, Emporia, Kansas, and is not intended to be considered representative of the employment

practices in all colleges and universities, although there is no reason to consider the findings to be unusual.

IV. METHODS OF PROCEDURE

In preparation for this study, related literature and previous studies regarding criteria used by recruiters in recruiting business graduating seniors for company positions were reviewed.

A questionnaire was formulated for gathering data. To test it, the questionnaire was reviewed by three experienced recruiters. The recruiters represented an accounting, a pharmaceutical, and an insurance company and were contacted by the writer while they were interviewing at the Kansas State Teachers College.

All suggested changes resulting from the test were made. A copy of the revised questionnaire appears in Appendix A.

A letter was compiled to inform its recipients of the nature of the study. This letter stressed the value of the study and pointed out that no identifying data were requested. A copy of the letter appears in Appendix B.

A list of all the companies that conducted interviews for business students at the Kansas State Teachers College from October, 1963, to September, 1964, was compiled from the

Placement Office Annual Report for 1963-64.15 This list appears in Appendix C.

The questionnaires were attached to the letters and forwarded to the recruiters of the forty companies appearing on the list in Appendix C.

Twenty-nine questionnaires, 72.5 per cent of those distributed, were returned, and they were found to be useable for this study.

After the data were collected, they were tabulated, analyzed, summarized, and prepared for presentation.

V. ORGANIZATION OF THE REMAINDER OF THE THESIS

Chapter II is devoted to a review of literature covering the criteria recruiters use to recruit business graduating seniors for company positions.

Chapter III presents the data collected from the questionnaires. This information is presented in quantitative terms and is analyzed statistically so that its meaning could be interpreted with a certain degree of assurance of being correct.

In Chapter IV, the data is summarized, conclusions are drawn, and recommendations are made.

^{15&}quot;Report of On-Campus Interviews," <u>Placement Office</u>
Annual Report for 1963-64 (Emporia, Kansas: Kansas State
Teachers College Press, 1965), pp. 11-15.

CHAPTER II

REVIEW OF THE LITERATURE

Much has been written regarding interviews, employment procedure, and selection of personnel; however, not many of these works concern recruiting. Therefore, in this chapter only the literature that closely relates to college recruiting is presented. Specifically, this chapter reviews literature concerning the criteria used in recruiting business graduating seniors for company positions.

I. THE REVIEW

The rise of college recruiting dates to the days when George Westinghouse first began to employ young engineering graduates. Despite the early activity of a few pioneering companies, the major emphasis upon college recruiting came during the period following World War II. During this early era of recruitment, the major recruiting criterion was the possession of a college diploma.

¹Richard S. Uhnbrock, <u>Recruiting the College Graduate</u> (New York: American Management Association, 1953), p. 3.

²George S. Odiorne and Arthur S. Hann, <u>Effective</u>
<u>College Recruiting</u> (Ann Arbor, Michigan; Bureau of Industrial
Relations, The University of Michigan, 1961), p. 1.

³Ibid.

In 1952, Edward Flash asked companies to list the characteristics used to recruit their general business trainees. This survey revealed the applicant's personality to be most important. This was followed by scholastic achievement, extra-curricular activities, appearance, and conduct during the interview. Least pertinent was work experience.

By developing an executive profile, companies try to determine the personal factors they need in a prospective employee. Such a study was made of thirty-three board chairmen, presidents, vice-presidents, and secretary-treasurers, predominantly from large companies. It was found that these executives received an average grade of "B" and that 73 per cent of them had engaged in two or more extra-curricular activities while in college. Most of the executives were from families with above average income and education. Over one-half of the executive's fathers were engaged in a professional or managerial occupation.

Hedward S. Flash, "Campus Job Interviewing: A Survey," Personnel, 28:367, January, 1952.

⁵¹b1d.

⁶Robert M. Wald and Roy A. Doty, "The Top Executive: A First Hand Profile," <u>Harvard Business Review</u>, 32:45, July-August, 1954.

^{7&}lt;sub>Ibid. p. 48.</sub>

⁸ Ibid., p. 47.

Mauer reported that General Electric placed high priority on grades while Monsanto Chemical Company desired "demonstrated ability and achievement." He stated:

The college student can heed the formula that, rightly or wrongly, almost all personnel heads and recruiters believe to be most indicative of future business success. This formula involves two sets of balances: the first between classroom performance and extracurricular activities; the second between specific abilities and a well-rounded personality. Companies look with even greater favor on students who are active on campus; they look with greater [sic] favor on active students who can get B's and a few A's. 10

Two hundred forty companies were asked what criteria they used to recruit general business graduates. This survey revealed that the interview impression made by the candidate was most important. This was followed by grades, personal history and background, and extra-curricular activities. Least pertinent was previous employment and psychological test scores. This study agreed with a 1952

Herryman Mauer, "The Worst Shortage in Business," Fortune, 53:204, April, 1956.

¹⁰ Herryman Mauer, "Twenty Minutes to a Career," Fortune, 53:170, March, 1956.

¹¹ Stephen Habbe, "Employment of the College Graduate," Studies in Personnel Policy No. 152 (New York: National Industrial Conference Board, 1956), p. 10.

¹² Ibid.

survey that included seventy-seven firms where the interview impression was found to be most crucial. 14

In a survey of 341 firms, 92 per cent of the respondents indicated that high grades and extracurricular activities were most important. 15

The results of Endicott's study on the importance of specific factors in the employment of college graduates indicated that personality and high marks in college were most pertinent. 16

In a survey of 355 women graduates, however, grades and extra-curricular activity correlated negatively with starting salary. Hence, the study results indicated that the women who had earned high grades and had participated in extracurricular activities received lower starting salaries than those with lower grades and fewer extracurricular activities.

¹⁴ Wendel Swenson and Eugene Lindgren, "The Use of Psychological Tests in Industry," <u>Personnel Psychology</u>, 5:20, May, 1952.

¹⁵Kermit K. Johnson, "An Investigation of Employment Techniques with Special Reference to the Selection of College Graduates by Business and Industry," <u>Dissertation Abstracts</u>, 16:2074, November, 1956.

¹⁶Frank S. Endicott, "Endicott Report," Journal of College Placement, 19:54, March, 1959.

¹⁷Annie W. Jordon, "Relationship Between Selected Collegiate Experiences and Beginning Jobs for Women,"
Dissertation Abstracts, 17:1041, May, 1957.

Husband compared the grades and the extra-curricular activities of his Dartmouth class of 1926 to salaries of class members in 1956. He concluded that men who succeeded in the world after college displayed many of the same success patterns as undergraduates in grades or activities. In general, Husband found that high grades were associated with high earnings and that leadership activities and extracurricular activity participation were related to later salary level. He reported that college fraternity men earned more after graduation than non-fraternity men. 20

Husband's advice to the college recruiter was as follows:

I would suggest that one look for the man in the top quarter of his class—the top quarter in almost anything; scholarship; campus politics; sports; or any other extra-curricular activity. Actually it does not seem to make any difference in what field or fields he made his marks. Together or singly, in sum, grades and extra-curricular activity furnish an excellent predictor of later success. 21

Jamie considered the interview impression to be the most important factor in the recruitment of graduates. 22

¹⁸ Richard W. Husband, "What Do College Grades Predict?" Fortune, 55:157, June, 1957.

¹⁹Ibid. ²⁰Ibid. ²¹Ibid., p. 158.

²² Wallace Jamie, "A Model Program for Corporate Recruitment," <u>Journal of College Placement</u>, 17:114, May, 1957.

The twenty minute interview an applicant has with a college recruiter may well determine his future career. 23

In a somewhat different vein, whyte stated, "If the criteria set up by many personnel men were to be applied across the board, the majority of U. S. Corporation executives would be out of a job tomorrow." 24

A recruiter for the General Electric Company stated that his organization reviewed the following major facts of the applicant's record to obtain an insight about the student:

- 1. Scholastic achievement. This is not only a matter of his final average. We also look at his standing in class. . . .
- 2. College activities. We are looking for the graduate who has participated in sports, fraternity or dormitory life. or college functions. . . .
- dormitory life, or college functions. . . . 3. College honoraries. The man elected to Phi Beta Kappa or the many other honoraries has been singled out by faculty and students for outstanding achievement.
- 4. Summer and part-time work experience. The experience of the job itself is not often so important as the responsibility of having a job; working for a boss earning money to help finance education.
- 5. Personality and appearance. Is he likeable and friendly? Does he express himself clearly and

²³ Gavin A. Pitt, The Twenty Minute Lifetime: A Guide to Career Planning (Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1959), p. 3.

²⁴ William H. Whyte, Jr., The Organization Man (Garden City, New York: Doubleday and Company, Inc., 1957), p. 155.

effectively? Does he have a pleasing business-like appearance? 25

Robert L. MacDonald, Director of Placement at the University of Pennsylvania, stated:

Most interviewers are inclined to evaluate a graduating senior on all of the following points:
(1) personality, (2) participation in extra-curricular activities, (3) scholastic standing, (4) courses of study pursued, (5) actual working experience in full or part-time jobs.²⁰

Harrington believed that only in a limited sense do corporations formulate their own hiring standards.²⁷

Instead, they follow criteria developed by industrial psychologists.²⁸ These specialists in turn shape their systems to meet the corporation's requirements.²⁹

Business Week reported that in 1960, recruiters were less arbitrary about academic grades. 30 It continued by saying, "whether the standards be grades, extra-curricular

²⁵Helen M. Barnes, "Putting First Things First,"

<u>College Placement Annual 1959</u> (Bethlehem, Pennsylvania: College Placement Council, Inc., 1958), p. 11.

²⁶Robert L. MacDonald, "Your Placement Office,"

<u>College Placement Annual 1959</u> (Bethlehem, Pennsylvania: College Placement Council, Inc., 1958), p. 30.

²⁷ Alan Harrington, "Executives Man: Personal Interview," Atlantic Monthly, 204:53, August, 1959.

²⁸<u>Ibid</u>. ²⁹<u>Ibid</u>.

³⁰ Combing the Campus for Talent, Business Week, April 16, 1960, p. 111.

activities or personality, everyone wants only the 'best' men."31

Sullivan asked twenty-one companies to rate the importance of certain factors in the selection of business trainees. This study revealed that academic grades, leadership on campus, major subject field and participation in extra-curricular activities were key factors in the decision of company recruiters to consider students. Semester credits in a major field, faculty reference statements, marital status, military status, and the reference of previous employers were relatively unimportant in the employing of college graduating seniors.

In a study at Stanford University, Williams correlated certain collegiate characteristics to the income levels of Stanford's business graduates who had been out of college for fifteen years or more, and found results which were quite different from those already presented. He found no correlation

³¹ Ibid.

³² Daniel J. Sullivan, Jr., "Selection Procedures for Specific Management Trainee Programs in Twenty-one Companies," <u>Dissertation Abstracts</u>, 21:2200, February, 1961.

³³Ibid.

between grades and earnings, but he did find that the number of collegiate offices held correlated with income. 34

In 1961, a study was conducted at the University of Michigan to determine the characteristics emphasized by college recruiters. At the end of their interview schedule, the recruiters indicated the strongest and weakest candidates and gave reasons for rating the applicants as they did. The main traits distinguishing the strong candidates from the weak were grades, conduct in the interview, planned goals and objectives, and maturity. Marital status, family background, military status, and how education was paid for were rated less pertinent. 36

Odiorne and Hann presented a summary view of the strong candidate based on the recruiter's criteria:

- 1. He's intelligent, as displayed by high grades.
- 2. He handles the interview situation well, has a high degree of skill in interpersonal relationships with recruiters.
- 3. He has a well thought out plan for his career and will discuss it rationally.
- 4. He is mature and sensible, not giddy or childish.
- 5. He has a friendly, pleasing personality; the recruiter likes him and finds little traits that surprise and attract him.

³⁴ Frank J. Williams, Jr., "Predicting Success in Business," <u>Dissertation Abstracts</u>, 20:4305, May, 1960.

³⁵⁰diorne and Hann, op. cit., p. 147.

^{36&}lt;u>Ibid.</u>, p. 148.

- 6. He has been around as much as the average fellow his age.
- 7. He wasn't a bookworm in college, but took part in a fair share of extra-curricular activities.
- 8. He may not be handsome, but he doesn't have any abnormal defects in appearance and dresses normally neat. 37

Some interesting information is contained in the results of a survey that was made by <u>Time</u> and analyzed at Columbia University. This study indicated that college graduates were much more likely to be managers than were men with less education. Also, this study showed that men who worked their way through college did not do as well in business as those who were family supported. Another factor this study disclosed is that there was a difference in the percentage of graduates who became manager, depending on religious preference. Thirty-four per cent of the Protestant, 33 per cent of the Jewish, and 26 per cent of the Catholic business graduates became proprietors or managers. 40

Bartels listed the following as traits which the recruiter desires a potential employee to possess: ability to communicate ideas, evidence of leadership activities,

³⁷ Ibid., p. 141.

³⁸ Thomas W. Harrell, Manager's Performance and Personality (Cincinnati: South-Western Publishing Co., 1961), p. 56, citing Havemann and West, 1952, pp. 27-187.

^{39&}lt;u>Ibid.</u>, p. 53. 40<u>Ibid</u>.

neat appearance, grades that indicate an effort to prepare for the future, personal integrity, personality, previous employment that reveals a sense of team work, realistic life goals that show the applicant thinks in terms of service, sense of values consistent with society's demands, and reading habits which reveal his skills and interest in professional and vocational literature.

Hann pointed out that the best offers are given those applicants who have demonstrated administrative potential by assuming leadership positions in college activities. 42 He stated, "Scholastic attainment is perhaps the closest to being a universal selection factor on the part of companies recruiting college graduates."

In 1961, Carroll compared certain personal characteristics of business graduates at the University of Minnesota to several criteria representing success in campus recruiting. The findings of this study seem to disagree with several surveys of firms with respect to the weight assigned

⁴¹ Martin H. Bartels, "The Interview--A Two-Way Street," College Placement Annual 1963 (Bethlehem, Pennsylvania: College Placement Council, Inc., 1962), p. 33.

⁴²A. S. Hann, "Develop an Image of Executive Potential," <u>College Placement Annual 1964</u> (Bethlehem, Pennsylvania: College Placement Council, Inc., 1963), p. 5.

⁴³ Ibid.

by companies to various criteria and selection methods. In this study, appearance was found to be more highly related to job finding success than grades. Also, extra-curricular activity participation of various kinds was not found to be significantly related to any criterion of job finding success. 45

Carroll reported:

Subjective type personality characteristics may be most important determinants of the job finding success of business school graduates in view of the small amount of variance in job finding success accounted for by the obvious and objective characteristics analyzed in this study.46

Alexander Clark, Director of University Placement at Columbia University, stated:

Interviewers are charged with the responsibility of making predictions about future potential of candidates. Apart from demonstrated ability in academic work and, perhaps, significant performance in extra-curricular activity, there is not much objective material upon which they can make judgement. 47

Stephen John Carroll, Jr., "The Relationship of Various Personal and Biographical Characteristics to Recruiting Decisions at the Entry Level of Management," Dissertation Abstracts, 25:1626, September, 1964.

^{45&}lt;u>Ibid</u>. 46<u>Ibid</u>.

⁴⁷ Alexander Clark, "Which Way?" College Placement Annual 1965 (Bethlehem, Pennsylvania: College Placement Council, Inc., 1964), p. 6.

II. SUMMARY OF THE REVIEW

The company surveys conducted by Habbe, 48 Swenson and Lindgren, 49 and Sullivan 50 indicated that the interview impression was the most important criterion in the recruitment of college graduating seniors. The views expressed by Jamie 51 and Pitt 52 endorsed the survey's results.

In studies conducted by Flash, ⁵³ Wald and Doty, ⁵⁴
Habbe, ⁵⁵ Johnson, ⁵⁶ Endicott, ⁵⁷ Husband, ⁵⁸ Sullivan, ⁵⁹ and
Odiorne and Hann, ⁶⁰ grades and extra-curricular activities
were important criteria used in recruiting college graduating
seniors. Concurring opinions were stated by Mauer, ⁶¹ Barnes, ⁶²
MacDonald, ⁶³ Bartels, ⁶⁴ and Hann. ⁶⁵

⁴⁸ Habbe, <u>loc. cit.</u> 49 Swenson and Lindgren, <u>loc. cit.</u>

⁵⁰ Sullivan, loc. cit. 51 Jamie, loc. cit.

⁵²Pitt, loc. cit. 53Flash, loc. cit.

⁵⁴ Wald and Doty, op. cit., p. 145.

⁵⁵Habbe, op. cit., p. 10. 56Johnson, loc. cit.

⁵⁷Endicott, loc. cit. 58Husband, op. cit., p. 157.

⁵⁹ Sullivan, loc. cit. 60 Odiorne and Hann, loc. cit.

⁶¹Herryman Mauer, "Twenty Minutes to a Career," Fortune, 53:170, March, 1956.

^{62&}lt;sub>Barnes, loc. cit.</sub> 63_{MacDonald, loc. cit.}

Bartels, <u>loc. cit.</u> 65Hann, <u>loc. cit.</u>

Flash, ⁶⁶ Habbe, ⁶⁷ Sullivan, ⁶⁸ and Odiorne and Hann ⁶⁹ found that one or more of the following standards were secondary to the above mentioned criteria used in recruiting college business seniors: work experience, military status, marital status, and family background.

Jordon's, 70 Williams', 71 and Carroll's 72 survey results partially contradicted the views and studies mentioned above, as do the opinions of Whyte 73 and Harrington. 74

⁶⁶ Flash, loc. cit.

⁶⁷ Habbe, loc. cit.

⁶⁸ Sullivan, loc. cit.

⁶⁹⁰diorne and Hann, op. cit., p. 148.

⁷⁰ Jordon, loc. cit.

⁷¹ Williams, loc. cit.

⁷² Carroll, loc. cit.

⁷³ Whyte, loc. cit.

⁷⁴Harrington, loc. cit.

CHAPTER III

PRESENTATION OF THE DATA

The purpose of this chapter is to present and interpret data in a manner which will be helpful in ascertaining the importance of certain factors used by recruiters in the recruiting of business graduating seniors of the Kansas State Teachers College.

The questionnaire that appears in Appendix A was forwarded to the recruiters of the forty companies listed in Appendix C. The forty companies represented all of the firms that conducted interviews for business students at the Kansas State Teachers College from October, 1963, to September, 1964, as determined by the <u>Placement Office Annual Report for 1963-64.</u>

Twenty-nine questionnaires, 72.5 per cent of those distributed, were returned, and they were found to be useable for this study. Therefore, all statements made refer only to those recruiters who replied to the questionnaire.

Statistical measures were applied to the returned questionnaires to determine the answers to the following questions:

¹ Report of On-Campus Interview, Placement Office Annual Report for 1963-64 (Emporia, Kansas: Kansas State Teachers College Press, 1965), pp. 11-15.

- 1. What factors in Section I of the questionnaire did the recruiters consider to be significant, and how important were they?
- 2. Did the order of the questions as they appeared in Sections I and II of the questionnaire significantly influence the order of the answers?
- 3. Did the order of importance of the criteria in Sections I and II agree?

I. IMPORTANCE OF THE FACTORS

Section I of the questionnaire was divided into seven categories which were scholastic record, family background, work experience, marital status, interview impression, extracurricular activities, and military status.

Within each category there were a number of related factors. For example, listed under the category of scholastic record appeared the following related factors: overall academic grades, grades in the major field, grades in the minor field, the major subject field, and the semester hours in the major field.

The design of the questionnaire permitted the recruiters to select one of the following five ratings for each factor: extremely important, very important, important, fairly important, and not important.

Procedure used. The number of responses for each of the scholastic record factor's five ratings is shown in Table I. This table reveals that there was a wide range in

NUMBER OF RESPONSES BY RECRUITERS FOR EACH OF THE SCHOLASTIC RECORD FACTOR'S RATINGS

Factor	Extremely important		Important	Fairly important	Not important
Over-all academic grades	2	14	10	3	-
Grades in major field	6	13	9	1	-
Grades in minor field	1	5	11	10	2
Major subject field	8	13	7	1	-
Minor subject field	1	5	9	9	5
Semester hours in major field	2	10	11	3	3

Read table thus: Two recruiters considered over-all academic grades to be extremely important.

the number of responses given by recruiters for the importance of a certain factor. For example, two recruiters considered the applicant's over-all academic grades to be "extremely important," the highest rating possible, while fourteen recruiters considered this factor to be "very important," the second highest rating.

Although Table I presents the data accurately, it was difficult to interpret the meaning of the data. Therefore, the data were statistically tested by the use of confidence intervals.

The confidence intervals enabled the data to be interpreted with a certain degree of assurance of being correct. When the confidence interval was established at the 95 per cent confidence level, the data were interpreted with a probability of 0.95 of being correct. Hence, the chance of being wrong and of misinterpreting the data was only 5 per cent. When the confidence interval was established at the 99 per cent confidence level, the data were interpreted with a probability of 0.99 of being correct. Therefore, the chance of being wrong and of misinterpreting the data was only 1 per cent.

A confidence interval is bound by two limits which are known as the upper and lower limits. Since the data were mutually exclusive, which means that only one response could

be given for each factor, the following formula for proportions was required to compute the limits of the confidence interval: $CI = \overline{P} \pm \sqrt{npq}$ t. By means of this formula it was established that the confidence limits at the 95 per cent confidence level are between 1.3 and 9.9. Since the data were discrete, which means that they were in whole units, it was necessary to round the limits from 1 to 10.

The confidence limits are interpreted to mean that between 1 and 10 responses for one of the factor's five possible ratings could have occurred by chance at the 95 per cent confidence level. Hence, if all of a factor's five ratings had between 1 and 10 responses, the factor's ratings could have occured by chance, and the factor was not significant at the 95 per cent confidence level. For example, referring to Table I, page 23, the responses for each of the minor subject field factor's five ratings were between 1 and 10. Therefore, all of the factor's five ratings are within chance, and the factor was considered to be not significant at the 95 per cent confidence level.

However, if one of the factor's five ratings had over 10 responses, the factor's rating was beyond chance; and

See Appendix D, p. 86.

consequently, the factor was <u>significant</u> at the 95 per cent confidence level. For example, referring to Table I, page 23, eleven recruiters considered the factor of grades in the minor subject field to be "important," the third highest rating. Therefore, as shown in Table II, the factor of grades in the minor subject field was <u>significant</u> and was considered to be "important" at the 95 per cent confidence level.

The confidence limits at the 99 per cent confidence level were from -.3 to 11.4.3 Thus, between 0 and 12 responses for one of the factor's five ratings could have occurred by chance at the 99 per cent confidence level.

However, if one of the factor's five ratings had over 12 responses, the factor's rating was beyond chance; and consequently, the factor was <u>significant</u> at the 99 per cent confidence level. For example, referring to Table I, page 23, fourteen recruiters considered the applicant's over-all academic grades to be "very important." Therefore, as shown in Table II, the factor of over-all academic grades was <u>significant</u> and was considered to be "very important" at the 99 per cent confidence level.

³See Appendix E. p. 87.

TABLE II

THE DEGREE OF IMPORTANCE THAT RECRUITERS CONSIDERED SIGNIFICANT FACTORS RELATED TO THE APPLICANT'S SCHOLASTIC RECORD

Factor	Extremely important		Important	Fairly important	Not important
Over-all academic grades		00			
Grades in		99			
major field		99			
Grades in minor field			95		
Major subject field		99			
Minor subject field					
Semester hours in major field	L		95		

Read table thus: At the 99 per cent confidence level, the recruiters considered over-all academic grades to be very important.

Scholastic record factor's rating results. The number of responses for each of the scholastic record factor's five ratings are shown in Table I, page 23. This table reveals that more than twelve recruiters considered the factors of over-all academic grades, grades in the major subject field, and the major subject field to be "very important," the second highest rating. Eleven recruiters considered the applicant's semester hours in his major subject field and the grades in his minor subject field to be "important," the third highest rating. The applicant's minor subject field was considered to be both "important" and "fairly important" by nine recruiters.

Therefore, Table II reveals that at the 99 per cent confidence level, the factors of over-all academic grades, the major subject field, and the grades in the major subject field were <u>significant</u> and were believed to be "very important." At the 95 per cent confidence level, the factors of the grades in the minor subject field and the number of semester hours in the major field were <u>significant</u> and considered to be "important." The minor subject field was <u>not significant</u> at the 95 per cent confidence level, since the occurrence of nine responses was not beyond chance.

In summary, it was found that recruiters considered the factors of over-all academic grades, the major subject

field, and the grades in the major subject field to be "very important." They considered the factors of the grades in the minor subject field and the number of semester hours in the major field secondary to the above factors and rated them to be "important."

ramily background factor's rating results. The number of responses for each of the family background factor's five ratings are shown in Table III. This table reveals that sixteen recruiters considered the applicant's father's occupation to be "fairly important," the fourth rating. More than twelve recruiters believed that the factors of the applicant's parents being separated or divorced and their education and income to be "not important," the lowest rating. Also, they considered the factor of the applicant's mother's occupation to be "not important."

Therefore, Table IV, page 31, reveals that at the 99 per cent confidence level, the factor of the applicant's father's occupation was <u>significant</u> and was believed to be "fairly important." The factors of the applicant's parents being separated or divorced and their education and income were <u>significant</u> and were considered to be "not important" at the 99 per cent confidence level. Also, they considered the factor of the applicant's mother's occupation as <u>significant</u>

NUMBER OF RESPONSES BY RECRUITERS FOR EACH OF THE FAMILY BACKGROUND FACTOR'S RATINGS

Factor	Extremely important		Important	Fairly important	Not important
Father's occupation	•	-	6	16	7
Mother's occupation	•	•	•	10	19
Parents not separated	-	2	6	6	15
Parents not divorced	-	3	5	6	15
Parents* education	-	2	3	9	15
Parents'	2 16	3	3	8	15

Read table thus: Six recruiters considered the applicant's father's occupation to be important.

TABLE IV

THE DEGREE OF IMPORTANCE THAT RECRUITERS CONSIDERED SIGNIFICANT FACTORS RELATED TO THE APPLICANT'S FAMILY BACKGROUND

Factor	Extremely important	Very important	Important	Fairly important	Not important
Father's					
occupation			•	99	
Mother's					
occupation					9 9
Parents not					
separated					99
Parents not					
divorced					99
Parents*					
education					99
Parents*					
income					99

Read table thus: At the 99 per cent confidence level, recruiters considered the applicant's father's occupation to be fairly important.

and believed it to be "not important" at the 99 per cent confidence level.

In summary, it was found that recruiters considered the factor of the applicant's father's occupation to be "fairly important." They considered the factors of the applicant's mother's occupation, of his parents being separated or divorced, and of their education and income secondary to the above factor and rated them to be "not important."

Work experience factor's rating results. The number of responses for each of the work experience factor's five ratings are shown in Table V. This table reveals that twelve recruiters considered the factor of college employment to be "fairly important," the fourth highest rating.

Nine recruiters believed the factor of permanent employment to be "important," the third highest rating.

Therefore, Table VI, page 34, reveals that at the 95 per cent confidence level, the factor of college employment was <u>significant</u> and was believed to be "fairly important."

The factor of permanent employment was <u>not significant</u> at the 95 per cent confidence level, since the occurrence of nine responses was not beyond chance.

In summary, the recruiters considered the factor of college employment to be "fairly important." This factor was

TABLE V

NUMBER OF RESPONSES BY RECRUITERS FOR EACH OF
THE WORK EXPERIENCE FACTOR'S RATINGS

Factor	Extremely important	Very important	Important	Fairly important	Not important
Permanent employment	2	5	9	5	8
College employment	•••	6	6	12	5
Non- supervisory experience	_	2	9	8	10
Supervisory experience	-	6	7	9	7

Read table thus: Two recruiters considered permanent employment experience to be extremely important.

TABLE VI

THE DEGREE OF IMPORTANCE THAT RECRUITERS CONSIDERED SIGNIFICANT FACTORS RELATED TO THE APPLICANT'S WORK EXPERIENCE

Factor	Extremely important	Very important	Important	Fairly important	Not important
Permanent employment					
College employment				95	
Non- supervisory experience					
Supervisory experience					

Read table thus: At the 95 per cent confidence level, the recruiters considered college employment to be fairly important.

believed to be the most important of the work experience factors.

The factors of supervisory and non-supervisory work experience will be discussed later.

Marital status factor's rating results. The number of responses for each of the marital status factor's ratings are shown in Table VII. This table reveals that more than twelve recruiters considered the applicant's being single or married to be "not important," the lowest rating. Ten recruiters considered the applicant's being divorced to be "very important," while nine recruiters considered the applicant's being separated to be both "very important" and "important."

Therefore, Table VIII, page 37, reveals that at the 99 per cent confidence level, the factors of the applicant's being single or married were <u>significant</u> and were believed to be "not important." The factors of the applicant's being separated or divorced were considered to be not <u>significant</u> since the number of responses was not beyond chance.

In summary, it was found that recruiters considered the factors of the applicant's being single or married to be "not important."

Interview impression factor's rating results. The number of responses for each of the interview impression

NUMBER OF RESPONSES BY RECRUITERS FOR EACH OF THE MARITAL STATUS FACTOR'S RATINGS

Factor	Extremely important	Very important	Important	Fairly important	Not important
Single	-	4	4	2	19
Married	1	4	5	4	15
Not divorced	2	10	9	4	4
Not separated	3	9	9	4	4

Read table thus: Four recruiters considered the applicant's being single to be very important.

TABLE VIII

THE DEGREE OF IMPORTANCE THAT RECRUITERS CONSIDERED SIGNIFICANT FACTORS RELATED TO THE APPLICANT'S MARITAL STATUS

Factor	Extremely important	Very important	Important	Fairly important	Not important
Single					99
Married					99
Not divorced					
Not separated					

Read table thus: At the 99 per cent confidence level, the recruiters considered the applicant's being single to be not important.

factor's ratings are shown in Table IX. More than twelve recruiters considered the factors of personality, confidence, conduct, ability to express one's self, and interest displayed to be "extremely important," the highest rating; while they believed the factors of salary requested and the applicant's age to be "important," the third highest rating. Thirteen recruiters considered the factor of goals and objectives to be "extremely important" while fourteen recruiters believed this factor to be "very important." Twelve recruiters considered the interviewee's appearance and preparedness to be "very important," and they considered the applicant's requested location to be "important." Eleven recruiters believed the way in which the applicant's education had been financed to be "fairly important," the fourth rating.

Therefore, Table X, page 40, reveals that at the 99 per cent confidence level, the factors of personality, confidence, conduct, ability to express one's self, and interest displayed were significant and were believed to be "extremely important." At the 99 per cent confidence level, the factor of goals and objectives was <u>significant</u> and was believed to be both "extremely important" and "very important." The factors of salary requested and the applicant's age were <u>significant</u> and believed to be "important" at the 99 per cent confidence level. At the 95 per cent confidence level, the factors of appearance and interview preparedness were

NUMBER OF RESPONSES BY RECRUITERS FOR EACH OF THE INTERVIEW IMPRESSION FACTOR'S RATINGS

	Extremely			Fairly	Not
Factor	important	important	Important	important	important
Appearance	8	12	9		-
Personality	15	12	2	***	-
Confidence	13	12	4	•••	-
Goals and					
objectives	13	14	2	-	-
Preparedness	9	12	8	-	•••
Conduct	13	11	5	-	-
Ability to					
express one's self	18	8	3	***	•
Interest displayed	14	12	3	_	
disprayed	1~	12)	_	-
Salary requested	•	4	13	6	6
Location					
requested	3	4	12	7	3
Applicant's age	1	4	13	8	3
How education had been pai		6	8	11	4

Read table thus: Eight recruiters considered the applicant's appearance to be extremely important.

TABLE X

THE DEGREE OF IMPORTANCE THAT RECRUITERS CONSIDERED SIGNIFICANT FACTORS RELATED TO THE INTERVIEW

Factor	Extremely important	Very important	Important	Fairly important	Not important
Appearance		9 5			
Personality	99				
Confidence	99				
Goals and					
objectives	99	99			
Preparedness		95			
Conduct	9 9				
Ability to					
express one's self	99				
Interest					
displayed	99				
Salary				_	
requested			9 9	•	
Location					
requested			95		
Applicant's			00		
age			99		
How education had been pai				95	

Read table thus: At the 95 per cent confidence level, the recruiters considered the applicant's appearance to be very important.

significant and were considered to be "very important"; while the factor of requested location was <u>significant</u> and believed to be "important." At the 95 per cent confidence level, the factor of the way in which the applicant's education had been financed was <u>significant</u> and was believed to be "fairly important."

In summary, it was found that recruiters considered the factors of personality, confidence, goals and objectives, conduct, ability to express one's self, and interest displayed to be "extremely important." They considered the factors of appearance and interview preparedness to be secondary to the above factors and rated them to be "very important." Least pertinent of the interview factors studied were salary requested, location requested, applicant's age, and the way in which the applicant's education had been financed.

Extracurricular activities factor's rating results.

The number of responses for each of the extracurricular factor's five ratings are shown in Table XI. This table reveals that more than twelve recruiters considered the factor of membership in college organizations to be "important," and the factor of membership in a social fraternity was believed to be "not important," the lowest rating. Nine recruiters considered being an officer of a college organization to be "very important," the second highest rating.

TABLE XI

NUMBER OF RESPONSES BY RECRUITERS FOR EACH OF THE EXTRACURRICULAR ACTIVITIES FACTOR'S RATINGS

	Extremely important	Very important	Important	Fairly important	Not important
Membership in college organization	s 2	8	13	5	1
Officer of college organization	2	9	8	8	2
Member of social fraternity	-	3	6	5	15
Member of honorary fraternity	•	9	10	5	5

Read table thus: Two recruiters considered membership in college organizations to be extremely important.

Therefore, Table XII reveals that at the 99 per cent confidence level, the factor of membership in college organizations was significant and was considered to be "important." The factor of being a member of a social fraternity was significant and was believed to be "not important" at the 99 per cent confidence level. The factor of being an officer of a college organization was not significant since the occurrence of nine responses was not beyond chance.

In summary, the recruiters considered the factor of membership in college organizations to be "important." They considered the factor of being a member of a social fraternity secondary to the above factor and rated it to be "not important."

The factor of being a member of a honorary fraternity will be discussed later.

Military status factor's rating results. The number of responses for each of the military status factor's five ratings are shown in Table XIII, page 45. This table reveals that twelve recruiters considered the applicant's active military obligation not being completed to be "not important," the lowest rating. Nine recruiters considered the applicant's active military obligation being completed to be "not important."

TABLE XII

THE DEGREE OF IMPORTANCE THAT RECRUITERS CONSIDERED SIGNIFICANT FACTORS RELATED TO THE APPLICANT'S EXTRACURRICULAR ACTIVITIES

Factor	Extremely important	Very important	Important	Fairly important	Not important
Membership in college organization	18		99		
Officer of college organization	ı				
Member of social fraternity					99
Member of honorary fraternity			•		

Read table thus: At the 99 per cent confidence level, the recruiters considered the applicant's having membership in college organizations to be important.

TABLE XIII

NUMBER OF RESPONSES BY RECRUITERS FOR EACH OF THE
MILITARY STATUS FACTOR'S RATINGS

Factor	Extremely important	Very 1mportant	Important	Fairly important	Not important
Active military obligation completed	8	2	6	Ų	9
Active military obligation not completed	7	3	3	4	12

Read table thus: Eight recruiters considered the applicant's military obligation being completed to be extremely important.

Therefore, Table XIV reveals that at the 95 per cent confidence level, the factor of the applicant's active military obligation being completed was <u>significant</u> and was considered to be "not important." The factor of the applicant's active military obligation being completed was <u>not significant</u> since the occurrence of nine responses was not beyond chance.

In summary, the recruiters considered the applicant's active military obligation not being completed to be "not important."

Factor's ratings which had no responses. As previously determined, the confidence limits at the 95 per cent confidence level were from 1 to 10. Therefore, if one of a factor's five ratings had over 10 responses, the factor's rating was beyond chance; and, consequently, the factor was found to be significant at the 95 per cent confidence level.

However, a factor is also <u>significant</u> if one of its ratings exceeds the lower limits of the confidence interval. In other words, since the confidence interval was from 1 to 10, if one of a factor's five ratings had no responses, the factor's rating was beyond chance, and the factor was <u>significant</u> at the 95 per cent confidence level. In such cases, the significant factor's rating should be stated in "negative" terms. For example, the factor of being a member of a

TABLE XIV

THE DEGREE OF IMPORTANCE THAT RECRUITERS CONSIDERED SIGNIFICANT FACTORS RELATED TO THE APPLICANT'S MILITARY STATUS

Factor	Extremely important	Very important	Important	Fairly important	Not important
Active military obligation completed					
Active military obligation not completed					95

Read table thus: At the 95 per cent confidence level, the recruiters considered the applicant's active military obligation not being completed to be not important.

fraternity had no responses recorded for the factor's "extremely important" rating. Hence, the rating was beyond chance, and the factor was <u>significant</u>. Therefore, recruiters considered the factor of being a member of a social fraternity to be "not extremely important."

Since it was previously determined that being a member of a social fraternity was considered to be "not important," stating that it was "not extremely important" would be redundant. Therefore, Tables I through XIV revealed the factors that were <u>significant</u> resulting from having over 10 responses for one of their ratings.

There were three significant factors that were not included in Tables I through XIV since none of their ratings had over 10 responses. As shown in Table XV, the factors of non-supervisory work experience, supervisory work experience, and being a member of an honorary fraternity had no responses for their "extremely important" rating.

Therefore, Table XVI, page 50, reveals that at the 95 per cent confidence level, the factors of non-supervisory work experience, supervisory work experience, and being a member of an honorary fraternity were <u>significant</u> and were believed to be "not extremely important."

In summary, the factors of non-supervisory work experience, supervisory work experience, and being a member

TABLE XV

NUMBER OF RESPONSES BY RECRUITERS FOR CERTAIN FACTOR'S RATINGS

Factor	Extremely important	Very important	Important	Fairly important	Not important
Non- supervisory experience		2	9	8	10
Supervisory experience	494	6	7	9	7
Member of honorary fraternity	-	9	10	5	5

Read table thus: No recruiters considered non-supervisory work experience to be extremely important.

TABLE XVI
THE DEGREE OF IMPORTANT THAT RECRUITERS
CONSIDERED CERTAIN SIGNIFICANT FACTORS

Factor	Not extremely important	Not very important	Not important	Not fairly important	Important
Non- supervisory experience	95				
Supervisory experience	95				
Member of honorary fraternity	95				

Read table thus: At the 95 per cent confidence level, the recruiters considered non-supervisory work experience to be not extremely important.

of an honorary fraternity were considered by recruiters to be "not extremely important."

Degree preference. In Section III of the questionnaire, the recruiters were asked if they considered the Bachelor of Science Degree equivalent to the Bachelor of Arts Degree. Twenty-eight of the twenty-nine recruiters replied that they considered the degrees equivalent. Hence, at the 99 per cent confidence level, the recruiters considered the degrees to be equivalent.

II. QUESTIONNAIRE CONSTRUCTION TEST

A questionnaire's design and form can influence the respondent's answers to the questions appearing on it.

Hence, the data received from the questionnaire may not be valid.

To prevent the occurrence of the above problem, the order of the questions on the questionnaire used in this study was determined by the use of a random sample table.

To determine if the use of the random sample table had prevented the order of the questions from substantially influencing the order of the answers, the data received from the questionnaires were statistically tested.

Procedure used. To determine if the use of the random sample table had prevented the order of the questions from

influencing the order of the answers involved a two-step procedure.

First, the statistical relationship between the order of the questions and the order of the answers was computed by the use of Spearman's rank correlation equation:

$$r = 1 - \frac{6 \sum d^2}{N^3 - N}$$

This statistical relationship is known as the correlation coefficient.⁵

Second, it was necessary, through the use of the "t" distribution test, 6 to determine whether the correlation coefficient was significant. If the correlation coefficient was significant, the order of the questions did substantially influence the order of the answers. However, if the correlation was not significant, the order of the questions did not substantially influence the order of the answers.

Testing the questionnaire. The statistical relation between the order of the questions in Section I and the order of the answers was computed by using Spearman's rank formula. This statistical relation, which is called the correlation coefficient, was found to be -.24.7

⁴See Appendix F, p. 88. See Appendix G, p. 89.

⁶See Appendix H, p. 90. ⁷See Appendix I, p. 92.

significant, which means that it was such that the order of the questions substantially influenced the order of the answers, the "t" distribution test was administered. It was found that such a correlation coefficient was not significant. Therefore, the order of the questions as they appeared in Section I of the questionnaire did not substantially influence the order of the answers.

Following the above testing procedure and using the same formula, the correlation coefficient between the order of the questions in Section II of the questionnaire and the order of the answers was found to be .32. After administering the "t" distribution test, it was found that the coefficient of .32 was not significant. Therefore, the order of the questions as they appeared in Section II of the questionnaire did not substantially influence the order of the answers.

In summary, the use of the random sample table had prevented the order of the questions as they appeared on the questionnaire from influencing the order of the answers.

See Appendix I, p. 92. See Appendix J, p. 94.

¹⁰ See Appendix J, p. 94.

III. COMPARISON OF THE ANSWER RESULTS

In Section II of the questionnaire, the recruiters ranked the following criteria in order of their preference: scholastic record, family background, work experience, interview impression, marital status, extracurricular activities, and military status.

The questionnaire was designed so that the recruiters' ranking of the above criteria could be cross-checked with their rating of the same categories in Section I. This was done to determine if the recruiters' two separate rankings of the same standards substantially agree.

<u>Procedure used.</u> The comparing of two separate rankings involved a two-step procedure.

First, the statistical relationship between the two rankings was computed by the use of Spearman's rank equation:

$$r = 1 - \frac{6 \sum d^2}{N^3 - N}$$
 .11

This statistical relationship is known as the correlation coefficient. 12

Second, it was necessary, through the use of the "t" distribution test, 13 to determine whether the correlation

¹¹ See Appendix F, p. 88. 12 See Appendix G, p. 89.

¹³ See Appendix H, p. 90.

coefficient was <u>significant</u>. If the correlation coefficient was significant, the two rankings substantially agreed. However, if the correlation coefficient was not significant, the two rankings substantially disagreed.

Comparing the answer results. Table XVII reveals the mean ranking of the categories in Section I and of the same criteria in Section II. It was obvious that the two rankings of the same standards were not identical, but it was not definite that the ratings would not substantially agree. Therefore, the two rankings were statistically tested.

By using Spearman's rank formula, the correlation coefficient between the recruiters' ranking of the categories in Section I and their ratings of the same criteria in Section II was found to be .70.14 To determine if a .70 correlation coefficient was significant, which means that it was such that the rankings substantially agreed, the "t" distribution test was administered. It was found that such a correlation was not significant. 15

Therefore, the recruiters' ranking of the categories in Section I did not substantially agree with their ratings of the same criteria in Section II.

¹⁴ See Appendix K, p. 96. 15 See Appendix K, p. 96.

TABLE XVII
CRITERIA MEAN RANKING BY SECTIONS

Ont hand a	Section	on I	Section II		
Criteria	Mean rank score	Mean rank	Mean rank score	Mean rank	
Scholastic record	6.3	2	5•9	2	
Family background	3.6	7	2.7	6	
Work experience	4.6	6	4.3	3	
Marital status	4.8	5	2.4	7	
Interview impression	7.2	1	6.1	1	
Extracurricular activities	5.0	3.5	4.1	4	
Military status	5.0	3.5	3.1	_5	

Read table thus: In Section I, the applicant's scholastic record mean score was 6.3, and it ranked second; while in Section II its mean score was 5.9, and it also ranked second.

Computing a composite ranking. Since the recruiters' ranking of the categories in Section I did not substantially agree with their ratings of the same standards in Section II, a composite ranking was attempted. The composite ranking was developed by deriving a mean rank for the two ratings as shown in Table XVIII.

However, in order for the composite rating to be valid, it must substantially agree with the recruiters' ranking of the categories in Section I and their rating of the same standards in Section II. The same procedure that has been previously described was used to determine if the composite ranking was valid.

By using Spearman's rank formula, the correlation coefficient between the recruiters' ranking of the categories in Section I and the composite rating was found to be .96.16 To determine if the .96 correlation coefficient was significant, which means that it was such that the rankings substantially agreed, the "t" distribution test was administered. It was found that such a correlation coefficient was significant. 17

Therefore, the composite criteria rating substantially agreed with the recruiters ranking of the categories in Section I of the questionnaire.

¹⁶ See Appendix L, p. 98.

¹⁷See Appendix L, p. 98.

TABLE XVIII

DEVELOPMENT OF A COMPOSITE CRITERIA RANK

Criteria	Section I rank	Section II rank	Total rank score	Mean rank score	Com- posite rank
Scholastic record	2	2	4.0	2.0	2
Family background	7	6	13.0	6.5	7
Work experience	6	3	9.0	4.5	5
Marital status	5	7	12,0	6.0	6
Interview impression	1	1	2.0	1.0	1
Extracurricular activities	3•5	4	7.5	3.8	3
Military status	3.5	5	8.5	4.3	4

Read table thus: The applicant's scholastic record ranked second in both Sections I and II for a total rank score of 4.0 (2 + 2). Hence, its mean rank score was 2.0 (4 + 2), and its composite rank was second.

By following the above testing procedure and using the same formula, the correlation coefficient between the composite ranking and the recruiters' rating of the same standards in Section II of the questionnaire was found to be .86. 18 To determine if .86 correlation coefficient was significant, the "t" distribution test was administered. It was found that such a correlation coefficient was significant. 19

Therefore, the composite criteria rating substantially agreed with the recruiters ranking of the same standards in Section II of the questionnaire.

In summary, since the composite criteria ranking substantially agrees with the rating of the standards in both Sections I and II, it is valid and the best probable ranking. The composite criteria rating is shown below: (1) interview impression; (2) scholastic record; (3) extracurricular activities; (4) military status; (5) work experience; (6) marital status; (7) family background.

¹⁸ See Appendix M, p. 100.

¹⁹ See Appendix M, p. 100.

CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

I. SUMMARY

Problem. The purpose of this study was to determine the importance of certain criteria in recruiting business graduating seniors of the Kansas State Teachers College.

Specifically, the study was directed at the following questions:

- 1. What criteria are considered to be most important in recruiting business graduating seniors?
- 2. What criteria are least pertinent in the recruiting of applicants?
- 3. What factors relating to a certain criterion do recruiters consider to be significant, and how important are they?
- 4. Are the standards being emphasized by the recruiters consistent with research results on this topic?

Importance. Information revealing the factors which seem to be emphasized by college recruiters and companies in recruiting graduates for positions would be valuable for several reasons.

This information would be of value to faculty members in advising students about the relative importance of various collegiate experiences to job finding success.

Such data would be helpful to the interviewing companies in evaluating their college recruiting program.

Comparisons could be made between what is emphasized by campus recruiters and what research results indicate should be stressed.

This information might assist students in planning their college lives and establishing their objectives. By being informed of the characteristics which business considers important, students may decide for themselves what benefits the graduates in terms of success in being interviewed.

<u>Procedure</u>. In preparation for this study, related literature and previous studies regarding criteria used by recruiters in recruiting business graduating seniors were reviewed. From this review, certain criteria were selected for study.

A questionnaire was formulated which contained the selected criteria. The questionnaire was designed so that upon its return the writer could statistically determine the importance of the selected criteria. The questionnaire was reviewed by three experienced recruiters, and their suggested changes were made.

A letter was compiled to inform its recipients of the nature of the study. The letter, with the questionnaire attached, was forwarded to the forty companies that conducted interviews at the Kansas State Teachers College from October,

1963, to September, 1964, as determined by the <u>Placement</u>

<u>Office Annual Report for 1963-64.¹</u> Twenty-nine questionnaires, 72.5 per cent of those distributed, were returned.

The data from the returned questionnaires were tabulated,
analyzed, summarized, and prepared for presentation.

Findings. Section I of the questionnaire was divided into seven categories. Within each category there were a number of related factors used by recruiters in recruiting business graduating seniors. The recruiters were asked to evaluate these factors by rating their degree of importance. The recruiters could select one of the following five ratings for each factor: extremely important, very important, important, fairly important, and not important.

The above data was statistically tested so that their meaning could be interpreted with a probability of .95 and .99 of being correct. As a result of these tests, the following findings were made concerning the categories related factors:

1. Scholastic record. It was found that recruiters considered the factors of over-all academic grades, the major subject field, and the grades in the major field to be

^{1&}quot;Report of On-campus Interview," <u>Placement Office</u>
<u>Annual Report for 1963-64</u> (Emporia, Kansas: Kansas State
Teachers College Press, 1965), pp. 11-15.

"very important," the second highest rating. They considered the factors of the grades in the minor subject field and the number of semester hours in the major field secondary to the above factors and rated them to be "important," the third highest rating.

- 2. Family background. It was found that recruiters considered the factor of the applicant's father's occupation to be "fairly important," the fourth highest rating. They considered the factors of the applicant's mother's occupation, of his parents being separated or divorced, and of their education and income secondary to the above factor and rated them to be "not important," the lowest rating.
- 3. Work experience. The recruiters considered the factor of college employment to be "fairly important;" while they believed the factors of supervisory and non-supervisory experience to be "not extremely important," the statistically derived first rating.
- 4. It was found that recruiters considered the factors of the applicant's being single or married to be not important.
- 5. Interview impression. It was found that recruiters considered the factors of personality, confidence, goals and objectives, conduct, ability to express one's self, and interest displayed to be "extremely important," the highest rating. They considered the factors of appearance and

interview preparedness to be secondary to the above factors and rated them to be "very important," the second highest rating. Least pertinent of the interview factors studied were salary requested, location requested, applicant's age, and the way in which the applicant's education had been financed.

- 6. Extracurricular activities. The recruiters considered the factor of membership in college organizations to be "important." They considered the factor of being a member of a social fraternity secondary to the above factor and rated it to be "not important." The recruiters believed the factor of being a member of an honorary fraternity to be "not extremely important."
- 7. Military status. The recruiters considered the applicant's active military obligation not being completed to be "not important."
- 8. The following factors were found to be <u>not</u>

 <u>significant</u> by the measures used: the applicant's being
 separated or divorced, being an officer of a college organization, permanent employment, and his active military
 obligation being completed.

In Section II of the questionnaire, the recruiters ranked certain criteria in order of their preference. This ranking was cross-checked with the recruiters' rating of the same standards in Section I to determine if they substantially

agreed. It was found that the recruiters ranking of the categories in Section I did not substantially agree with their ratings of the same criteria in Section II.

Therefore, a composite criteria ranking was developed and tested to determine if it would substantially agree with both the ratings of standards in Sections I and II of the questionnaire. The test's results revealed a substantial agreement between the ranking of the same standards in both sections. Hence, the following ranking is the best probable rating:

<u>Criteria</u>	Rank
Interview impression	1
Scholastic record	2
Extraourricular activities	3
Military status	4
Work experience	5
Marital status	5
Family background	7

In Section III of the questionnaire, the recruiters were asked if they considered the Bachelor of Science Degree equivalent to the Bachelor of Arts Degree. Twenty-eight of the twenty-nine recruiters replied that they considered the degrees equivalent.

III. CONCLUSIONS

These conclusions are drawn in answer to the $q_{\mbox{\scriptsize ue}}$ stions to which the study was directed.

Criteria considered most pertinent and the relating factor's importance. This study, as does certain previous research, reveals that the interview impression is the principal criterion used by recruiters in recruiting business graduating seniors. The decisions made about an applicant during the interview may well determine his future employment. Therefore, students would be well advised to spend time preparing for interviews.

The recruiter's impression of the applicant's personality, confidence, goals and objectives, and interest is most important. The interviewee who is pleasant to talk to, confident, has sensible goals, and displays interest should favorably impress interviewers.

The applicant's scholastic record is a major criterion used by most recruiters. Grades are a tangible standard that usually indicate intelligence and, to some recruiters, predict future performance.

The recruiters consider the applicant's over-all academic grade, major subject field, and the grades in the major subject field to be of prime interest. The major subject field indicates in which phase of business the student is interested, and the grades in the major subject curriculum reveal the applicant's ability in this field. The over-all academic grade usually indicates intelligence and

the applicant's scholastic performance in relationship to other students.

Extracurricular activities rank third in the importance of the criteria studied. Participation in college activities indicates social adjustment and the willingness to sacrifice personal time.

This study reveals that recruiters consider membership in college organizations to be important, while belonging to a social fraternity is not essential. Hence, most recruiters are not concerned with which organizations the applicant belongs, but they do consider participation in some activities to be important.

Criteria considered least pertiment and the relating factor's importance. The male applicant's military status ranks fourth in the standards studied and is considerably less important than the above criteria studied.

The applicant's active military obligation not being completed is considered to be not important. Although most companies may prefer that an applicant have his active military obligation fulfilled, it appears that it is not a pertinent recruiting factor.

The applicant's work experience record is the fifth most important criterion studied. It appears that the experience of the job itself is not so important as having been employed.

Recruiters consider college employment and the way in which the applicant's education has been financed to be fairly important. This indicates that employment during college to help finance educational expenses is of interest to recruiters.

The applicant's marital status ranks sixth in importance of the standards studied. It appears that the applicant's being single or married is of minor concern to most recruiters.

Family background is the least pertinent of the criteria studied. The importance of the applicant's family background could be summarized by a recruiter who commented that he is interested in hiring the student, not his family.

However, the applicant's father's occupation is considered by recruiters to be fairly important. This may indicate that companies are interested in knowing about the applicant's home occupational environment.

<u>Degree preference</u>. Most recruiters consider the Bachelor of Science Degree equivalent to a Bachelor of Arts Degree.

Comparison of the study results with previous research. The company surveys conducted by Habbe, 2 Swenson

²Stephen Habbe, "Employment of the College Graduate," Studies in Personnel Policy No. 152 (New York: National Industrial Conference Board, 1956), p. 21.

and Lindgren, 3 and Sullivan 4 indicated that the interview impression was the most important criterion in recruiting graduating seniors. The views expressed by Jamie 5 and Pitt 6 endorsed the survey's results. In the present study, the interview impression rated as the primary standard used by recruiters in recruiting students for employment.

³Wendel Swenson and Eugene Lindgren, "The Use of Psychological Tests in Industry," <u>Personnel Psychology</u>, 5:20, 1952.

Daniel J. Sullivan, Jr., "Selection Procedures for Specific Management Trainee Programs in Twenty-one Companies," Dissertation Abstracts, 21:2200, February, 1961.

Swallace Jamie, "A Model Program for Corporate Recruitment," <u>Journal of College Placement</u>, 17:114, May, 1957.

Gavin A. Pitt, The Twenty Minute Lifetime: A Guide to Career Planning (Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1959), p. 3.

In studies conducted by Flash, Wald and Doty, 8

Habbe, Johnson, 10 Endicott, 11 Husband, 12 Sullivan, 13 and
Odiorne and Hann, 14 grades and extracurricular activities
were important criteria used in recruiting college graduates.

Concurring opinions were stated by Mauer, 15 Barnes, 16

⁷Edward S. Flash, "Campus Job Interviewing: A Survey," Personnel, 28:367, January, 1952.

⁸Robert M. Wald and Roy A. Doty, "The Top Executive: A First Hand Profile," <u>Harvard Business Review</u>, 37:54, July-August, 1954.

Habbe, loc. cit.

¹⁰ Kermit K. Johnson, "An Investigation of Employment Techniques with Special Reference to the Selection of College Graduates by Business and Industry," <u>Dissertation Abstracts</u>, 16:2074, November, 1956.

¹¹Frank S. Endicott, "Endicott Report," <u>Journal of College Placement</u>, 19:54, March, 1959.

¹²Richard W. Husband, "What Do College Grades Predict?" Fortune, 55:157, June, 1957.

¹³sullivan, loc. cit.

¹⁴ George S. Odiorne and Arthur S. Hann, Effective College Recruiting (Ann Arbor, Michigan: Bureau of Industrial Relations, The University of Michigan, 1961), p. 1.

¹⁵Herryman Mauer, "The Worst Shortage in Business," Fortune, 53:204, April, 1956.

¹⁶Helen M. Barnes, "Putting First Things First,"

<u>College Placement Annual 1959</u> (Bethlehem, Pennsylvania:
College Placement Council, Inc., 1958), p. 11.

MacDonald, 17 Bartels, 18 and Hann. 19 In the present study, grades and extracurricular activities ranked second and third, respectively, in the standards studied.

Flash, 20 Habbe, 21 Sullivan, 22 and Odiorne and Hann 23 found that one or more of the following standards were secondary to the above mentioned criteria used to recruit college graduates: work experience, military status, marital status, and family background. This study revealed that these standards were of less importance than the interview impression, scholastic record, and extracurricular activities.

¹⁷Robert L. MacDonald, "Your Placement Office,"

College Placement Annual 1959 (Bethlehem, Pennsylvania:
College Placement Council, Inc., 1958), p. 30.

¹⁸ Martin H. Bartels, "The Interview--A Two-Way Street," College Placement Annual 1963 (Bethlehem, Pennsylvania: College Placement Council, Inc., 1962), p. 33.

¹⁹A. S. Hann, "Develop an Image of Executive Potential," <u>College Placement Annual 1964</u> (Bethlehem, Pennsylvania: College Placement Council, Inc., 1963), p. 5.

²⁰Flash, <u>loc. cit.</u> ²¹Habbe, <u>loc. cit.</u>

²² Sullivan, loc. cit. 23 Odiorne and Hann, loc. cit.

Jordon's, 24 Williams', 25 and Carroll's 26 survey results partially contradicted the views and studies mentioned above as do the opinions of Whyte 27 and Harrington. 28

In general, with a few exceptions, it appears that the present study results are in agreement with the findings of previous research.

III. RECOMMENDATIONS

In view of this study's findings, the following recommendations are made:

1. This study, as with certain previous research, revealed that the interview impression is the most important recruiting criterion employed by recruiters. A large

²⁴Annie W. Jordon, "Relationship Between Selected Collegiate Experiences and Beginning Jobs for Women,"

<u>Dissertation Abstracts</u>, 17:1041, May, 1957.

²⁵Frank J. Williams, Jr., "Predicting Success in Business," <u>Dissertation Abstracts</u>, 20:4305, May, 1960.

²⁶Stephen John Carroll, Jr., "The Relationship of Various Personal and Biographical Characteristics to Recruiting Decisions at the Entry Level of Management," <u>Dissertation Abstracts</u>, 25:1626, September, 1964.

²⁷William H. Whyte, Jr., <u>The Organization Man</u> (Garden City. New York: Doubleday and Company, Inc., 1957), p. 155.

²⁸ Alan Harrington, "Executives' Man: Personnel Interview," Atlantic Monthly, 204:53, August, 1959.

majority of decisions made about students evolve essentially from the brief meeting of the college recruiter and student. Since so much depends upon the interview, it is recommended that the Kansas State Teachers College Placement Office place considerable emphasis on a preparatory program for students on employment interviewing.

- 2. The student's scholastic record and participation in extracurricular activities are major standards used by recruiters in evaluating business graduates. It is suggested that faculty advisors continue to emphasize the importance of academic achievement and to encourage student participation in college activities. To assist the advisors in this task, it is further recommended that this study's findings and conclusions be published and distributed by the faculty advisor to new students.
- 3. This study was limited to the evaluation of certain criteria by business recruiters. The research results may not be indicative of the standards employed by school administrators when recruiting business teachers. It is suggested that a similar study be conducted to determine the importance of the criteria used by recruiters in the educational field.

²⁹ Jamie, loc. cit.

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APPENDIXES

APPENDIX A

QUESTIONNAIRE

A STUDY OF THE IMPORTANCE OF CERTAIN CRITERIA IN SELECTING BUSINESS GRADUATES AT THE KANSAS STATE TEACHERS COLLEGE

INSTRUCTIONS: Please check only one rating for each entry.

I. How do the following factors rank in your evaluation of applicants?

	Extremely Important	Very Important	Important	Fairly Important	Not Important
SCHOLASTIC RECORD					
Over-all academic grades				***************************************	
Grades in major field					
Grades in minor field					
Major subject field					***************************************
Minor subject field				*******************************	
Semester hours in					
major field					
Others					

PAMILY BACKGROUND					
Father's occupation					
Mother's occupation					
Parents not separated	***************************************	-		*****	
Parents not divorced			**********	******	******
Parents' education				(-
Parents' income					
Others					
			-	***************************************	
		-	******************		
~ 					

•

	Extremely Important	Very Important	Important	Fairly Important	Not Important
WORK EXPERIENCE					
Permanent employment					
College employment				-	
Non-supervisory					
Experience	4045			***************************************	
Supervisory Experience					4-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1
Others					

MARITAL STATUS Single	4-1				
Married					
Not divorced					
Not separated			ميرين المستسلسين والمراود و	وبينوان التناق التناوي	ويوالالالتالي

INTERVIEW IMPRESSION Appearance					
Personality					
Confidence					***
Goals and objectives					
Preparedness		****			
Conduct				waters to the second second	
Ability to owners					
Ability to express one's self				•	
Interest displayed		***************************************			
Salary requested			***************************************	***************************************	**************
Location requested			-		****
Applicant's age	-	***************************************			
How education was paid f	or		*************	***************************************	
Others					
	-				
	-				

	Extremely	Very		Fairly	Not
	Important	Important	Important	Important	Important
EXTRACURRICULAR ACTIVITIES Membership in college					
organizations					
Officer of college organization			***************************************		
Member of social fraternity					***
Member of honorary fraternity					
Others					
	Andrew Staffer Staffer	***************************************		******************************	
		-			***************************************
MILITARY STATUS (MALES)					
Active military obligation completed		***************************************	***************************************		
Active military obliga-					
tion not completed	**************************************				
II. Which 5 of the follow selecting college gra 2nd, 3rd, etc.)					
Sch	olastic Rec	ord			
Fam	ily Backgro	ound			
Wor	k Experienc	:e			
Interview Impression					
Harital Status					
Extracurricular Activities					
Mi1	itary Statu	LS.			
III. Do you consider a Ba Arts Degree?	chelor of 8	icience Degr	ee equivalo	ent to a Bac	chelor of
_	_) Yes	(N₀		
IV. Feel free to add any	comments y	rou wish to	make. (Use	e reverse si	ide to continue

Return to: Jerry V. Bradford
Apartment No. 1
1301 East 11th Street
Emporia, Kansas

APPENDIX B

LETTER OF TRANSMITTAL

Apartment Number 1 1301 East 11th Street Emporia, Kansas

February 24, 1965

Dear Sir:

As part of a graduate program at the Kansas State Teachers College, I am currently conducting a study for a Master's degree. For this project I need your views and those of your organization concerning the importance of certain criteria in selecting college graduates for business positions.

I am soliciting your assistance for information pertaining to this subject. The study could benefit the following groups:

- my school's faculty, in advising students of business desires.
- the students, by knowing what business wants and giving them the opportunity for preparing themselves accordingly.
- your organization, by acquiring a better business graduate.

I shall be grateful if you will complete the attached questionnaire, which does not request any identifying information about your firm. Therefore, please feel free to express your policies and views openly.

I am inclosing a stamped, self-addressed envelope for the return of the questionnaire, and would appreciate having the information not later than two weeks after you receive this letter.

I offer my thanks in advance for your cooperation.

Sincerely yours,

Jerry V. Bradford Graduate Student Goodyear Tire & Rubber Company Chicago, Illinois

Hallmark Cards Lawrence, Kansas

Hogue, Beebe, & Trindle, C.P.A. Dodge City, Kansas

International Business Machines Kansas City, Missouri

Interstate Bakeries Corporation Kansas City, Missouri

J. C. Penney Company Denver, Colorado

Kansas City Life Insurance Company Kansas City, Missouri

Kennedy & Coe, C.P.A. Salina, Kansas

Maurer-Neuer Packing Company Arkansas City, Kansas

Motors Insurance Corporation Wichita, Kansas

Mutual of Omaha-United of Omaha Omaha, Nebraska

Northwestern Mutual Insurance Company Kansas City, Kansas

Peat, Marwick, & Mitchell, C.P.A. Kansas City, Missouri

Phillips Petroleum Company Bartlesville, Oklahoma

Pierce, Farris, Cochran & Sutton Co. Hutchinson, Kansas

Procter & Gable Distributing Company Kansas City, Missouri Reno Hardware & Implement Company Hutchinson, Kansas

R. J. Reynolds Tobacco Company Richmond Heights, Missouri

Robert Coe, C.P.A. Grand Junction, Colorado

Ross, Fuller, & Costello Kansas City, Missouri

Southwestern Bell Telephone Company Topeka, Kansas

State Farm Insurance Company Columbia, Missouri

Swift & Company Kansas City, Kansas

Upjohn Company Kansas City, Missouri

Woolworth & Company Denver, Colorado

APPENDIX D

COMPUTING THE 95 PER CENT CONFIDENCE INTERVAL

A. Confidence Interval Formula for Proportions

$$CI = \frac{*}{P} \pm \sqrt{npq} \cdot t_{28 \text{ d.f.}}$$

B. Computations

CI =
$$5.6 \pm \sqrt{.16 \cdot 28} \cdot 2.05$$

CI = $5.6 \pm \sqrt{4.48} \cdot 2.05$
CI = $5.6 \pm 2.11 \cdot 2.05$
CI = 5.6 ± 4.3
CI = $1.3 \pm 0.9.9$

C. Findings

This formula establishes the confidence limits at the 95 per cent confidence level from 1.1 to 9.9. Since the data is discrete, it is necessary to round the limits and make the confidence interval from 1 to 10.

*The expected frequency in each cell by chance would be 5.6.

APPENDIX E

COMPUTING THE 99 PER CENT CONFIDENCE INTERVAL

A. Confidence Interval Formula for Proportions

$$CI = \overline{P} \pm \sqrt{npq} \cdot t_{28 \text{ d.f.}}$$

B. Computations

CI =
$$5.6 \pm \sqrt{.16 \cdot 28} \cdot 2.77$$

CI = $5.6 \pm \sqrt{4.48} \cdot 2.77$
CI = $5.6 \pm 2.11 \cdot 2.77$
CI = 5.6 ± 5.9
CI = $-.3 \pm 0.11.4$

C. Findings

This formula establishes the confidence limits at the 99 per cent confidence level from -. 3 to 11.4. Since the data is discrete, it is necessary to round the limits and make the confidence interval from 0 to 12.

*The expected frequency in each cell by chance would be 5.6.

APPENDIX F

SPEARMAN'S RANK CORRELATION

One of the oldest and for many years the most widely used of all testing methods is known as the rank correlation test. Being a non-parametric test, which means that no assumptions whatsoever have to be made about the distribution of the underlying population, it is not necessary to assume normality about the population. It is only necessary to be able to arrange the sample observations in rank order.

This test measures the statistical relationship between two variables (rankings). The statistical relationship is known as the correlation coefficient. The correlation coefficient can range from +1 to -1. A value of -1 is just as perfect correlation as a value of +1, the only difference being the direction of the relationship. A high value for the correlation coefficient simply indicates a high degree of "co-relation."

APPENDIX G

INTERPRETING THE CORRELATION COEFFICIENT

The correlation coefficient indicates the statistical relationship between two variables (rankings). The degree to which the two rankings correlate is the degree of accuracy in which one of them may be estimated from the known value of the other. Although this information is not vital to this study, the writer thought it might be of interest. The degree of accuracy in which one variable may be estimated from a known value of the other is shown below:

1. If the coefficient is greater than .95, there is a high degree of correlation between the variables and one of them may be quite accurately estimated from a known value of the other.

APPENDIX H

"T" DISTRIBUTION

"T" distribution is a continuous probability distribution with an infinite range. The T distribution. although symmetrical, is more widely dispersed than the normal distribution. The smaller the sample size the more widely dispersed is the T distribution. Since the size of the sample is relevant to the T distribution, it is necessary to refer to the concept of degrees of freedom. This term refers to the maximum number of mutually independent variables in a system. In a sample of size n, there are n-1 degrees of freedom, because if n-1 frequencies are specified, the other frequency is determined by the total size of n. Thus, if there are five items whose total is fifteen and four of the items have values of 1, 2, 3, and 4, obviously the final items must have a value of 5 or more. Therefore, if n = 5, there are four, or n-1 degrees of freedom. The T distribution has a different value for sach degree of freedom and when the degrees of freedom are infinitely large, the T distribution is equivalent to the normal distribution.

Finding the significance of the rank correlation coefficient. The correlation coefficient indicates only the statistical relationship between two variables (rankings).

To determine the significance of this relationship, it is necessary to administer some testing method. Since the number in the sample was under thirty, the T distribution test was used.

As previously stated, the correlation coefficient reveals only the statistical relationship between variables. By the T distribution formula, the correlation coefficient is converted into a T score. The T score, taking into account the above concept of degrees of freedom, determines if the correlation coefficient is significant at the confidence level desired.

APPENDIX I

SECTION I CONSTRUCTION TEST

A. Statement of the problem

Did the order of the questions as they appeared in Section I of the questionnaire substantially influence the order of the answers?

B. Computations

1. Spearman's rank correlation was computed as shown below:

$$r = 1 - \frac{6 \le d^2}{N^3 - N}$$

$$r = 1 - \frac{(6)(69.5)}{343 - 7}$$

$$r = 1 - \frac{(6)(69.5)}{336}$$

$$r = -.24$$

2. To determine if -.24 rank correlation coefficient is significant at the 95 per cent confidence level, the "t" distribution test of significance was administered as shown below:

$$t = r / \frac{N-2}{1-r^2}$$

$$t = -.24 / \frac{7-2}{1-.06}$$

$$t = -.55$$

At the 95 per cent confidence level, with 6 degrees of freedom, "t" equals 2.45. Since "t" score -.55 is less than 2.45, the correlation coefficient -.24 is not significant.

C. Conclusion

Therefore, the order of the questions as they appeared in Section I of the questionnaire did not substantially influence the order of the answers.

APPENDIX J

SECTION II CONSTRUCTION TEST

A. Statement of the problem

Did the order of the questions as they appeared in Section II of the questionnaire substantially influence the order of the answers?

B. Computations

1. Spearman's rank correlation was computed as shown below:

$$r = 1 - \frac{6\sum_{d}^{2}}{N^{3} - N}$$

$$r = 1 - \frac{(6)(38)}{343 - 7}$$

$$r = 1 - \frac{(6)(38)}{336}$$

$$r = .32$$

2. To determine if .32 rank correlation coefficient is significant at the 95 per cent confidence level, the "t" distribution test of significance was administered as shown below:

$$t = r \sqrt{\frac{N-2}{1-r^2}}$$

$$t = .32 \sqrt{\frac{7-2}{1-.01}}$$

$$t = .72$$

At the 95 per cent confidence level, with 6 degrees of freedom, "t" equals 2.45. Since "t" score .72 is less than 2.45, the correlation coefficient .32 is not significant.

C. Conclusion

Therefore, the order of the questions as they appeared in Section II of the questionnaire did not substantially influence the order of the answers.

APPENDIX K

COMPARING SECTION I AND SECTION II RANKINGS

A. Statement of the problem

Did the recruiter's ranking of the categories in Section I substantially agree with their ratings of the same criteria in Section II?

B. Computations

 Spearman's rank correlation was computed as shown below:

$$r = 1 - \frac{6\sum_{0}^{1} d^{2}}{N^{3} - N}$$

$$r = 1 - \frac{99}{3^{4}3 - 7}$$

$$r = 1 - \frac{99}{336}$$

$$r = .70$$

2. To determine if .70 rank correlation coefficient is significant at the 95 per cent confidence level, the "t" distribution test of significance was administered as shown below:

$$t = r / \frac{n-2}{1-r^2}$$

$$t = .70 / \frac{7-2}{1-.49}$$

$$t = 2.23$$

At the 95 per cent confidence level, with 6 degrees of freedom, "t" equals 2.45. Since "t" score 2.23 is less than 2.45, the correlation coefficient .70 is not significant.

C. Conclusion

Therefore, the recruiter's ranking of the categories in Section I did not substantially agree with their ratings of the same criteria in Section II.

APPENDIX L

COMPARING THE COMPOSITE CRITERIA AND SECTION I RANKING

A. Statement of the problem

Did the composite criteria rating substantially agree with the recruiter's ranking of the categories in Section I of the questionnaire?

B. Computations

1. Spearman's rank correlation was computed as shown below:

$$r = 1 - \frac{6 \sum_{N} d^{2}}{N^{3} - N}$$

$$r = 1 - \frac{(6)(2.5)}{3^{4}3 - 7}$$

$$r = 1 - \frac{15}{336}$$

$$r = .96$$

2. To determine if .96 rank correlation coefficient is significant at the 95 per cent confidence level, the "t" distribution test of significance was administered as shown below:

$$t = r / \frac{n-2}{1-r^2}$$

$$t = .96 / \frac{7-2}{1-.92}$$

$$t = 7.58$$

At the 95 per cent confidence level, with 6 degrees of freedom, "t" equals 2.45. Since "t" score 7.58 is greater than 2.45, the correlation coefficient .96 is significant.

C. Conclusion

Therefore, the composite criteria rating substantially agreed with the recruiter's ranking of the categories in Section I of the Questionnaire.

APPENDIX M

COMPARING THE COMPOSITE CRITERIA AND SECTION II RANKING

A. Statement of the problem

Did the composite criteria rating substantially agree with the recruiter's ranking of the same standards in Section II of the questionnaire?

B. Computations

1. Spearman's rank correlation was computed as shown below:

$$r = 1 - \frac{6 \sum d^{2}}{N^{3} - N}$$

$$r = 1 - \frac{(6)(8)}{3^{4}3 - 7}$$

$$r = 1 - \frac{48}{336}$$

$$r = .86$$

2. To determine if .86 rank correlation coefficient is significant at the 95 per cent confidence level, the "t" distribution test of significance was administered as shown below:

$$t = r / \frac{N - 2}{1 - r^2}$$

$$t = .86 / \frac{7 - 2}{1 - .74}$$

$$t = 3.76$$

At the 95 per cent confidence level, with 6 degrees of freedom, "t" equals 2.45. Since "t" score 3.76 is greater than 2.45, the correlation coefficient .86 is significant.

C. Conclusion

Therefore, the composite criteria rating substantially agreed with the recruiter's ranking of the same standards in Section II of the questionnaire.