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An Empirical Investigation of Personal Characteristics Significantly Affecting Employment Offers from International Accounting Firms to Accounting Graduates

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AN EMPIRICAL INVESTIGATION OF PERSONAL CHARACTERISTICS SIGNIFICANTLY AFFECTING EMPLOYMENT OFFERS FROM INTERNATIONAL ACCOUNTING FIRMS TO ACCOUNTING GRADUATES

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To my late Father, I give thanks for teaching me to see humor in all of life; to my Mother, for giving me the desire to excel; to my brothers and sister, for being such loyal friends; to my wife Gail, for showing me love and patience; to my sons, Johnny and Allen, for giving me purpose.

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Chapter 1

INTRODUCTION

Many accounting students view public accounting employment with an international accounting firm as a valuable professional experience. Some of these students consider the in-house training offered by international firms to be superior to that available at many regional and local accounting firms. Many of these students are of the opinion that an exposure to the variety and the magnitude of operations of the international clientele is, in itself, an educational experience without equal.

While some accounting students are desirous of employment with an international firm because of its financial rewards, many are interested in the psychological rewards as well. These latter rewards include such things as the enjoyment and the prestige of employment with an international firm or, perhaps, the opportunity for service to the accounting profession ultimately at the national and the international level.

Other accounting students are attracted to employment with an international firm because of the continuing demand

for qualified, entry-level personnel.[1] They view this demand as an indication of job security and mobility in a period of time when unemployment is a national problem. Some of these students seek this experience with the understanding that, if the employment does not prove to be mutually satisfying to them and their firm, they will be able to change employment rather easily. The conventional wisdom is that it is easier to go from a large public accounting firm to a smaller public accounting firm or industry than vice versa.

Whatever the reasons, many accounting students actively seek employment with the international public accounting firms.

This chapter discusses the nature of the problem of seeking employment with an international firm, the objectives of the study at hand, the hypotheses to be tested, the research methodology, the justification, limitations, and the plan of the study.

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[1] James H. MacNeill and Mary McInnes, The Supply of Accounting Graduates and the Demand for Public Accounting Recruits: 1979, American Institute of Certified Public Accountants (New York: 1979), p. 21.

NATURE OF THE PROBLEM

Several relationships come into play as accounting students engage in the pursuit of employment with an international accounting firm. The typical relationships are shown in Figure 1.

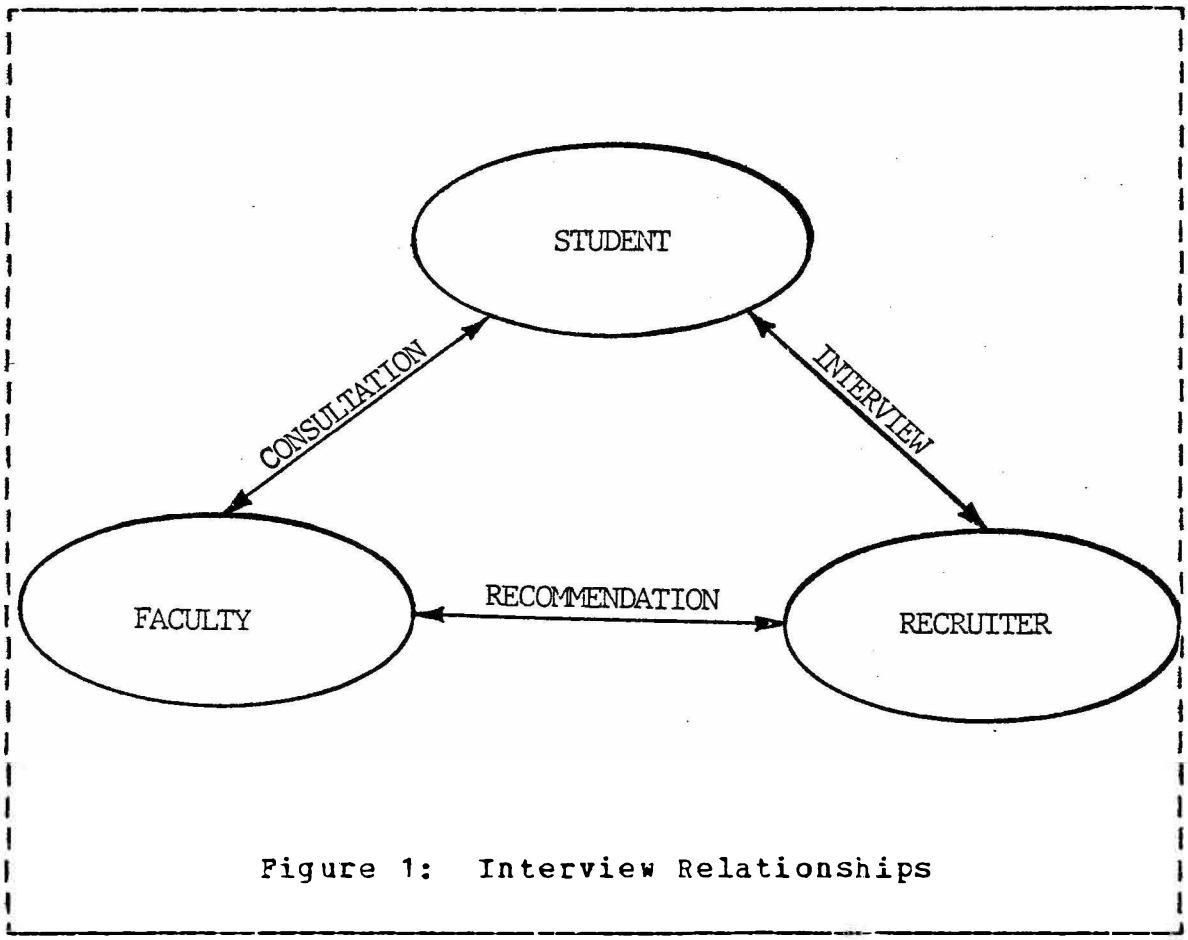

Figure 1: Interview Relationships

The Faculty's Perspective

Students occasionally ask accounting faculty members for information and advice pertaining to employment with the international firms. Frequently the questions center on

what these public accounting firms are looking for in entry-level employees. That is, faculty members are asked to identify the characteristics which are viewed by the recruiters for international accounting firms to be important, if not the most important, when considering undergraduate accounting students.

Similarly, recruiters request opinions from the faculty concerning students, even to the point of specific recommendations. Faculty members can offer only recommendations or information that is general in nature in many cases. The responses by faculty members may be based on their observations and outdated experiences from personal accounting and/or educational backgrounds which may not be relevant in a changing employment market.

A certain amount of generalization by faculty is required because the questions themselves are usually general in nature and the time devoted to advising students and conferring with recruiters is necessarily limited. If there were a research effort designed to explore this area, accounting faculty members would be able to offer better, more-timely advice to students and recruiters.

The Recruiter's Perspective

Each of the international accounting firms desires basically similar characteristics and qualifications in new employees, and each firm follows similar approaches to

attract qualified entry-level applicants. The decision to consider further a particular applicant generally rests with the individual campus recruiter representing his accounting firm. The recruiter is interested in making a decision which is best for his firm.

No one can anticipate perfectly what a recruiter will decide in all cases since the decision process is an individual matter. It is always possible for recruiters from different accounting firms to reach opposite decisions involving the same applicant. It is always possible that an individual recruiter might offer employment to an average entry-level applicant when his firm is experiencing a period of growth, and demand for new professional staff is strong. Under different circumstances, the same recruiter might choose not to offer employment to the same applicant, if for example overhiring had occurred in a previous period. Conversely, some firms may choose to hire an exceptionally qualified applicant whether or not a current need exists in the firm.

All accounting firms compete with one another to employ in excess of one-fourth of all undergraduate accounting students.[2] Accounting firms spend a great deal of time and money in their efforts to attract qualified applicants.[3]

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[2] MacNeill and McInnes, Supply of Accounting Graduates, pp. 20-21.

[3] For example, Robert Pivik, the National Partner for Firmwide Planning and Development with Deloitte Haskins & Sells, stated, "Recruiting is costly in terms of time,

While these costly recruiting efforts seem necessary, a study in this area might serve as a fundamental reference for those firms that wish to reduce the qualitative aspect, and thus the cost, of professional staff selection.

The Student's Perspective

The student faces the ultimate problem. It is the student who must actively seek employment with an international accounting firm. It is the student who must show evidence of possessing the qualities and qualifications that the accounting firms seek. Furthermore, it is the student who is inherently interested in improving his chances of employment by enhancing and emphasizing those attributes which are considered most important by the international firms.

As in the case of the accounting faculty, many accounting students are aware that there is general agreement as to the usual factors considered important by the accounting profession, and the international accounting firms in particular. However, there has been no definitive study which statistically identified and tested the relative importance of these factors. Such a study could serve as a

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effort, and out-of-pocket expenses. Last year (1977) when we hired a little over 1,000 we calculated that our recruiting costs were about 3.5 million dollars. This year (1978) it will probably be 4 million." (From Profiles of Public Accounting Firm Careers, edited by Richard J. Murdock (College of Administrative Science: The Ohio State University, 1978), p. 2.)

basis for advisory conferences between faculty and students concerning entry into the accounting profession, specifically with international firms. The results of such a study could be used by a student as a benchmark against which he might compare his personal qualifications and characteristics if he is considering employment with an international accounting firm.

OBJECTIVES OF THE STUDY

The overall objective of the study is to identify, by empirical investigation, the specific measures of the personal characteristics and qualifications of accounting students which have a statistically significant effect on employment offers from international accounting firms. There is an implicit assumption involved here which states that there exists a general group of characteristics which are weighed during the recruitment process. While the objective of this study is not merely to identify the inventory of characteristics involved, the results should substantiate the results of other surveys[4] and verify the opinions of accounting students and public accountants who are interested in the recruiting for the international firms.

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[4] See, for example, Lloyd Seaton, Jr., and Jackson A. White, "Recruiting Practices of CPA Firms," The Journal of Accountancy, Volume 135, Number 5 (May, 1973), pp. 86-7.

More specifically, the objectives of the study are to answer the following questions, among others:

1. What were the specific measurements of characteristics of accounting students which had a statistically significant effect on employment offers from international accounting firms?

2. Was there a significant difference in the characteristics of male and female students who received employment offers from the international accounting firms? If so, what were the differences?

3. Was there a significant difference in the characteristics of male students who were and who were not offered employment by the international accounting firms? If so, what were the differences?

4. Was there a significant difference in the characteristics of female students who were and who were not offered employment by the international accounting firms? If so, what were the differences?

5. Was there a significant difference in the characteristics of Caucasian and non-Caucasian students who were offered employment by the international accounting firms? If so, what were the differences?

6. What characteristics of the students who were offered employment by the international accounting firms were the most important predictors of the salary offered commensurate with the employment?

7. Was there a significant difference in the reasons, given by students who were and who were not offered employment by the international accounting firms, regarding the selection of accounting as a career? If so, what were the reasons that differed?

8. Was there an inordinate number of male versus female students who received employment offers from the international accounting firms? That is, did there appear to be discrimination or reverse discrimination in the number of female students recruited based on this study?

The study should be useful in the future in several ways:

1. To serve as a basis of faculty consultation and advice for students who wish to procure employment with international accounting firms;

2. To serve as a standard for self-evaluation by students in their consideration of employment with international accounting firms; and

3. To serve as a rudimentary guide for accounting firms that wish to reduce the qualitative facet of professional staff selection.

The study also develops a profile of the characteristics and qualifications of a typical accounting student who is successful in the attempt to receive an employment offer from an international accounting firm. This profile should provide answers to the following questions, among others:

1. How do these students view their ability to communicate?

2. How do these students view their ability to handle interviews?

3. How do these students view their participation in the interview process related to the number of questions or comments they initiated during the interview?

4. Did these students attempt to put the interviewer "on the spot" with intense questions?

5. How do these students view their willingness to travel?

6. On the average, how many campus interviews with the international accounting firms were arranged?

7. How many office visits were granted on the average?

8. Was the recruiter perceived as having a "bad day?"

9. Did the recruiter ask what the student felt were "unfair" questions?

HYPOTHESES TO BE TESTED

The general hypothesis to be tested by this study is that there exists an inventory of personal qualifications and characteristics which are weighed and considered by recruiters for international accounting firms in the interviewing process with undergraduate accounting students seeking entry-level professional positions. These qualifications and characteristics may have varied appeal to different recruiters, and certain of these qualifications and characteristics may take on added or reduced significance in view of the totality of the qualities of a particular applicant. It is within this framework that this study was undertaken to determine if any of these qualifications and characteristics were statistically significant, so as to represent a general constraint that should be recognized and considered by students who are interested in employment with an international accounting firm.

The hypotheses to be tested in this study are stated below:

1. There is no difference in the characteristics of undergraduate accounting students who are offered entry-level employment by international accounting firms and those who are not offered employment.

2. There is no difference in the characteristics of male and female undergraduate accounting students who are offered entry-level employment by international accounting firms.

3. There is no difference in the characteristics of male undergraduate accounting students who are offered entry-level employment by international accounting firms and male undergraduate accounting students who are not.

4. There is no difference in the characteristics of the female undergraduate accounting students who are offered entry-level employment by international accounting firms and female undergraduate students who are not.

5. There is no difference in the characteristics of Caucasian and non-Caucasian undergraduate accounting students who are offered entry-level employment by international accounting firms.

6. There is no linear functional relationship between the salary offer and the employment variables (i.e., personal characteristics and qualifications) of accounting students.

7. The reasons for selecting accounting as a career are independent of whether or not undergraduate accounting students are successful in receiving an entry-level offer from an international accounting firm.

8. The populations represented by the females and males in this study are homogeneous with respect to offers of employment (and hence non-offers) made by the international accounting firms.

RESEARCH METHODOLOGY

To determine an inventory of the general characteristics of accounting students which are considered by the recruiters for the international firms, surveys of the recruitment personnel in the local offices of the firms were conducted. These characteristics were further substantiated by comparison to other studies and by the examination of recent recruitment files maintained in the local office of one of the international firms. Surrogates for some of the

qualitative characteristics were determined through discussion with recruitment personnel for the international accounting firms.

The students[5] to be included in the survey came from a group of eight universities selected on the basis of their emphasis on preparation for public accounting careers and their geographical location. These eight were a judgment sample chosen to provide a homogeneous group of students. Robert Kavner, General Services Partner in the New York office of Coopers & Lybrand, suggested that offices in different areas are unique. He stated that "offices have different complexions. Our Omaha office has a very different kind of environment than the New York office environment."[6] Different environments suggested that different characteristics are required of the recruits in various areas; therefore, the study was limited to one geographical area. The assumption was that the characteristics sought in potential employees for offices in one area would be similar. The study was conducted on this basis; however, the assumption is merely a limiting factor for the study. Opinions and facts to the contrary would tend to add to the external validity of the present study.

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[5] These students refer to undergraduate students obtaining a bachelor's degree with a major in accounting who are seeking an entry-level emplcyment position with an international accounting firm.

[6] Richard J. Murdock, ed., Profiles of Public Accounting Firm Careers (College of Administrative Science: The Ohio State University, 1978), p. 4.

Students at the universities mentioned were voluntarily enlisted by representatives of Beta Alpha Psi to complete a survey instrument which was designed to capture the general characteristics and surrogates previously identified. The students selected had all interviewed with the international firms[7] during the 1979-1980 school year.

The necessary sample data were randomly divided into two groups of equal size. One of these groups, the analysis sample,[8] was used to develop the discriminant function for research hypothesis 1. That is, discriminant analysis was performed on the analysis sample to determine the model which shows the relative importance among the measures of the various characteristics of the analysis sample. The predictive power of the model was then tested on the remaining group, the holdout sample.[9] This technique of validating the function is known as the split-sample or cross validation method.[10] Discriminant analysis, multiple regression, and the chi-square tests for independence and homogeneity were performed to test the remaining research

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[7] These firms are the Big Eight accounting firms headquartered in the United States, including Arthur Andersen & Co.; Arthur Young & Company; Coopers & Lybrand; Deloitte Haskins & Sells; Ernst & Whinney; Peat, Marwick, Mitchell & Co.; Price Waterhouse; and Touche Ross & Co.

[8] Joseph F. Hair, Jr., et al., Multivariate Data Analysis: With Readings, (Tulsa, Oklahoma: Petroleum Publishing Co., 1979); p. 94.

[9] Ibid.

[10] Ibid.

hypotheses.

Additional detailed discussion of the research methodology appears in Chapter 3 and Appendix C of the paper.

JUSTIFICATION OF THE STUDY

This study was undertaken in the belief that the results will be useful to the public accounting profession in general and to the accounting students who in particular serve as the continuing life support of the profession's numerous segments. Accounting students who seek employment with the international firms are necessarily in competition for a limited number of entry-level positions. They need to be aware of the attributes which will be used to discriminate among them for the available positions.

The results of this study should be beneficial to many accounting students. Once a student is cognizant of the many qualities and qualifications noted in this study, he can make one of several judgments. If he possesses all of the general attributes, he can concentrate on improving those characteristics which are relatively more important than the others. If a student is able to improve the characteristics found to be more important, he should have a competitive edge over students who possess only the general attributes.

If a student possesses some of the general attributes, but not all, he can improve those which will perhaps place him in a marginal position for employment with an international firm. This may be possible if the student is in the sophomore or junior year and has sufficient time and motivation to improve his chances of acquiring the desired employment.

This study should also be beneficial to those students who do not possess the general attributes needed for employment with an international firm. Once a student recognizes that his chances of obtaining employment with an international firm are somewhat remote, he can redirect his attention toward other areas of employment within the accounting profession. It is hoped that students may find personally suitable employment and have a more enjoyable accounting career as a result of this study, without the disappointment of rejection when striving toward an inappropriate goal.

A major justification for this study results from a series of panel presentations at The Ohio State University in the 1977-1978 school year. This series of programs was given by the Omicron Chapter of Beta Alpha Psi. Representatives of seven of the eight international accounting firms and one of the largest national firms were presented with a standard set of questions which covered all facets of working for a large firm. In a series of

questions which generally fell into twenty-two areas, the second question was "Of those extended job offers, how do they differ from those not extended job offers?"[11] That question states precisely what this study attempts to answer.

LIMITATIONS OF THE STUDY

There are certain limitations of the study involving the selection of students and universities to be included. The ability to generalize from this study is limited to the students and universities included in the survey, thus reducing external validity. The students and universities included may not be representative of all students and universities. The inclusion of students from the eight universities in this study was a decision made to provide what is thought to be a representative and homogeneous sample. Chapter 3 discusses the inherent problems involved in this study as they relate to gaining a random sample of the accounting students surveyed. The division of the responses into analysis and holdout samples was accomplished to counteract the lack of analysis based on a random sample.

The students who responded did so on a voluntary and confidential basis. Some students may have chosen not to respond to the survey because they received no offer of employment from an international firm. Hence, potential

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[11] Richard J. Murdock, ed., Profiles of Public Accounting Careers, p. 3.

non-response bias is a limitation of this study.

Another limitation of this study is that all variables that may have an impact on the discrimination between students in the recruitment process by the international firms cannot be identified in and captured by a survey instrument. Furthermore, statistical tests can show only associations between variables, not a cause and effect relationship.

The selection of students for this study was limited to accounting students and post-baccalaureate students who were pursuing an undergraduate degree in accounting. Students seeking master's degrees were considered beyond the scope of this initial study.

Employment was limited in this study to mean entry-level employment in the United States as offered by international accounting firms to include the areas of auditing, tax, management services, and the like. Thus, the typical circumstance was studied: the first employment opportunity for a student attempting to obtain an employment offer from one of the international accounting firms following graduation with an undergraduate accounting degree. A less typical situation was also considered, that of a student acquiring a second undergraduate degree (accounting) who was seeking the first employment opportunity with an international accounting firm.

PLAN OF THE STUDY

Chapter 2 presents a discussion of the general interviewing process between the international accounting firms and the senior-level accounting students. Also presented is a discussion of the characteristics selected for inclusion in the study along with the results contained in related studies.

The third chapter contains an in-depth discussion of the research methodology for the study. More detail on the sample selection, population identification, and the data collection process is presented along with discussion of the statistical tests used in the thesis. The various hypotheses being tested are delineated in detail.

A presentation and analyses of the findings for each hypothesis are offered in Chapter 4. Other findings of a more general nature are presented in Chapter 4, also.

Chapter 5 contains the summary, conclusions, implications, and recommendations of this study, along with suggestions for further research.

Chapter 2

THE CHARACTERISTICS UNDER REVIEW

The most critical link in the chain of events leading up to the actual offer of employment by an international accounting firm may well be the interviewing process. During the interview, the applicant for employment must show evidence of possessing the characteristics which generally are considered important.

This chapter presents an overview of the interviewing process, a review of the literature regarding similar studies in accounting and other areas of employment, a discussion of the selection of the characteristics which were included in the survey, and finally a review of the questionnaire used to capture the measurement of the characteristics chosen.

THE INTERVIEWING PROCESS

The procedure for interviewing with many public accounting firms, regardless of size, is similar. It consists of two distinct steps: the campus interview and the office visit. Figure 2 illustrates a flowchart representation of the campus interview and its potential

conclusions. The discussion which follows relates primarily to the interviewing process conducted by the international accounting firms.

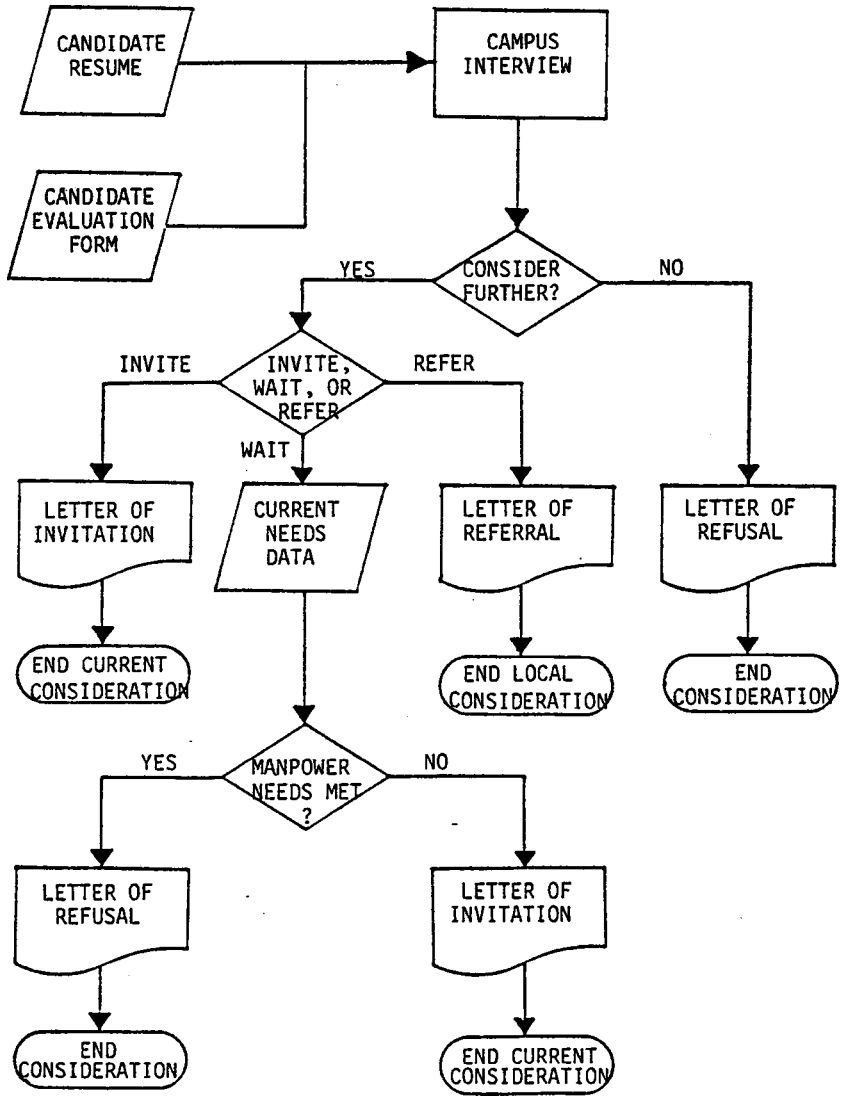

Figure 2: The Campus Interview

The Campus Interview

The interview held on the campus is usually arranged by the accounting firm in conjunction with the university's placement service or the department/school of accounting. Accounting students register for an interview at an available time on a first-come, first-serve basis.

The representative of the accounting firm is normally a member of the management team, either a manager or partner of the firm. Many of the campus recruiters receive training in interviewing techniques from their firms,[12] and some firms allow experienced personnel to accompany new members of the interview team while new personnel develop their interviewing skills on the job.

The campus interview consists of a limited time, one-half hour typically, devoted to general discussion and a series of questions and answers between the applicant and the recruiter. The applicant provides some type of resume or campus placement service registration sheet for the recruiter to peruse, usually in advance of the interview.

The recruiter has available a printed form, designed and provided by the firm, for the purpose of recording relevant data and reactions to the student. As a common courtesy to the student, this candidate evaluation form is not generally completed in his presence. Thus, the student is not forced

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[12] For example, Coopers & Lybrand and Ernst & Whinney require that all recruitment personnel attend their respective three-day seminars devoted to an intensive study of effective interview techniques.

to feel he is being judged and appraised.

Candidate evaluation forms are important for two reasons. To the recruiter, they provide an opportunity to record relevant information about the candidate for employment. For purposes of this study, the candidate evaluation form serves as a source of qualities and qualifications initially reviewed on campus. These factors are the initial hurdle which the student must bridge in the interviewing process. These factors act as the first minimum constraint in many cases.

The candidate evaluation form of one of the international firms is particularly noteworthy in that it provides guidance to the interviewer in his attempt to achieve an effective interview. Following are points which this candidate evaluation form recommends:

1. It suggests that the recruiter review the applicant's resume before the interview in order to identify items requiring clarification, and to note items of significance related to the applicant's career interests for follow-up discussion during the interview. A good reason for this procedure is to demonstrate knowledge of and interest in the candidate, both of which should help put the candidate at ease.

2. This candidate evaluation form also recommends that the interviewer explain the structure of the interview, especially as it involves giving the applicant an opportunity to ask questions. The interviewer is reminded to note first impressions of personal appearance, verbal expression, and self-confidence.

3. This form further recommends that the recruiter open the interview with general questions in the areas of education, campus activities, work experience and

interests. The recruiter is reminded to appraise the organization of thoughts by the applicant, his verbal expression, the significance of prior work experience, work attitudes and goals, leadership ability, and, again, the self-confidence of the applicant.

4. As part of the general discussion, the interviewer should clarify any points not fully covered by the applicant including the tentative area of employment interest and the ability of the applicant. The candidate evaluation form exhorts the interviewer to answer specific questions offered by the applicant realistically, being careful not to "oversell."

5. In the latter part of the interview, the form reminds the recruiter to formulate an overall judgment of the applicant's potential for employment with the firm, to include an assessment of the applicant's knowledge of his area of employment interest, the significance of questions asked, and the degree of interest in the particular international accounting firm conducting the interview.

6. The final suggestion on this candidate evaluation form is that the recruiter should inform the applicant as to what will next happen to his application. In this way, no doubt or misunderstanding as to the next step in the employment process should exist for either person.

A general discussion of the information recorded on many of the candidate evaluation forms is presented in a subsequent section entitled "Literature Relating to Characteristics for Study."

The Office Visit

If an applicant is judged by the campus interviewer to exceed the minimum qualifications, or if a marginal applicant is available when the manpower needs for a particular firm have not been completely filled, the

candidate is sent a letter of invitation for an office interview.

The visit to the local office of the international accounting firm is arranged at a mutually convenient time for the applicant and the interested professional staff of the firm. The applicant spends several hours at the local office during which time he meets other members of the professional team, perhaps three or four of whom have responsibility to evaluate his potential.

In some cases, the main purpose of the office visit is to allow the candidate an opportunity to meet more of the professional staff so that he and the recruiting firm can judge how well he might fit in the firm. The office visit allows the recruiting firm to explore more fully the campus impression of the personal and professional growth potential of the applicant.

When questioned as to whether or not they attempt to observe any particular characteristic of the candidate during the office visit other than what was noted during the campus interview, most recruitment personnel answered negatively. One local office administers the American Institute of Certified Public Accountants' Orientation Test. The purpose of this test is to measure the applicant's reading comprehension, business vocabulary, and quantitative skills. In general, however, the firms are satisfied with the information gathered during the campus interview alone

and they use the office visit for reassessment of their initial impressions.

When the office visit is concluded, the professional staff members again complete candidate evaluation forms. The partner or manager in charge of recruitment reviews the completed forms, calls a conference of those who evaluated the candidate if needed, and reaches a decision regarding the candidate. Employment offers are extended to those who are judged to be the most outstanding.

LITERATURE RELATING TO CHARACTERISTICS FOR STUDY

The determination of the characteristics for inclusion in this study was the fulcrum upon which the study rests. Much attention was given to the selection of the characteristics to be surveyed and the design of the survey instrument used to capture measurements of the characteristics.

The discussion which follows is a review of the recent surveys concerning the identification of characteristics considered important in achieving employment. The surveys represent viewpoints from relevant sources, including business firms, financial institutions, students, and accounting firms of all sizes. This discussion is followed by a listing of the characteristics selected for inclusion in the study and the method used to attempt to capture measurements of these characteristics.

Business Viewpoint

A recent survey[13] seeking information about the factors involved in obtaining emplcyment was made of businesses, government agencies (state and federal), industry associations, and financial institutions across the nation. One aspect of this survey by Blitstein asked the respondents to rank the importance of certain factors needed for a business student to obtain employment in general. Table 1 shows the factors and the responses.

As shown in the first column, skill in oral communication is by far the most important factor. Overall, the factors appear to be important in the following order of decreasing rank: (1) oral communication skills, (2) personality, (3) poise, (4) written communication skills, (5) appearance, and (6) grade-point average. Recommendations, social graces, and school attended seem to have the least effect on success in obtaining employment.

Blitstein ventured that the relatively low ranking of grade-pcint average may be due, in part, to grade inflation. While this may be true in the general business area, grade-point average may retain more significance in the accounting employment area.

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[13] Allen Blitstein, "What Employers Are Seeking in Business Graduates," The Collegiate Forum (Dow Jones & Company, Inc.: Winter 1980/81), p. 7.

TABLE 1

Factors in Obtaining Employment

FACTOR	PER CENT OF RESPONSES VERY IMPORTANT	IMPORTANT	NOT IMPORTANT
Oral Communication Skills.	69.0	30.0	1.0
Personality.	44.1	51.6	4.3
Poise.	42.9	57.1	0.0
Written Communication Skills.	38.3	52.2	9.5
Appearance	37.9	56.9	5.2
Grade-Point Average. .	23.7	64.5	11.8
Social Graces.	6.8	64.0	29.2
School Attended. . . .	1.1	51.6	47.3
Recommendations. . . .	16.9	52.8	30.3

Source: Allen Blitstein, "What Employers Are Seeking in Business Graduates," The Collegiate Forum (Dow Jones & Company, Inc.: Winter 1980/81), p. 7.

Opinions of Students

As mentioned in Chapter 1, many accounting students have general perceptions and opinions concerning selection criteria used by the international accounting firms. A survey of students was undertaken in the fall of 1979 by Adams[14] in which students were asked to rate various accounting employment selection criteria in terms of

[14] Bettie M. Adams, "Student Perceptions and Evaluation of Employee Selection Criteria Used by Public Accounting Firms for Entry-Level Positions," Proceedings of the Thirty Second Annual Meeting, Southeast Regional Meeting-American Accounting Association, ed. by Oscar J. Holzman (1980), pp. 265-9.

relative importance. Table 2 presents the findings of that study.

TABLE 2

Importance of Factors as Viewed by Students

RANKING*	CHARACTERISTICS
1	Academic Performance
2	Ability to Communicate
3	Appearance
4	Leadership Qualities
5	Personality
6	Age
7	Faculty Recommendations
8	College Attended
9	Work Experience
10	Location Preference
11	Extracurricular Activities
12	Sex
13	Race
14	Family Background

*Characteristics are ranked in descending order of importance.

Source: Bettie M. Adams, "Student Perceptions and Evaluation of Employee Selection Criteria Used by Public Accounting Firms for Entry-Level Positions," Proceedings of the Thirty Second Annual Meeting , Southeast Regional Meeting-American Accounting Association, ed. by Oscar J. Holzman (1980), pp. 268.

Discussion in the Adams study indicated that academic performance and ability to communicate received the largest percentage of high ratings. Factors such as sex, race, and family background were found to be of little or no

importance in the opinion of the accounting students. In contrast to the Blitstein survey, grade-point average was considered very important.

Opinions of Accounting Firm Recruiters

While it is interesting and useful to know what students and various employers perceive to be significant, the opinion of recruitment personnel for accounting firms must be considered more informative.

The Seaton and White Study

Seaton and White[15] surveyed 297 firms of certified public accountants in an eight-state area in 1971. One aspect of their study was to ask the respondents about the personal characteristics sought in new employees. While the preponderance of replies came from small to medium-sized firms, the findings included responses from the local offices of the international accounting firms.

Seaton and White offered this summary of their findings relative to the characteristics sought in new employees:

> The largest number of respondents described attributes closely related to an individual's aggressive attitude toward his job. . . . Characteristics reflecting ambition, that is, a desire to learn and advance, were mentioned most frequently. Personality factors such as 'ability to get along with others,' 'friendliness' and the like ranked second, with grades and academic

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[15] Lloyd Seaton, Jr., and Jackson A. White, "Recruiting Practices of CPA Firms," The Journal of Accountancy, Volume 135, Number 5 (May, 1973), pp. 86-7.

achievement a close third. Appearance and ability factors followed very closely in frequency of occurrence. Characteristics relating to communicative ability as well as attributes commonly identified with high ethical standards (character) were mentioned less frequently. It may be that these characteristics are accepted as given as a result of the applicant's backgound and training; however, (Seaton and White) were surprised to find them listed so infrequently.[16]

Table 3 shows the order of importance as determined by Seaton and White on the basis of the per cent of responses.

TABLE 3

Characteristics Sought in New Employees by CPA Firms

RELATIVE RANKING*	CHARACTERISTICS	PER CENT OF RESPONSES
1	Ambition	18.6
2	Personality	14.6
3	Grades	13.7
4	Appearance	13.2
5	Ability	13.2
6	Maturity	5.1
7	Experience	4.4
8	Character	4.0
9	Expression	2.9
-	All Other Factors	10.3

*Based on the per cent of responses, in descending order of importance.

Source: Lloyd Seaton, Jr., and Jackson A. White, "Recruiting Practices of CPA Firms," The Journal of Accountancy, Volume 135, Number 5 (May, 1973), pp. 86-7.

[16] Ibid., p. 87.

The Murdock Summary

The series of panel discussions held by the Omicron Chapter of Beta Alpha Psi in 1977-1978 resulted in the publication of "Career Patterns in Eight Large Public Accounting Firms"[17] by Richard J. Murdock. The general findings of the discussions indicated the following:

> All the firms are looking for technically competent students with the same general qualities. These qualities were identified as intelligence, personality, motivation, and ability to communicate with both oral and written skills.[18]

Murdock made an important observation in pointing out that "the qualities identified above are not time dependent. A good career accountant today has the same qualities as years ago."[19]

SELECTING THE CHARACTERISTICS FOR STUDY

The next step was to determine if the characteristics identified in the literature were relevant for the present study. This part included two surveys made for this study plus a review of candidate evaluation forms and recruitment files.

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[17] Richard J. Murdock, "Career Patterns in Eight Large Public Accounting Firms," The Ohio CPA Journal, (Summer, 1980), pp. 107-111.

[18] Ibid., p. 107

[19] Ibid., p. 108.

The Initial Survey

The first survey made for this study was conducted with the recruitment personnel of eight local offices of the international accounting firms. The particular offices were chosen for their proximity to and recruitment at some of the universities selected for the study. The recruitment personnel were asked to identify, in order of importance, the characteristics they desire in applicants for entry-level positions of employment. Personnel at four offices, representing regional viewpoints of half of the international firms, responded.

Table 4 shows the listing of characteristics indicated by this survey. Traits listed in parentheses are considered synonymous to the first trait listed. When the respondents failed to rank the characteristics in order of importance, the number of times that the characteristics were mentioned was used as a basis to indicate the importance placed on them. Thus, when no ranking was provided, the characteristics were next listed according to the number of times they were mentioned by the respondents.

TABLE 4

Characteristics Considered by Recruiters - Southwest Region

RELATIVE RANKING*	CHARACTERISTICS AND SYNONYMS	TIMES MENTIONED
1	Intelligence (Grades, Mental Ability)	4
2	Communication Skills	4
3	Poise (Bearing, Manner, Self-Confidence, Attitude)	4
4	Motivation (Ambition, Drive)	4
5	Personality (Getting Along with Others)	4
6	Appearance	3
7	Leadership Ability	3
8	Interests (Activities)	3
9	Maturity (Judgment)	3
10	Technical Competence	1
11	Integrity	1
12	Work Experience	1

*Based on the specific ranking by the respondents, in descending order of importance; otherwise ranked by the number of times mentioned by respondents.

Source: Author's survey.

The Follow-Up Survey

A second survey of eight different local offices of the international firms was conducted in a different geographical location. The purpose of this survey was to substantiate the characteristics identified by the first survey. Since the responses were basically similar to those of the initial survey, this second survey supported the

conclusion that the international accounting firms look for the same basic traits in entry-level professional staff, regardless of office location. This, too, substantiated Murdock's assertion that the same general qualities are sought by all large accounting firms. Thus, while this study was limited to one geographical area, the findings should be of general usefulness regardless of a student's geographical location.

The respondents to the follow-up survey were asked only to identify the characteristics they considered important, as opposed to ranking them in order of importance. Again, personnel from four of the international accounting firms responded. In total, viewpoints from six of the eight international firms were represented in the two surveys combined.

Table 5 lists the characteristics identified by the second survey. The traits are placed in the same order as Table 4 for ease of comparison.

Several additional traits that were mentioned in the second survey were similar in nature to those listed in Tables 4 and 5. Table 6 is designed to show these additional traits and the grouping under which these characteristics would most closely fit.

The characteristic "executive presence" was included by James D. Gates, partner at the Louisville, Kentucky, office of Coopers & Lybrand. Based on a review of the candidate

TABLE 5

Characteristics Considered by Recruiters - Midwest Region

CHARACTERISTICS AND SYNONYMS	TIMES MENTIONED
Intelligence (Grades, Intellectual Abilities, Grade-Point Averages, SAT and/or ACT Scores)	5
Communication Skills	4
Bearing (Self-Confidence, Attitude)	4
Motivation (Ambition)	4
Personality (Friendliness, Enthusiasm, Salesmanship)	4
Appearance (Dress, Grooming)	2
Leadership Ability (Leadership Responsibilities)	3
Activities	2
Judgment (Desision-Making Ability, Analytical, Mentally Disciplined)	4
Technical Competence	0
Integrity	0
Work Experience	1

Source: Author's survey.

evaluation form used by Coopers & Lybrand for campus interviews, "executive presence" is described as follows: deal with top people, impressive, stands out, a winner, remembered, levelheaded, at ease, and aware. Hence, it is probably best classified as leadership ability.

TABLE 6

Probable Grouping of Other Characteristics

Additional Characteristics	Probable Grouping (Per Table 4)
Ability to be Convincing. . .	Communication Skill
Alertness	Motivation
Effective in Interpersonal Contacts	Communication Skill
Enthusiastic about the Profession	Personality
Executive Presence.	Leadership Ability
Goals	Motivation
Innovation.	Intelligence
Willing to Accept Responsibilities	Leadership Ability

Source: Author's survey.

Review of Candidate Evaluation Forms

Seven of the eight international firms [20] provided access to copies of their candidate evaluation forms. It was noted during the perusal of these forms that they were similar in content. As an example, Table 7 shows six areas in which an applicant is rated by Coopers & Lybrand as either (1) outstanding, (2) good, (3) average, or (4) poor. All of the forms contained a similar rating scale.

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[20] These firms were Arthur Andersen & Co.; Arthur Young & Company; Coopers & Lybrand; Ernst & Whinney; Peat, Marwick, Mitchell & Co.; Price Waterhouse; and Touche Ross & Co.

TABLE 7

Information from Coopers & Lybrand Candidate Evaluation Form

ITEM NO.	QUALITIES	DESCRIPTION
1.	Attitude, Motivation, Goals	Positive, Cooperative, Motivated, Successful, Goal-Oriented
2.	Communication Skills, Personality, Salesmanship	Articulate, Listens, Enthusiastic, Likeable, Poised, Tactful, Accepted, Convincing
3.	Executive Presence, Deal with Top People	Impressive, Stands Out, A Winner, Remembered, Levelheaded, At Ease, Aware
4.	Intellectual Abilities	Insightful, Creative, Curious, Imaginative, Understands, Reasons, Intelligent, Scholarly
5.	Judgment, Decision Making Ability	Mature, Seasoned, Certain, Independent, Common Sense, Determined, Logical
6.	Leadership	Self-Confident, Takes Charge, Effective, Respected, Management Minded, Grasps Authority

Based on the responses from the recruitment personnel at the local offices of the international firms and a review of the majority of their candidate evaluation forms, the characteristics have been compressed into five categories. These categories are communication skills, leadership

qualities, personal qualities, motivational qualities, and technical qualities. These categories are shown in Table 8, Table 9, Table 10, Table 11, and Table 12, respectively, along with the descriptions or measures used to delineate each category.

TABLE 8

Communication Skills Described on Candidate Evaluation Forms

COMMUNICATION SKILLS
1. Responses were readily understood.
2. Asked intelligent questions.
3. Adequate vocabulary.
4. Used good grammar.
5. Writes well (if observed).
6. Expressed thoughts concisely.
7. Listens. Absorbs what was said.
8. Did not dominate the conversation.
9. Questions showed depth of purpose.
10. Logical thinking behind answers to questions.
11. Grades in English courses.

Some of the candidate evaluation forms requested other information such as area of interest (audit, tax, management service, and such), office preference, faculty impressions, race, sex, and distinguishing characteristics. Additionally, some of the forms indicated that age, level of experience, sex, or cultural background should not influence the evaluation by the interviewer.

TABLE 9

Leadership Qualities Described on Candidate Evaluation Forms

LEADERSHIP QUALITIES

1. Demonstrates self-confidence.
2. Held several elective offices.
3. Takes charge, management minded.
4. Respected, recipient of leadership awards.
5. Impressive, stands out, a winner.
6. Priorities in allocating time.
7. Election or appointment to positions of responsibility by peers.
8. Desire for responsibility and opportunity compared to concern for security.

TABLE 10

Personal Qualities Described on Candidate Evaluation Forms

PERSONAL QUALITIES

1. Dress, grooming, physical appearance, and social manners are appropriate for a professional person.
2. Integrity; loyalty to a principle, family, organization, and the like.
3. Poise, courtesy, sincerity, honesty.
4. Independent, common sense, seasoned, certain.
5. Curious, creative, imaginative.
6. Has realistic appraisal of own capabilities.
7. Seems to enjoy the challenge of problem solving activities.
8. Intelligent, scholarly, reasons, understands.
9. Hobbies and activities are group oriented, not solitary.
10. Levelheaded, at ease, aware.
11. Seems enthusiastic about present situation and future prospects.

TABLE 11

Motivation as Described on Candidate Evaluation Forms

MOTIVATIONAL QUALITIES

1. Positive, cooperative.
2. Energetic, demonstrates self initiative, determined.
3. Successful, goal-oriented, record of vigorous involvement in achieving goals.
4. College job experiences related to grade point average.
5. Worked to pay for all or part of education.
6. Excelled at outside activities and has work goals.
7. Preparation for interview (knowledge of firm and firm positions).

TABLE 12

Technical Qualities Described on Candidate Evaluation Forms

TECHNICAL QUALITIES

1. Good accounting related work experience.
2. Academic achievement (accounting and general).
3. Grades continuously high or steadily improved.
4. Logical and questioning mind.
5. Maturity, judgment, decision-making ability.
6. Degree sought.
7. Overall grade-point average.
8. Accounting grade-point average.
9. SAT/ACT scores.
10. Accounting hours, specific courses taken.
11. Class standing (Top 10%, Top 25%, etc.)

An Example of Candidate Ratings

One of the evaluation forms gave guidelines to the overall rating of an applicant. The ratings fell into five categories: outstanding, excellent, good, average, and marginal. Outstanding is described as unusually qualified in virtually every respect with no weaknesses noted. This rating is generally not given to more than 2% of the candidates interviewed. An excellent candidate is one clearly among the top candidates whose strengths far outweigh weaknesses. This rating is usually limited to no more than 15% of the candidates interviewed. Those whose qualifications are good and whose substantial strengths compensate for any weaknesses are considered good candidates, no more than 40% of those interviewed. Average candidates possess a balanced mixture of strengths and weaknesses, neither clearly good nor marginal. These total about 30% of the candidates. A marginal candidate is one who would not be likely to function effectively in public accounting nor have capabilities which could be developed. These compose the remaining 13% of all candidates interviewed.

Survey of Student Recruitment Files

The foregoing studies provided a fairly rigorous and comprehensive inventory of characteristics which come into consideration during the interviewing process. However, one

more test was made, this time involving inspection of the actual student recruitment files. Thirty-nine students who attended two of the universities and who interviewed at one of the local offices of an international firm participated in the survey.

Each student signed a waiver which gave permission for the inspection of the information contained in the permanent recruitment files[21] maintained in the local office of the accounting firm. The waiver also released the local office from any responsibility for any misuse of the information taken from the files.

Prior to the inspection of the recruitment files, a discussion was held with the managing partner of the local office so that refinements of the characteristics could be made. These refinements include the following, as examples. As a measurement of maturity and stability, being married and having children are weak considerations. Age is generally not applicable as a factor if the candidate is less than thirty years of age. As a measurement of motivation, taking the Uniform Certified Public Accounting Examination while in school, if eligible based on state law, is a weak consideration and not applicable. Finally, any trend in grade-point average is reviewed for the most recent

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[21] Recruitment files are considered "permanent" only in the sense that they are maintained on a semi-active basis for a year or so following the initial campus interview. If manpower needs dictate, the files of marginal applicants may be reactivated. The recruitment files are disposed of following a new round of campus interviews.

twelve to eighteen months generally.

The review of the permanent recruitment files indicated that many of the characteristics identified in the surveys presented earlier were, in fact, captured in the files: this was self-fulfilling since many of the characteristics closely scrutinized were recorded on the candidate evaluation form itself. However, the spaces allotted for ranking the candidates and commenting on the candidates were actively used as an extension of the basic quantitative data collected.

In total, the review of the studies related to significant employment characteristics, the supportive surveys of the recruitment personnel at the local offices, information requested on the candidate evaluation forms, inspection of the actual recruitment files, and discussion with recruitment personnel for the international firms tended to indicate that most, if not all, of the characteristics considered in a typical employment interview with an international firm had been enumerated.

PREPARATION OF QUESTIONNAIRE

The questionnaire used to survey the accounting students is presented in Appendix B. The discussion which follows relates to the portions of the survey instrument designed to capture measurements of the characteristics identified above.

Personal Data

The first section of the survey instrument was designed mainly to capture surrogates for the characteristic appearance. Respondents were asked to supply data relative to age, sex, height, weight, and racial-ethnic category.

The respondents were also asked to indicate whether or not they were married. Some students, no doubt, perceive that being married is a factor which is considered. Some female students assume that being married can be viewed as a lack of mobility or a presupposition to child-bearing, both of which may work to the female's detriment in obtaining employment. On the other hand, some male students assume that being married can be viewed as a surrogate for maturity or stability, each of which may work to the male's advantage in obtaining employment. Thus, this charactistic was included for analytical purposes despite the fact that it was noted earlier as being a weak consideration as a surrogate for maturity.

Another item requested under personal data was that the respondent indicate the method used to pay college expenses. This information served several purposes. First, if the student worked his way through school, it is a surrogate for motivation. It may be a measure of academic performance if the student attended school via scholarship or grant. Also, if a student worked his way through college, an interviewer may be more agreeable to a marginal grade-point average or a

somewhat downward trend in grades during the period of employment while in school. Finally, the work experience itself may be beneficial to the student in terms of evidence of accepting responsibility, being able to fit in, and so forth.

Respondents were asked to indicate the per cent of each of the following methods used to pay college expenses: (1) parental support, (2) personal loan, (3) scholarship, grant, (4) worked way through, or (5) other (describe).

Activities

The main purpose of the second section of the questionnaire was to capture information relative to the student's sociability (fitting in) and leadership ability. Each respondent was asked to provide the number of organizations of which he was a member as acknowledged to the firms interviewed. The measurement should provide a surrogate for peer acceptance and personality (friendliness, getting along with others).

Respondents were then asked for the names of honorary organizations of which they were members. This information was needed to provide insight into academic performance and faculty recommendations. By having the actual names of the honorary organizations, membership in Beta Alpha Psi could be isolated and tested as a separate factor representing not only academic performance and sociability, but also commitment to the profession or loyalty to an organization.

Membership in a social fraternity or sorority was requested next. Membership in such a social organization provided evidence of interests and involvement outside accounting and schoolwork in general.

In addition to requesting information about membership in various groups, respondents were asked to state the number of positions (elected or appointed) which they held as acknowledged to the firms they interviewed. This information was needed as a measurement of accepting responsibility, leadership ability, and peer recognition.

Finally, the students were asked whether or not they had any accounting or other work experience that they acknowledged and considered advantageous in their interviewing efforts. These data served as a measure of motivation, responsibility, and technical competence.

Academic Data

Because of its importance in the studies discussed earlier, care was taken to capture as much information as possible concerning academic performance and its various components. Academic performance may be considered a surrogate for intelligence, technical competence, and ambition.[22]

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[22] Seaton and White, in a comment to their original study, stated the following: ". . . It has been our experience that recruiters translate grades as hard evidence of possession of ambition. . ." (From "Seaton's and White's Reply," The Journal of Accountancy, Volume 136, Number 4 (April, 1974), p. 88.)

Respondents were asked to identify the grade-point basis at their individual universities. All responses indicated a 4.00 grade-point system on the semester basis.

Overall Courses

Students were requested to provide their overall grade-point average at the time of the interview. (All grade-point averages were limited to two-digit numbers for analysis purposes; for example, a response indicating a 3.23 grade-point average was truncated and converted to a whole number of 32.) In addition, the students were asked to indicate the number of hours for which they had earned letter grades of (1) A or B, (2) C, and (3) D or below. This classification was selected based on the review of the candidate evaluation forms.

Accounting Courses

The accounting grade-point average at the time of the interview was requested. (As mentioned in the section entitled "Overall Courses," all grade-point averages were converted to a two-digit whole number.) The respondents were asked to provide the number of accounting hours for which they had earned letter grades of (1) A or B, (2) C, and (3) D or below.

English

As a surrogate for communication skills, the number of hours in non-literature English courses, for which they had earned letter grades of (1) A or B, (2) C, and (3) D or below, was requested.

Other Data

Respondents were asked to list any academic degrees that they held other than the undergraduate business degree with an accounting major which they were currently seeking. The presence of another undergraduate degree could be considered as an indication of academic ability, other interests, maturity, and motivation, among others, on the part of the particular respondents.

Lastly, the students were asked to choose from a list the best description of the trend of their grades for the previous year or year and a half. Since the trend of grades was mentioned by the recruitment personnel of the international firms during the surveys and discussions, care was taken to provide the students with sufficient choice in this matter.

The choices relative to the grade trend were as follows:

Remained somewhat low (say C-minus)
Started low but steadily improved
Remained somewhat average
Started average but steadily improved
Remained steadily high (say B plus or above)
Showed moderate decline
Showed significant decline
Other (describe)

The order of the descriptions of grade trends was chosen such that it was neither one of steady improvement nor steady decline in value judgment. Respondents were perhaps forced to pay more attention to the choices than otherwise.

It was necessary to provide general guidelines to the students relative to the meaning of "low" and "high" as they pertain to grade-point averages. Because the students attended several different universities, their interpretation of these words might have had too much variation. Therefore, C-minus was selected to be used as a benchmark for the meaning of "somewhat low," and B-plus or above was chosen to designate "high."

Self Evaluation

Most of the data in the foregoing sections of the survey instrument was quantitative in nature. Certain qualitative data were required in order to measure such characteristics as communication skills, personality, and motivation, especially since these items are qualitative in nature.

This section of the questionnaire was designed to capture information relative to several of the qualitative characteristics. Respondents were asked to rank themselves on a five-point scale; the rankings were (1) clearly below average, (2) somewhat below average, (3) average, (4) somewhat above average, and (5) clearly above average.

Ten items in total were ranked by the respondents. Preparation for the interview (study of the firm, prepared questions, etc.) was used as a surrogate for motivation. Ease with which the interview was handled was a surrogate for communication skills and maturity (judgment). Students were then asked directly to rank themselves on their ability to communicate. As another measurement of communication skill and motivation, respondents compared themselves to other students as to the number of questions or comments they felt they initiated during the interview.

Two of the items related to commitment, motivation, and perhaps maturity. Willingness to travel, one of the criteria found on some of the candidate evaluation forms, was included as a measurement of commitment to the profession and motivation. In addition, the students were asked to rank their perception of their commitment to the accounting profession based upon their association with and knowledge of fellow accounting majors.

The last three items to be ranked on the five-point scale in the self-evaluation section of the questionnaire concerned physical appearance, dress, and grooming. Respondents were asked to classify, from a business viewpoint, the style of their business attire, their general physical attributes, and the style of their hair.

Profile Data

As an aside, respondents were asked to identify in order of importance the reasons for their selection of accountancy as a career. The reasons included the following: salary, advancement, training by the firm, working with "things," availability of employment, security, experience to be gained, working with people, and other (describe). The purpose of these questions was to aid in the development of a successful candidate's profile. This information was not representative of the characteristics considered by the international accounting firms as employment criteria. However, it was used as supplemental information for purposes of this study.

SUMMARY

Chapter 2 serves as a bridge between the problems identified in Chapter 1 and the research methodology presented in Chapter 3. Chapter 2 initially presents a discussion of the interviewing process conducted by the international accounting firms as it involves undergraduate accounting students. This discussion includes both the campus interview and office visit components of the interviewing process.

More importantly, Chapter 2 presents the viewpoints of businessmen, accounting students, accounting firms of local and regional size, and the international accounting firms

pertaining to characteristics they consider important in securing employment. These characteristics were combined into five general categories: communication skills, leadership qualities, personal qualities, motivational qualities, and technical qualities.

The characteristics included in each category were found to be relevant through a review of recruitment files, two surveys of recruitment personnel, and a review of the candidate evaluation forms for seven of the eight international accounting firms. A questionnaire was developed to capture measurements of the characteristics previously identified. The characteristics and their measurement are discussed in the remaining portion of Chapter 2.

Chapter 3

RESEARCH METHODOLOGY

Chapter 3 provides a discussion of the research methodology that was adopted for the design and conduct of the present study. Several broad areas are covered. The first area of discussion specifically concerns the type of study chosen, followed by the research objectives and hypotheses for the study. The statistical techniques selected to accomplish the research objectives and a detailed listing of defined dependent and independent variables for the research are then presented. The chapter discussion concludes with discourses related to the data collection procedures used in selecting the participants, universities, and the sample of students for the study.

THE TYPE OF STUDY

The basic approach for this study was survey research. Survey research involves large and small populations which necessitate the study of samples chosen from the populations to discover the relative incidence, distribution, and interrelations of sociological and psychological

variables.[23]

The social scientific nature of survey research is shown by the nature of the variables. Sociological facts related to this study because they were the attributes of individuals based on their membership in social groups: sex, education, age, race, and the like.[24] Psychological variables included opinions and attitudes.[25] The specific type of survey research used was the self-administered questionnaire.

The self-administered questionnaire was adopted because it allowed the inclusion of numerous variables related to the largest number of respondents possible, given the confines of time and cost associated with laboratory experiments, field experiments, and field studies.

The mail questionnaire has two potentially serious drawbacks which should be recognized as limitations of this study: lack of response and the inability to check the responses given. Lack of response was recognized in Chapter 2 as a potential limitation of the study. To alleviate the inability to check the responses given, the questionnaire was pretested on a group of senior-level accounting majors who had participated in the interviewing process.

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[23] Fred N. Kerlinger, Foundations of Behavioral Research (2nd ed., New York: Holt, Rinehart, and Winston, Inc., 1973), p. 388.

[24] Ibid., p. 410.

[25] Ibid., p. 411.

Discussion of ambiguous responses with the pretest respondents led to the clarification of questions and potential answers contained in the questionnaire. Thus, the validity and reliability of the questionnaire and the responses thereto were enhanced.

SPECIFIC RESEARCH OBJECTIVES

The fundamental objective of the study was to supplement and refine the general understanding of the characteristics which significantly affect the receipt of employment offers from international firms. This objective is worthy in that the process of obtaining employment with an international firm is important, not only to many accounting students, but also to the recruitment personnel for the international firms. Accomplishing this objective should provide students, recruitment personnel, and accounting faculty members with better information for making informed decisions or offering informed advice.

Objectives 1 and 2

The pervasive objective of the study was to identify the specific measures of the personal characteristics and qualifications of students in accounting which statistically have a significant impact on the receipt of an employment offer from an international accounting firm.

The research hypothesis for Objective 1 may be stated as follows:

> There is a difference in the characteristics of undergraduate accounting students who are offered entry-level employment by international accounting firms and those who are not offered employment.

A second objective of the study was to determine if there is a difference in the characteristics of male students and female students, other than sex, who receive employment offers from the international firms. The purpose of this investigation was to determine which characteristics were most closely related to male students versus female students who were qualified to receive an employment offer from the international accounting firms.

The research hypothesis for Objective 2 is stated as follows:

> There is a difference in the characteristics of male and female undergraduate accounting students who are offered entry-level employment by international accounting firms.

Objectives 3, 4, and 5

The third objective of the study was to create a discriminatory model for male students only. A specific model for males only was more meaningful than a general model including the effects of characteristics for both male and female students.

The research hypothesis for Objective 3 follows:

> There is a difference in the characteristics of male undergraduate accounting students who are offered entry-level employment by international accounting firms and male undergraduate accounting students who are not.

The fourth objective of the study was to create a discriminatory model for female students only. A specific model for females only was more meaningful than a general model including the effects of characteristics for both female and male students.

The research hypothesis for Objective 4 can be stated as:

> There is a difference in the characteristics of the female undergraduate accounting students who are offered entry-level employment by international accounting firms and female undergraduate accounting students who are not.

The fifth objective of the study was to determine if the characteristics for employment with an international accounting firm differed for Caucasian and non-Caucasian students.

For Objective 5, the research hypothesis is:

> There is a difference in the characteristics of Caucasian and non-Caucasian undergraduate accounting students who are offered entry-level employment by international accounting firms.

Objective 6

Once the significant characteristics that had an impact on employment offers had been identified, then a model based on the same inventory of characteristics was built which identified the characteristics which were most important as predictors of the salary offer received from the international firms.

The research hypothesis for Objective 6 is stated as follows:

> There is a linear functional relationship between the salary offer and the employment variables (i.e., personal characteristics and qualifications) of accounting students.

Objective 7

One of the informational items about accounting students which warranted separate attention was the reasons given for selecting accounting as a career. An objective of the study was to determine if the reasons given by students for choosing an accounting career had a relationship to whether or not they received an employment offer from the international accounting firms.

The research hypothesis associated with Objective 7 may be stated as:

> The reasons for selecting accounting as a career are independent of whether or not undergraduate accounting students are successful in receiving an entry-level offer from an international accounting firm.

Objective 8

The final specific objective of the study was to determine if there was a significant difference in the proportions of female students and of male students who received employment offers from international firms (and hence, the proportions of non-offers). That is, did there appear to be discrimination or reverse discrimination in the employment offers alloted to female accounting students?

Research hypothesis 8 can be stated in the following manner:

> The populations of female accounting students and of male accounting students are not homogeneous with respect to entry-level employment offers (and non-offers) made by the international accounting firms.

A General Profile of Successful Applicants

A minor objective of this study was to report certain findings which were not statistically tested. The study instead developed a general profile of the characteristics of a typical accounting student who succeeded in receiving an employment offer from an international accounting firm. Included in the profile are the responses to questions which appear to be of concern to many accounting students who are interested in employment with an international firm. The responses related to the following areas of interest, among others:

1. How did these successful students rate their ability to communicate?

2. How did they rate their ability to handle interviews?

3. How did they view their participation in the interview process?

4. Did they ask intense questions of the recruiter?

5. What was their attitude toward the required travel related to their potential employment?

6. What was the average number of campus interviews arranged by the successful recruit?

7. What was the average number of office visits granted to the successful recruits?

8. What was the average number of employment offers?

9. How many accounting hours had the successful recruit completed at the time of interview?

10. What was the average accounting and overall grade point averages for the successful recruits?

11. What proportion of the successful recruits and the unsuccessful recruits thought at least one of the recruiters was having a bad day?

12. What proportions felt that at least one recruiter asked unfair questions?

STATISTICAL TECHNIQUES

Several statistical techniques were used in the analysis of the data. The following paragraphs discuss these techniques, including a brief description of why each was considered appropriate. A more detailed description of discriminant analysis and multiple regression is presented in Appendix C to the paper. Discussion of the limitations related to the assumptions of these two techniques and the problem of multicollinearity also are presented.

Discriminant Analysis

Objectives 1 through 5 offered previously would be best accomplished by the use of two-group discriminant analysis. For example, the two groups for Objective 1 are defined to be (1) accounting students who are successful in their attempt to receive an employment offer from an international accounting firm, and (2) accounting students who are not successful in receiving such an employment offer. The objectives of discriminant analysis, which match the objectives of this study, include the following:

1. Determining if statistically significant differences exist between the average score profile of the two a priori defined groups (as given above).
2. Establishing procedures for classifying the statistical units (accounting students in this study) into groups on the basis of their scores on several variables (i.e. characteristics).
3. Determining which of the independent variables account most for the differences in the average score profiles of the two groups.[26]

The objectives of discriminant analysis introduce the concepts of a priori defined groups and average 'score' profiles. Figure 3, which illustrates graphically these concepts, is used to explain the basic idea of two-group discriminant analysis. The reader should note that in the illustration there are only two measurements (X_1 and X_2) for each student in the two groups. In the analyses to follow, more than forty measurements were employed.

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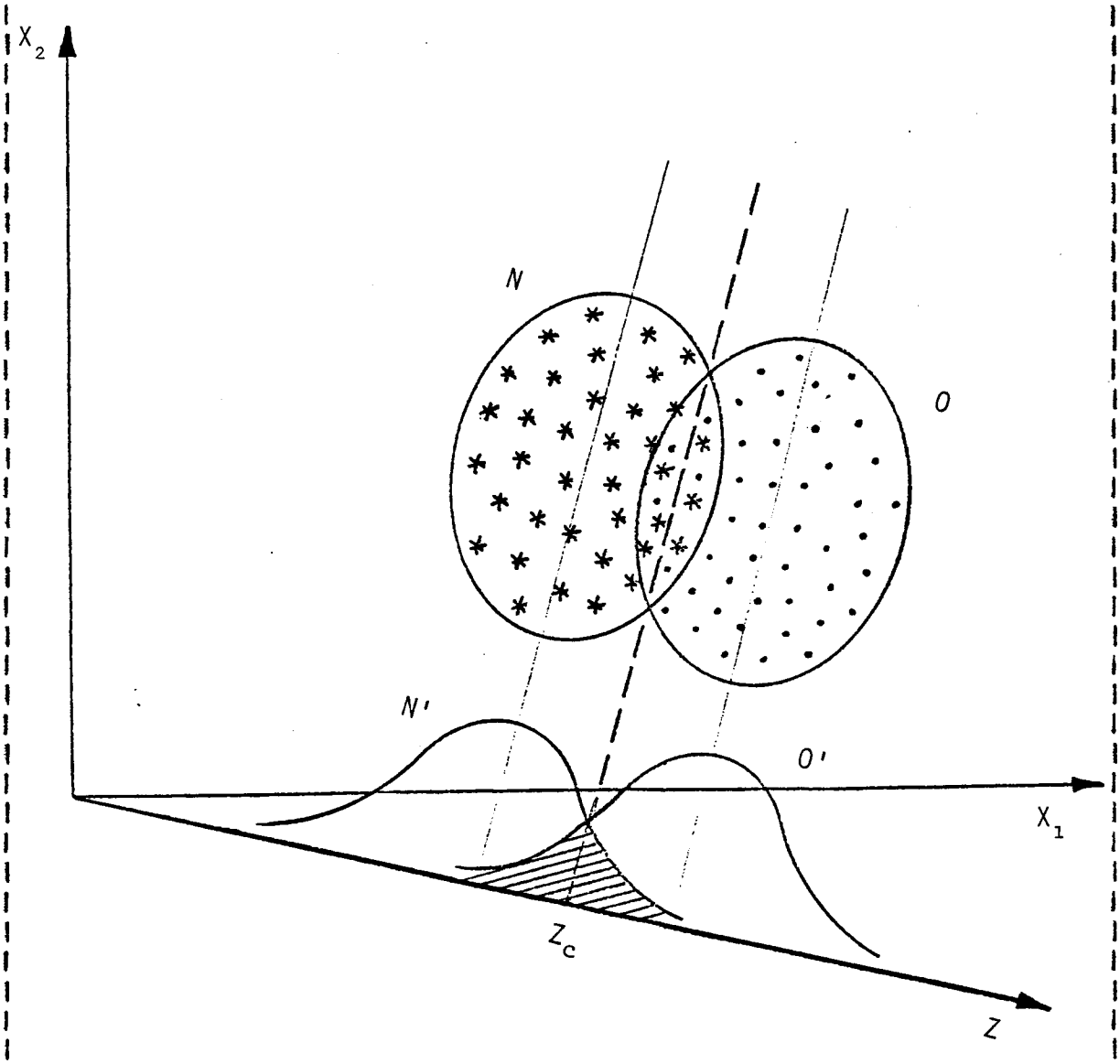
[26] Joseph F. Hair, Jr., et al., Multivariate Data Analysis, p. 90.



Source: Robert B. Welker, "Discriminant Analysis as an Aid to Employee Selection," The Accounting Review, XLIX (July, 1974), p. 515.

Figure 3: Two-Group Discriminant Analysis

In terms of this study, Figure 3 displays a scatter diagram of the two measurements X_1 and X_2 for each member of the two groups. Accounting students who received and did not receive an entry-level employment offer are shown with an * (asterisk) and a . (dot), respectively. The two a priori groups of accounting students who receive no offer (N) and those who do receive an offer (O) from the international firms are represented by the ellipses N and O. Although a student can be a member of only one of the two groups after the interviewing process, some overlap of the measurements will exist unless perfect discrimination is possible.

The discriminant scores, shown on the Z axis, correspond to a linear combination of the two measurement variables. As can be seen, these scores discriminate between the predicted group membership in the following manner: accounting students with a score smaller than Z_c (the cutting score) would be predicted not to receive an entry-level employment offer; students with a score larger than the cutting score would be predicted to receive such an offer.

The two ellipses N and O graphically enclose some proportion of the sample of students included in the study, say 95 per cent or more of each group.[27] A straight line drawn connecting the points where the two ellipses intersect

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[27] Ibid., p. 90.

which is then projected to the discriminant score axis Z determines the cutting score (also termed the critical Z score or value).[28]

N' and O' represent the distributions of the discriminant scores (known generally as Z-scores) determined for each student in groups N and O. The individual Z-scores, ascertained by weighting the independent variables for each student, are thus used for determining the predicted group membership. The overlap of the distributions N' and O' (represented by the shaded area in the figure) is smaller than any other overlap that would be obtained by any other line drawn through ellipses N and O.[29] The discrimination between distributions N' and O' (and thus groups N and O) is maximized by the minimization of this overlap. Altman refers to the overlap as the zone of ignorance.[30] Discriminant scores which fall in this area, that is, those which fall near the cutting score, are classified according to their relationship to the cutting score. However, there is a distinct possibility that the group membership may be incorrectly predicted because of the lack of perfect discrimination.

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[28] Ibid., p. 97.

[29] Ibid., p. 91.

[30] Edward I. Altman, "Financial Ratios, Discriminant Analysis, and the Prediction of Corporate Bankruptcy," The Journal of Finance, Vol. 4 (September, 1968), p. 593.

Thus, discriminant analysis determines the linear combination of two or more independent variables that best separates the a priori defined groups. The discrimination is accomplished by the statistical decision rule of maximizing the between-group variance relative to the within-group variance, as expressed in ratio form.

Discriminant analysis can be useful in two ways: (1) in determining group differences, and (2) in correctly classifying statistical units (students) into the two dichotomous groups.

Discriminant analysis can thus be considered either as a technique of profile analysis or as an analytical predictor; it is most appropriate where there is a single, categorical dependent variable (such as "offer" versus "non-offer") and several metrically scaled independent variables. The variables included in the study are described later.

Major Stages of Discriminant Analysis

Hair, Anderson, Tatham, and Grablowsky stated that discriminant analysis can be divided into three major stages: (1) derivation of the model, (2) validation of the model, and (3) interpretation of the model.[31] This approach was used for this study because it highlighted the determination and strength of the model, plus it emphasizes the important variables (characteristics).

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[31] Joseph F. Hair, Jr., et al., Multivariate Data Analysis, p. 92.

The derivation stage involved determining the statistically significant function to separate the two dichotomous groups. The validation stage involved developing a classification matrix to evaluate further the predictive accuracy of the discriminant function. The interpretation stage involved determining which of the independent variables contributed the most toward discriminating between the two groups.

Sample Division

The split-sample method of applying discriminant analysis involves developing the discriminant model on one group (referred to as the analysis sample) and testing the model on a second group (referred to as the holdout sample). The analysis sample for each distinct hypothesis was selected by use of a random number table predicated upon the condition that the cases selected for the sample exhibited the same basic characteristics represented in the total sample. For example, the analysis sample for Hypothesis 1 was selected so as to be composed of not only offer/non-offer respondents in representative proportions, but also male/female respondents in representative proportions within the offer/non-offer groups. Hence, each analysis sample (and therefore each holdout sample) was selected to be representative of the underlying total sample in order to strengthen the analyses. The split-sample approach

counteracts the upward bias in the prediction accuracy of a model which generally results when the model is developed from a single sample and is then used to predict the group membership of the statistical units from the very same sample.

For Hypothesis 1, the analysis sample was chosen by the use of a random number table with each of the 172 questionnaire responses from the southwest having an equal chance of being selected. Eighty six of the responses were thus chosen for the analysis sample while the remaining eighty six were used as the holdout sample. The fifteen responses from the midwest (referred to as the external sample) were withheld and used for prediction purposes only. No sample division was made to test Hypothesis 2 other than to select from all respondents only the successful students (133). The analysis sample used to derive the discriminant function for Hypothesis 3 consisted of the male students only from the analysis sample for Hypothesis 1; the discriminant function was used to classify the male students from the holdout and external samples for Hypothesis 1. The analysis sample for Hypothesis 4 consisted of fifty-six of the questionnaire responses from the southwest selected at random to represent 75% of the responses from female students who participated in the survey. The holdout sample was the remaining responses not selected for the analysis, but held instead for testing the predictive power of the

model derived corresponding to Hypothesis 4. (As discussed in Chapter 5, the limited number of responses from non-Caucasians precluded the analysis of Hypothesis 5.) The composition of the various workable samples (offer versus non-offer, male versus female, etc.) is presented in Chapter 4 for each hypothesis.

Unstandardized and Standardized Models

The models corresponding to Hypotheses 1 through 4 are presented both in unstandardized and standardized forms as deemed appropriate. An unstandardized model has qualities which make its presentation advantageous to the reader. Each unstandardized model contains a constant and the unstandardized coefficients of the independent variables. The nature of the constant is similar to that of the Y-intercept in an unstandardized regression model. In the discriminant analysis, its purpose is to allow the use of unstandardized coefficients and the values of the independent variables to compute discriminant scores from the raw data for each case under investigation. Since the values of the independent variables are not generally known in standardized form (i.e., the mean equals zero and the standard deviation equals one), knowing the constant and the unstandardized coefficients allows the manual computation of the discriminant scores. The value of the discriminant scores should be equal in magnitude to the scores obtained

when computed with the standardized values of the coefficients. Thus, the reader can substitute readily available values into the models and calculate individual discriminant scores.

A standardized model contains only the standardized coefficients of the independent variables. The advantage of knowing the coefficients in standardized form is that it allows a direct comparison of their magnitude to assess the relative strength of each of the independent variables. Thus, the larger the absolute value of a standardized coefficient, the greater the impact of the independent variable on the discriminant score.

Classification Matrices

Having derived the discriminant models from the analyses samples, classification matrices were prepared. Each matrix presents the predicted group membership (e.g. offer versus non-offer) in comparison to the actual group membership for the analysis, holdout, and external samples, as deemed appropriate. Each matrix contains the number and percentage of cases correctly classified by the model.

The overall measurement of how well the discriminant model classifies the cases is known as the hit-ratio. The hit-ratio is similar to the coefficient of determination in regression analysis.[32] The calculation and meaning of the

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[32] Joseph F. Hair, Jr., et al., Multivariate Data Analysis: With Readings, p. 97.

hit-ratio for a two-group analysis can be seen in the following example. Suppose a sample of one-hundred students was composed of seventy students who received employment offers and thirty students who were not successful. If a discriminant function was derived which correctly classified sixty of the seventy successful students and twenty of the thirty unsuccessful students, then the hit- ratio would be determined to equal (60 + 20)/100, or 80%. Thus, the hit-ratio is a weighted-average percentage of correct classification.

To consider what was an acceptable level of predictive accuracy for the discriminant model, a comparison was made to the percentage that could be classified correctly by chance (without the aid of the discriminant model). Since the group sizes were unequal, the model selected to determine the acceptable level was the proportional chance criterion.[33] The formula for the proportional chance criterion is:

$$C_{proportional} = p^2 + (1-p)^2$$

Where: p = the proportion of students in group 1 (say 70 successful students of the 100 total)

1 - p = the proportion of students in group 2 (say 30 unsuccessful students of the 100 total)

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[33] Ibid., p. 102.

Therefore, C proportional = $(0.7)^2 + (1-0.7)^2$, or 58% in the example offered previously. That is, 58% could be classified correctly by chance.

Probability of Group Membership

One of the normal outputs of discriminant analysis is the probability of group membership for each statistical unit. For example, based on the magnitude and sign of the discriminant score, the probability of an accounting student receiving or not receiving an employment offer from an international firm can be determined. All cases in this study were reviewed to find the range of discriminant scores associated with selected probabilities of the offer/non-offer status. This information is presented in Appendix D along with an illustration of the use of the model corresponding to Hypothesis 1.

Multiple Regression

Objective 6 was best achieved by the use of multiple regression. Spurr and Bonini explain that the multiple regression technique describes the average relationship between any number of independent variables and the dependent variable.[34] Or, as Chou states, regression analysis establishes the "nature of the relationship"

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[34] William A. Spurr and Charles P. Bonini, Statistical Analysis for Business Decisions (Rev. ed.; Homewood, Illinois: Richard D. Irwin, Inc., 1973), p. 495.

between variables.[35] That is, it studies the functional relationship between the variables and thus provides a mechanism for determining which of the independent variables are most important in the prediction of the dependent variable, which in this study is "salary offer."

The model corresponding to Hypothesis 6 is presented only in the standardized form. The purpose of Objective 6 was to identify the characteristics which were most important as predictors of the salary offer received from the international firms. Since the objective was not actually to predict the salary offer, unstandardized coefficients were not presented. The standardized coefficients were presented to allow the direct assessment of the relative strength of the independent variables as was done for the discriminant analysis.

Chi-Square Tests

Objectives 7 and 8 were best achieved by the use of Chi-square analysis. In considering Hypothesis 7, the reasons for selecting accounting as a career could be the same for students who are successful and for students who are unsuccessful in receiving an entry- level employment offer from an international accounting firm. That is, the random variable "reason" for successful applicants could be

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[35] Ya-lun Chou, Statistical Analysis with Business and Economic Applications (2nd ed.; New York: Holt, Rinehart, and Winston, 1975), p. 579.

generally the same for unsuccessful applicants. The Chi-square test of independence was used to determine if the reasons given by the two groups are dependent upon whether or not the students are successful in receiving an employment offer.

As discussed in Chapter 2, respondents were asked to rank in order of importance the factors which they considered in selecting accounting as a career. They were instructed to choose at least one factor, but were encouraged to choose as many factors as they considered.

The participants in the study were given an open-ended list of factors to review. Nine specific items were named whereas the tenth item was classified as "Other (describe)." The nine specific items consisted of the following: salary, advancement, training by firms, working with "things," availability of employment, status, security, experience to be gained, and working with people. By asking the respondents to supply any additional factor(s) which they considered, any consistently added factor(s) could have been noted during the pretest of the survey instrument. This methodology is similar to that used by Weber and Stevenson.[36] Thus, no attempt was made to make the list of career-choice factors an all-inclusive list, other than to include the specific items which pre-tested most frequently.

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[36] Richard P. Weber and W. C. Stevenson, "Evaluation of Accounting Journal and Department Quality," The Accounting Review, LVI (July, 1981), p. 600.

No attempt was made to identify the reasons as either being indicative of values or attitudes. For example, see Brenner's observations on students' values,[37] and Baker's comment[38] as to a differentiation between values and attitudes. In his additional comments, Brenner contended that "attitudes reflect values, and therefore, can give some insight into an individual's values."[39]

Brenner's study purported to show that evidence exists which indicates that accounting students' attitudes or values may differ from nonaccounting majors. The thrust here was to test statistically if the difference in career-choice factors was significant for accounting students who were successful and unsuccessful in seeking employment with an international firm.

In meeting Objective 8, the proportions of female and male accounting students in the survey who received entry-level employment offers (and who did not) were compared by the chi-square test of homogeneity. Under the assumption that the populations are homogeneous, the males and females can be considered to have been selected from a

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[37] Vincent C. Brenner, "Some Observations on Student Values and Their Implications for Accounting Education," The Accounting Review, XLVIII (July, 1973), pp. 605-8.

[38] C. Richard Baker, "Some Observations on Student Values and Their Implications for Accounting Education: A Comment," The Accounting Review, XLIX (July, 1974), pp. 576-7.

[39] Vincent C. Brenner, "Additional Comments on Student Values and Their Implications for Accounting Education," The Accounting Review, XLIX (July, 1974), p.578.

common population of "students." Thus, the probability that a female was classified as "offer" or "non-offer" would be the same as that for a male student.

DEPENDENT AND INDEPENDENT VARIABLES

Objectives 1 through 5 were designed to require the use of discriminant analysis, a statistical technique that utilized dependent variables which were categorical in nature. The independent variables were both metric and nonmetric in nature. Objective 6 required the use of multiple regression, a statistical technique which utilized both metric/ordinal dependent and independent variables. Objectives 7 and 8 required Chi-square tests which use the underlying distributions or proportions described previously.

The variables, both dependent and independent, used in the discriminant and regression analyses are identified and defined in the list to follow:

X	VARIABLE NAME	DEFINITION
1	AGE	Student's age in years.
2	SEX	Female = 0, Male = 1.
3	HT	Height in inches.
4	WT	Weight in pounds.
5	MARST	Marital status: Not married = 0, Married = 1.
6	HCAP	Visible handicap: No = 0, Yes = 1.
7	RACE	Caucasian = 0, Non-Caucasian = 1.
8	PARENT	Percentage of college expenses provided by parent support.
9	LOAN	Percentage of college expenses provided by personal loan.

10	SCHOL	Percentage of college expenses provided by scholarships and grants.
11	WORK	Percentage of college expenses provided by working while in college.
12	OTHER	Percentage of college expenses provided by other sources (as detailed by respondent).
13	ORG*	Number of organizations of which respondent is a member.
14	BAP	Membership in Beta Alpha Psi: No = 0, Yes = 1.
15	HONOR	Number of honorary organizations of which respondent is a member.
16	FRAT	Membership in a social fraternity or sorority: No = 0, Yes = 1.
17	ELECT*	Number of positions (treasurer, committee chairman and such) held by applicant in the organizations.
18	ACEXP*	Any accounting or bookkeeping experience considered advantageous during the interview.
19	WEXP*	Any other work experience considered advantageous in the interview.
20	OGPA**	Overall grade-point average at time of interview.
21	AB	Number of hours for which the letter grades A or B have been earned.
22	C	Number of hours for which the letter grade C has been earned.
23	DE	Number of hours for which the letter grades D or below have been earned.
24	AGPA**	Accounting grade-point average at time of interview.
25	AAB	Number of hours in accounting for which the letter grades A or B have been earned.
26	AC	Number of hours in accounting for which the letter grade C has been earned.
27	ADE	Number of hours in accounting for which the letter grades D or below have been earned.
28	EAB	Number of hours in English

		courses for which the letter grades A or B have been earned.
29	EC	Number of hours in English courses for which the letter grade C has been earned.
30	EDE	Number of hours in English courses for which the letter grades D or below have been earned.
31	DEGREE	Other undergraduate degrees: No = 0, Yes = 1.
32	GRTREN***	Grade trend for past year to eighteen months.
33	PREP***	Preparation for interview(s).
34	POISE***	Ease of handling interview(s).
35	COMM***	Ability to communicate.
36	INITQ***	Self-evaluation of the number of questions or comments initiated by respondent during the interview as compared to other students.
37	INTQ***	Self-evaluation of the intensity of questions raised by the respondent as compared to other students.
38	TR***	Willingness to travel.
39	COMT***	Self-evaluation of the commitment of the respondent to the accounting profession based on association with fellow accounting majors.
40	ATTR***	Self-evaluation of business attire.
41	PHYS***	Self-evaluation of physical attributes.
42	HAIR***	Self-evaluation of style of hair.
43	OFFER	Received entry-level employment offer from an international accounting firm: No = 0, Yes = 1.
44	MAXPAY	Maximum annual salary offer received with an employment offer.

*Student responses were solicited only if items 13 and 17 through 19 were acknowledged to the recruiter.

**As described in Chapter 2, all grade-point averages were converted to two-digit whole numbers.

***Items 32 through 42 were based on a 5-point Likert scale as described in Chapter 2.

Hypothesis 1 required one categorical dependent variable, OFFER (variable 43), which took on the values of 0, 1. When the discriminant function was tested for its predictive ability, the value of 0 denoted that the subject was expected not to receive an offer of employment from an international accounting firm, whereas the value 1 denoted that an offer was expected. Independent variables X_1 through X_{42} were included in the analysis based on their relevance to the discussion in Chapter 2.

Hypothesis 2 utilized the categorical dependent variable SEX (variable 2) while the independent variables only for students who were successful in obtaining an entry-level employment were included in the analysis. Thus, the variable SEX was converted from an independent variable as in Hypothesis 1 to the dependent variable in Hypothesis 2.

Hypotheses 3 and 4 used the same independent variables described for Hypothesis 1 with one exception. A major difference was that the functions derived for males and females respectively were based on the selection of males only for that analysis, and the selection of females only for Hypothesis 4. In both cases, the categorical dependent variable was OFFER.

For Hypothesis 5, the categorical dependent variable was to be RACE (variable 7) whereas the selection of subjects for the analysis was to be limited to those successful in receiving an employment offer from an international firm.

All other independent variables, other than OFFER and RACE, were to be used in the analysis which was precluded due to limited response.

Regression analysis was used for Hypothesis 6. As such, Hypothesis 6 required a metric dependent variable. The dependent variable used was an additional variable requested on the survey instrument. Repondents were asked to identify the maximum salary offer they received during the interview process. This variable was defined as MAXPAY (variable 44) and represented the maximum annual salary offer received. The analysis was naturally limited only to those students who were successful in their pursuit of an employment offer from an international firm.

As discussed above, the analyses for Hypotheses 7 and 8 were based on the probabilities of reasons for selecting accounting as a career and the proportion of females in the survey compared to the proportion of males receiving employment offers from the international firms.

THE DATA COLLECTION PROCEDURES

The typical relationships entailed in the recruitment process are among the recruiter, the student, and the accounting faculty. Based on the Adams study of student perceptions, faculty recommendations hold a relatively low importance overall (see Table 2). At the same time, faculty input is sought by the recruiters as evidenced by the

request for such information on the candidate evaluation forms. The thrust of this study was not directed to accounting faculty members because of their tertiary involvement in recruiting. The impact of faculty recommendations was captured, however, through the measurement of a student's membership in honorary organizations and grade/grade- point information.

A secondary source of participation in this study was that of recruitment personnel. The recruiter must assimilate the characteristics held by perhaps a dozen students during a single interview session. The recruiter must reach a decision regarding potential employment in every case, by balancing the student's qualifications with the firm's needs. Undoubtedly, the recruiter, through his decision process, is an important variable with respect to an individual student's attempt to obtain an employment offer. A strong case can be argued that the recruiter is a vital factor in interviewing and, therefore, should be the main participant in this study. However, students who possess the general qualifications desired by international accounting firms run minimal risk of being passed over by the recruiters for several firms. Even if some of the firms overhired in a previous recruiting session, it is doubtful that a qualified applicant would go unnoticed by all of the firms.

The two reasons stated above, that an individual recruiter and/or the single office of a firm cannot significantly affect the overall recruiting efforts for a group of qualified students, led to the decision that this study should be addressed to the student participant. Nevertheless, the predominant viewpoint of recruitment personnel was captured in the list of characteristics via discussion, survey results, and review of candidate evaluation forms and recruitment files as discussed in Chapter 2.

An important argument to support the use of students as the questionnaire respondents is that it is the characteristics of the students which are being investigated. By using students as the decision-makers in the self-evaluation and other sections of the questionnaire, a discriminant analysis model was developed which would permit students to supply their characteristics in an identical manner in the future. Since Hypotheses 1 through 5 were concerned with the differences in the characteristics of students who completed the questionnaire after the employment-offer decision had been made, the effect of the recruiter as a vital factor was overshadowed. The characteristics thus stand alone.

The use of students as subjects in behavioral accounting research is a prevalent approach. Ashton and Kramer state that ". . . studies which have focused on decision making

have found considerable similarities in the decisions and the apparent underlying information-processing behavior of student and non-student groups."[40] While some would believe that this study could more properly have been directed to recruiters, the characteristics used by recruitment personnel in the decision-making process of employment offers were considered. The input to the study, in particular the self-evaluation by students, may have generated similar results if completed by recruitment personnel. Ashton and Kramer indicated that ". . . the available evidence suggests that real-world decision makers (e.g. recruiters) possess the information-processing characteristics and biases that are extremely similar to that of their student counterparts."[41] In conclusion, the selection of students as the primary participants in this study was predicated on the belief that the models will be most beneficial to students, and the models may be replicated by students as a predictive tool to measure their employment potential with an international firm. A major strength of this study is that students are not used as surrogates for another group: students in this case are the actual population being studied.

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[40] Robert A. Ashton and Sandra S. Kramer, "Students as Surrogates in Behavioral Accounting Research: Some Evidence," Journal of Accounting Research, Vol. 18, No. 1 (Spring, 1980), p. 1.

[41] Ibid., p. 3.

Selection of the Universities

The selection of the eight universities from which to choose students was done on the basis of two factors: (1) the emphasis by the universities on student preparation for public accounting service, and (2) their geographical location. Each of the universities is accredited by the American Assembly of Collegiate Schools of Business. Seven of the eight universities have active Beta Alpha Psi chapters whereas the eighth has an accounting student organization which is similar in function to a Beta Alpha Psi chapter. Students from these universities were assumed to represent a homogeneous population in that they attend institutions of higher learning in a similar region of the country and receive similar input related to career goals and education.

The Sample Selection

Gaining access to the population would have been a formidable task and this hurdle represents both a strength and a limitation of this study. The cost, time, and required appointments to administer the surveys personally was of such a magnitude as to make this approach infeasible from a cost-benefit viewpoint. For example, the Ashton and Kramer study involved only thirty volunteer subjects enlisted from one auditing course at one university.[42] Adequate coverage

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[42] Ibid., p. 5.

of the selected population would have required access to multiple senior-level courses at each of the universities in eight different cities.

A direct mail survey was not possible because of the lack of publically-available or accessible sources of names and addresses for the student populations. One possible source of the names of the students involved was the registration sheets at the universities on which students select available interview times with the international firms. Investigation revealed that the universities did not retain these lists nor would they make available this information. A second source was the summary interview lists maintained by some of the accounting firms themselves. However, the firms chose not to make this information available, and, in some cases, did not retain this information.

The final choice was to gain access to the students through the student accounting organizations. Presidents of the Beta Alpha Psi chapters at the seven universities and the student accounting association at the eighth university agreed to aid in the dissemination of questionnaires. The questionnaires were mailed to the student officers with guidance as to their distribution. Suggestions included the following: (1) minimal disruption of accounting classes as possible, (2) announcement to senior-level accounting classes containing students to be surveyed and, (3) the limitation of distribution to undergraduate accounting

majors who had interviewed with the international firms. Emphasis was placed on the inclusion of students in general, not just Beta Alpha Psi/ accounting association members, and the need for responses from students who interviewed whether or not they received an employment offer. Addressed, stamped envelopes were provided for the return of the questionnaires. The student officers were encouraged to call the researcher collect if any questions arose. Follow-up calls were placed to the student officers to determine that distribution of the questionnaires was proceeding well. As added encouragement to the student officers, emphasis was placed on the importance of the survey to future accounting students and the faculty members who advise them. A final appeal for assistance was supported by the promise that a copy of the findings of this study would be provided to each accounting department where students participated in the survey. Copies of the correspondence are included in Appendix A.

The selection of individual students for this survey used a technique called representative sampling.[43] This involves choosing a sample which the researcher considers to be typical or representative of the population.[44] The disadvantage of this approach is that the estimators based

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[43] William Mendenhall, Lyman Ott, and Richard L. Scheaffer, Elementary Survey Sampling (Belmont, Calif.: Wadsworth Publishing Company, Inc., 1971), p. 32.

[44] Ibid.

on such a sample cannot be evaluated. This limitation was overcome by the use of an analysis sample and holdout samples as described previously. Also, the determination of models using discriminant analysis was enhanced by the use of prior probabilities which matched those of the sample data as opposed to what would be encountered in the true populations.

SUMMARY

Chapter 3 has presented an overview of the type of study at hand, including a discussion of the research objectives and hypotheses, the statistical techniques, the dependent and independent variables, and the data collection procedures. As a synopsis of the discussion related to the research hypotheses and the statistical techniques, Table 13 below provides a recapitulation of the issues and methodology chosen.

TABLE 13

Hypotheses and Research Methodology

HYPOTHESIS	ISSUE	METHODOLOGY
1	Difference in characteristics of students regarding offer versus non-offer status	Discriminant analysis
2	Difference in characteristics of male and female students who receive employment offers	Discriminant analysis
3	Difference in characteristics of male students regarding offer versus non-offer status	Discriminant analysis
4	Difference in characteristics of female students regarding offer versus non-offer status	Discriminant analysis
5	Difference in characteristics of Caucasian and non-Caucasian students who receive employment offers	Discriminant analysis
6	Relationship between the salary offer and the employment variables of students receiving employment offers	Multiple regression
7	Independence between the reasons for selecting accounting as a career and the receipt of an employment offer	Chi-square test of independence
8	Difference in proportions of female students and of male students receiving employment offers	Chi-square test of homogeneity

Chapter 4

RESULTS AND INTERPRETATION OF RESEARCH

Chapter 4 presents the results obtained from testing each of the research hypotheses presented in Chapter 3. The presentation of the findings for each hypothesis is generally given in the following manner: (1) the purpose of each hypothesis is reintroduced, (2) the variables and their unstandardized and standardized coefficients are presented in tabular form at different levels of significance, (3) discussion is offered to explain the models and interpret the meaning of the variables, and (4) the ability of certain of the models to predict correctly, for instance the receipt of an employment offer, is presented in tabular form. Also presented are general profiles of the characteristics and viewpoints of a typical accounting student who successfully and unsuccessfully interviewed for an employment offer from an international accounting firm.

Questionnaire responses were received from 172 students representing eight universities from the southwestern region of the United States. As discussed in Chapter 3, these 172 responses were divided into the analysis sample and the

holdout sample for testing some of the hypotheses. The analysis sample was defined as the questionnaire responses selected at random from the total 172 responses for the purpose of deriving the discriminant models. The holdout sample was the remaining related responses which were not selected to be part of the analysis sample. Fifteen additional responses were also acquired from a university in the midwestern section of the United States. To test if the model might be useful to the students at this midwestern university, and perhaps other universities, the model was applied to the fifteen responses (called the external sample). In this manner, the applicability of the model to students beyond the original eight universities was evaluated. Table 14 presents a frequency analysis for selected characteristics of the 172 questionnaire responses from the southwest. These characteristics were selected because they are either of particular concern to accounting students (e.g. married versus not married), or else they were not intended to be tested or could not be tested on the basis of the responses to this study; the general relationships shown are nonetheless of interest.

TABLE 14

Analysis of Responses from the Southwest Region

Characteristic of Respondent	Actual Group: Offer Number	(%)	Non-Offer Number	(%)
All	124	(72%)	48	(28%)
Male	69	(71%)	28	(29%)
Female	55	(73%)	20	(27%)
Caucasian	120	(72%)	47	(28%)
Non-Caucasian	4	(80%)	1	(20%)
Married	25	(37%)	43	(63%)
Not Married	99	(95%)	5	(5%)
Male-Married	16	(38%)	26	(62%)
Female-Married	9	(35%)	17	(65%)
Male-Not Married	53	(96%)	2	(4%)
Female-Not Married	46	(94%)	3	(6%)

HYPOTHESIS 1

The first hypothesis was established for two fundamental reasons: (1) to derive a discriminant model (function) that indicated the qualifications and personal characteristics of students which were significantly different for those students who received an entry-level employment offer from an international accounting firm versus those students who did not receive an employment offer, and (2) to test the predictive power of the discriminant function on the basis of a holdout sample from the same population for which this

function was derived. To test if the model might be useful to students at other universities, that is, to test the external validity, the model was used to predict the employment offers to the external sample of students from a different university.

To consider the sensitivity of the variables selected, a discriminant analysis was performed at four different levels of significance: 0.001, 0.010, 0.050, and 0.100. Table 15 summarizes the results of these analyses. The numbers preceding the variable names indicate the order in which the independent variables appeared in the model. This is true for all tables which present the functions corresponding to their respective hypotheses.

TABLE 15

Unstandardized Discriminant Functions for Hypothesis 1

Unstandardized Coefficients of Variables Significantly Affecting Employment Offers

Variable	Levels of Significance 0.001	0.010	0.050	0.100
Constant	-8.5665	-8.5665	-8.0090	-8.5783
1. AGPA	0.1542	0.1542	0.1241	0.1124
2. POISE	0.8639	0.8639	0.7923	0.6563
3. BAP	*	*	1.0468	1.0829
4. INTQ	*	*	*	0.3794
5. DEGREE	*	*	*	1.9277
6. SCHOL	*	*	*	0.0191

*Not significant.

The 0.001 and 0.010 Significance Levels

The discriminant models developed at the 0.001 and 0.010 levels of significance were identical. Each model contained a constant and two independent variables. Table 16 presents the standardized coefficients.

TABLE 16

Standardized Discriminant Functions Derived for Hypothesis 1

Standardized Coefficients of Variables Significantly Affecting Employment Offers

Variable	Levels of Significance 0.001	0.010	0.050	0.100
1. AGPA	0.7906	0.7906	0.6366	0.5764
2. POISE	0.6760	0.6760	0.6200	0.5136
3. BAP	*	*	0.4577	0.4735
4. INTQ	*	*	*	0.3104
5. DEGREE	*	*	*	0.3551
6. SCHOL	*	*	*	0.3168

*Not significant.

The first two independent variables (or measures of students' characteristics) to appear in the model were AGPA (accounting grade- point average) and POISE (the ease of handling interviews as measured by the students who have completed interviewing). (Reference is made here to the list in Chapter 3 for the definitions of other variables which are discussed below.) As discussed in Chapter 2, the

AGPA may be considered as indicative of a student possessing intelligence, technical competence, and motivation (ambition). By being the very first characteristic to enter the function, AGPA must be viewed as potentially the most discriminating variable for accounting students in the survey who sought entry-level employment with the international accounting firms. The standardized coefficients shown in Table 16 indicate that it was relatively the most important variable to enter the model: it had the largest effect on the offer of employment. This was one of the most important findings of the study, especially in that it supported what many people believed to be the case.

Other variables in the analysis also represent measures of intelligence, technical competence, and ambition; however, these were not included in the model: OGPA, AB, AAB, EAB, and perhaps SCHOL, BAP, and HONOR, if broadly interpreted. Variables AC, ADE, EC, EDE, and the like, representing average and below average measures of intelligence, would also be considered positive measurements of intelligence if preceded by negative coefficients. Nonetheless, of all the variables included in the analysis designed to capture evidence of intelligence, AGPA is the most statistically significant characteristic. The technical and motivational qualities sought in entry-level candidates, as seen by their being recorded on candidate

evaluation forms, appear to be captured by the variable AGPA.

POISE, the second independent variable to enter the discriminant function, was the variable name for the ranking that students gave themselves for the "ease with which you handle interviews." The meaning of this variable should be regarded to encompass the student's self-image: as such, it includes the student's ability to communicate, personality, maturity, bearing (manner, attitude, or self-confidence), and, perhaps, physical appearance. Taken together, AGPA and POISE can be viewed as illustrative of a self-assured student: one who has proved his ability and is confident in his outlook.

Table 17 presents the classification matrix related to the predictive ability of the discriminant function developed at the 0.001 and 0.010 levels of significance. The purpose of the table, and similar tables to follow, is to give an indication of the strength of the discriminant model derived. The model was derived from the information contained in eighty-six questionnaire responses, previously defined as the analysis sample for Hypothesis 1, selected at random from the total 172 responses from the southwestern region of the United States. In the case of Hypothesis 1, Table 17 displays the results of the model's prediction that a student would receive an employment offer or not. The analysis sample section of the table indicates that the

model correctly predicted 95.0% of the students from the analysis sample who, in fact, did receive employment offers from the international accounting firms. The model did not perform as well in correctly classifying students from the analysis sample who did not receive an employment offer (42.3%). The hit-ratio (i.e., percentage of correctly classified students) in the analysis sample was 79.1%.

TABLE 17

Classification Matrix for Hypothesis 1: 0.001 and 0.010

Actual Group Membership	Number of Cases	Predicted-Group Membership: Non-Offer	Predicted-Group Membership: Offer	Percentage Correctly Classified
Analysis Sample:				
Non-Offer	26	11	15	42.3%
Offer	60	3	57	95.0%
	Hit-Ratio =	(11+57)	/86 =	79.1%
Holdout Sample:				
Non-Offer	22	13	9	59.1%
Offer	64	7	57	89.1%
	Hit-Ratio =	(13+57)	/86 =	81.4%
Total Sample:				
Non-Offer	48	24	24	50.0%
Offer	124	10	114	92.0%
	Hit-Ratio =	(24+114)	/172 =	80.2%
External Sample:				
Non-Offer	6	2	4	33.3%
Offer	9	1	8	88.9%
	Hit-Ratio =	(2+8)	/15 =	66.7%

Nevertheless, in correctly classifying students in terms of their receipt of employment offers, the model performed better than chance. This assertion is supported by the calculation of the proportional chance criterion mentioned in Chapter 3. The proportional chance criterion was used to determine if the percentage of correct classifications was significantly larger than would be expected by chance. For the analysis sample, the proportional chance criterion for correct classification is 57.8%. It has been suggested that, if the classification accuracy is at least 25% greater than by chance (57.8% in this case), the model performs significantly better than by chance classification.[45] Thus, the measure of significance for the analysis sample is approximately 72.3% and, since the hit-ratio is 79.1%, the model correctly classifies significantly better than expected by chance.

Since the model was derived entirely from the information in the analysis sample, a better indication of its predictive ability is obtained from the holdout sample. The holdout sample was the remaining eighty-six questionnaire responses which were not selected at random to be part of the analysis sample. The discriminant function generally is biased toward superior classification of the analysis sample for this reason; however, the hit-ratio for the holdout sample was slightly higher (81.4%) than for the analysis

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[45] Joseph F. Hair, Jr., et al., Multivariate Data Analysis, p. 103.

sample. The function correctly classified 89.1% of the successful candidates and it improved to a correct classification of 59.1% of the unsuccessful candidates. Since the hit-ratio was 81.4% and the minimum acceptable classification accuracy was 72.3%, the model classified significantly better than expected by chance.

The discriminant function predicted the group membership for the external sample, composed of information about fifteen students from a different geographical location, reasonably well. Again, it correctly predicted the successful students well (88.9%) but did not perform as well on the prediction of unsuccessful students (33.3%). This may be explained by the small sample size for the external group or the limited input from the unsuccessful candidates. The discriminant function did predict the successful students' classification well in all cases, and this finding should add to its external validity.

The 0.050 Significance Level

At the 0.050 level of significance, membership in Beta Alpha Psi (BAP) entered the discriminant function as the third independent variable. Membership in Beta Alpha Psi indicated not only above average academic performance, but also a certain amount of interest in group- oriented activities and sociability on the part of students. It provided students an excellent opportunity in many cases to

come into contact with some of the actual professional people with whom they ultimately interviewed. Consequently, this exposure allowed the students to develop a rapport with the recruitment personnel which may have made them more at ease during the interview process. Membership in Beta Alpha Psi appeared to represent evidence of the personal and technical qualities captured on candidate evaluation forms as shown in Tables 8 through 12, Chapter 2.

In summary, the main purpose of testing Hypothesis 1 was to determine the qualifications and personal characteristics of students which were significantly different for those who received an employment offer as compared to those who did not. Knowledge of the coefficients of the variables in Table 15 also made possible the calculation of the individual Z-score for each candidate. The Z-score can be compared to the probabilities of employment offers shown in Appendix D. The probabilities must be interpreted from the viewpoint that they serve only as broad indications of the potential receipt of an employment offer. While only the extreme Z-scores should be viewed with any degree of confidence, the presence of some indication should be better than none at all.

Table 18 presents the classification table related to the predictive ability of the discriminant function including three independent variables (AGPA, POISE, and BAP) derived at the 0.050 significance level. The hit-ratios for the

analysis and external samples were the same as for the function derived at the 0.001 and 0.010 significance levels. Since the holdout sample hit-ratio is virtually unchanged from the original model, little improvement to the discriminating ability of the function occurs with the inclusion of the variable BAP.

TABLE 18

Classification Matrix for Hypothesis 1: 0.050

Actual Group Membership	Number of Cases	Predicted-Group Membership Non-Offer	Offer	Percentage Correctly Classified
Analysis Sample:				
Non-Offer	26	13	13	50.0%
Offer	60	5	55	91.7%
	Hit-Ratio =	(13+55)	/86 =	79.1%
Holdout Sample:				
Non-Offer	22	12	10	54.5%
Offer	64	7	57	89.1%
	Hit-Ratio =	(12+57)	/86 =	80.2%
Total Sample:				
Non-Offer	48	25	23	52.1%
Offer	124	12	112	90.3%
	Hit-Ratio =	(25+112)	/172 =	79.7%
External Sample:				
Non-Offer	6	2	4	33.3%
Offer	9	1	8	88.9%
	Hit-Ratio =	(2+8)	/15 =	66.7%

The 0.100 Significance Level

Three additional independent variables were added to the discriminant function when it was developed at the 0.100 level of significance. These variables were INTQ (intensity of the questions initiated by the applicant during the interview as compared to other students), DEGREE (applicant held other undergraduate degree), and SCHOL (per cent of college expenses paid by scholarship or grant during college career). The variable INTQ may provide further evidence of the student's ability and willingness to conduct meaningful communication during the course of an interview. This characteristic would be beneficial to someone at entry-level employment with a public accounting firm because of the frequent required conversations with clients. The variable DEGREE may be interpreted as showing proof of motivation (in the acquisition of an additional degree) or maturity (both in age and in seeking a more active or more desirable area of employment). The variable SCHOL may not only be another surrogate for intelligence, but also an indication of faculty recommendation. Table 19 presents the classification table for this function. The addition of three more independent variables to the function does not seem to warrant the reduction in the level of significance. Based on a review of the hit ratios, little improvement in discrimination was gained by their inclusion in the model.

TABLE 19

Classification Matrix for Hypothesis 1: 0.100

Actual Group Membership	Number of Cases	Predicted-Group Membership Non-Offer	Offer	Percentage Correctly Classified
Analysis Sample:				
Non-Offer	26	14	12	53.8%
Offer	60	6	54	90.0%
	Hit-Ratio =	(14+54)	/86	= 79.1%
Holdout Sample:				
Non-Offer	22	15	7	68.2%
Offer	64	8	56	87.5%
	Hit-Ratio =	(15+56)	/86	= 82.6%
Total Sample:				
Non-Offer	48	29	19	60.4%
Offer	124	14	110	88.7%
	Hit-Ratio =	(29+110)	/172	= 80.8%
External Sample:				
Non-Offer	6	2	4	33.3%
Offer	9	1	8	88.9%
	Hit-Ratio =	(2+8)	/15	= 66.7%

HYPOTHESIS 2

Once it was determined that there was a significant difference in the characteristics of accounting students who were and were not successful in receiving employment offers from the international accounting firms, a second objective was to determine if there was a difference in the characteristics of male and female accounting students, all

of whom received employment offers. The purpose of this hypothesis was to ascertain if significantly different standards were used in making employment offers to male versus female accounting students. This was accomplished by deriving a discriminant model that indicated the specific characteristics that significantly separated the successful male from the successful female students. Hypothesis 2 was tested by using the data for all successful male and female accounting students (133) from the southwest and midwest samples. Of the total successful students, 62 were female and 71 were male; consequently, prior probabilities for the analysis were 0.47 and 0.53, respectively.

Hypothesis 2 was tested at the 0.100 level of significance in order to allow all potentially meaningful variables to enter the model. The following variables, entering in the order given below, formed the discriminant model for Hypothesis 2: (1) WT (weight of student, in pounds); (2) EC (the number of hours in non-literature English courses for which the letter grade C was earned); (3) OTHER (per cent of college expenses paid from sources other than parental support, personal loan, scholarship or grant, and working); (4) ACEXP (any accounting or bookkeeping experience acknowledged during the interview which the student considered advantageous); and (5) ELECT (the number of positions in honorary and social organizations acknowledged during the interview). Table 20

presents the standardized coefficients for the significant variables.

TABLE 20

Discriminant Function for Hypothesis 2: 0.100

Variable	Standardized Coefficient
1. WT	1.00911
2. EC	0.32451
3. OTHER	0.23472
4. ACEXP	-0.22492
5. ELECT	-0.20455

In view of the purpose of Hypothesis 2, analysis and holdout samples were not utilized (i.e., the predictive power of the model was not investigated). However, a review of the discriminating variables was pertinent. The function derived for Hypothesis 2 discriminated between successful accounting students on the basis of the variable SEX (with 0=female and 1=male). An independent variable which entered the discriminant function with a positive coefficient was interpreted as a characteristic that related to male students primarily, whereas a negative coefficient for a significant independent variable indicated that the characteristic related essentially to female students. In other words, a positive coefficient causes the discriminant

score for the student to be of a more positive magnitude and the discriminant function would more readily classify the student as male.

The first three independent variables to enter the discriminant function, WT, EC, and OTHER, had positive coefficients. The inclusion of WT (weight), which was a general surrogate for "appearance," had no meaning other than that the successful male students tended to weigh more than female students. The inclusion of EC showed that successful male students earned more C letter grades in English courses than did their female counterparts. In other words, the female students tended to do better in English courses than did the male students. The variable OTHER indicated, statistically, more successful male than female students received funding of college expenses from sources other than parental support, personal loan, scholarship or grant, or self-support through working. The predominant other sources included the receipt of Social Security and Veterans Administration benefits, and the use of personal savings or spouse support. Generally speaking, it appeared that the wives of married male students worked to put the male through college.

The final two independent variables to enter the model, ACEXP and ELECT, had negative coefficients. This showed that having accounting/bookkeeping experience and holding positions in honorary and social organizations generally was

more strongly related to the successful female than male students.

The hit-ratio for Hypothesis 2 was 96.2%; that is, the discriminant model corresponding to Hypothesis 2 correctly classified as being male versus female 96.2% of the 133 students . The function correctly classified 98.4% of the 62 female students and 94.4% of the 71 male students. These high classification rates added credence to the variables which discriminated between the two groups. None of the variables corresponding to Hypothesis 1 were significantly different for successful male and female students.

HYPOTHESIS 3

The objective of Hypothesis 3 was to derive for male accounting students only a discriminant function from the analysis sample and to test its predictive power on the male students from the holdout and external samples. The discriminant model corresponding to Hypothesis 3 was derived from the data for the male accounting students (48) included in the analysis sample selected for Hypothesis 1, and the predictive power of the model was tested by classifying the male students in the holdout sample (49) and the external sample (6). The discriminant function was derived as discussed previously for Hypothesis 1 using the same four significance levels. Table 21 shows the results of the analysis in terms of unstandardized coefficients, while

Table 22 presents the standardized coefficients derived for the model corresponding to Hypothesis 3.

TABLE 21

Unstandardized Discriminant Functions for Hypothesis 3

Unstandardized Coefficients of Variables Significantly Affecting Employment Offers to Male Students

Variable	Levels of Significance 0.001	0.010	0.050	0.100
Constant	-1.5749	-1.5749	2.1579	1.3287
1. BAP	2.3624	2.3624	1.7108	1.2546
2. INTQ	*	*	0.9210	0.9210
3. DEGREE	*	*	2.4256	2.8898
4. AGE	*	*	-0.2914	-0.2909
5. AB	*	*	*	0.0136

*Not significant.

Tables 21 and 22 show that the variables which significantly affected employment offers to male students were BAP (membership in Beta Alpha Psi), INTQ and DEGREE (as defined earlier for Hypothesis 1), AGE, and AB (the number of hours in overall courses for which the letter grades A or B had been earned). Table 15 earlier showed the comparable variables as they relate to students generally, both male and female. The variables for Hypothesis 1 and Hypothesis 3 were somewhat similar as would be anticipated. BAP, INTQ, and DEGREE were common to both models.

TABLE 22

Standardized Discriminant Functions for Hypothesis 3

Standardized Coefficients of Variables Significantly Affecting Employment Offers to Male Students

Variable	Levels of Significance 0.001	0.010	0.050	0.100
1. BAP	1.0000	1.0000	0.7242	0.5311
2. INTQ	*	*	0.7260	0.7260
3. DEGREE	*	*	0.5906	0.7037
4. AGE	*	*	-0.5039	-0.5032
5. AB	*	*	*	0.4553

*Not significant.

The differences in the models corresponding to Hypotheses 1 and 3 were relevant. For students in general, AGPA was the most discriminating variable; the model for male students indicated membership in Beta Alpha Psi to be the most significant variable. The model for male students included neither AGPA nor SCHOL, but it did include BAP and AB, all of which can be viewed as surrogates for intelligence and the like. Thus, while the variables were of a different composition, the underlying personal characteristic of intellectual ability was evident in both models. The most interesting distinctions between the models corresponding to Hypotheses 1 and 3 were the inclusion of the variable AGE in the male model and the exclusion of POISE from the male model. A generalization of

these findings was that age was more significant and that POISE was less significant to the male than to the female students. A more detailed discussion of the models for male students follows immediately, whereas the discussion of the model for female students is found in the section entitled "Hypothesis 4."

The 0.001 and 0.010 Significance Levels

The function for male students derived at the 0.001 level of significance was the same as that at the 0.010 significance level. The only independent variable to enter the model was BAP, membership in Beta Alpha Psi. Table 23 presents the classification table for the discriminant function at these levels of significance. The discriminant function derived from the males in the analysis sample correctly classified 81.8% of the successful male candidates and 66.7% of the unsuccessful male candidates. The hit-ratio was 77.1%.

The results of classifying the holdout and external samples were better than that for the analysis sample. The discriminant function for male students, built on membership in Beta Alpha Psi only, correctly classified 88.9% and 76.9% of the successful and unsuccessful male students, respectively, for the holdout sample. The hit-ratios for the male members of the holdout and external sample were 85.7% and 100%, respectively. Calculation of the

TABLE 23

Classification Matrix for Hypothesis 3: 0.001 and 0.010

Actual Group Membership	Number of Cases	Predicted-Group Membership		Percentage Correctly Classified
		Non-Offer	Offer	
Analysis Sample:				
Non-Offer	15	10	5	66.7%
Offer	33	6	27	81.8%
	Hit-Ratio =	(10+27)	/48 =	77.1%
Holdout Sample:				
Non-Offer	13	10	3	76.9%
Offer	36	4	32	88.9%
	Hit-Ratio =	(10+32)	/49 =	85.7%
Total Sample:				
Non-Offer	28	20	8	71.4%
Offer	69	10	59	85.5%
	Hit-Ratio =	(20+59)	/97 =	81.4%
External Sample:				
Non-Offer	4	4	0	100%
Offer	2	0	2	100%
	Hit-Ratio =	(4+2)	/6 =	100%

proportional chance criterion indicated that approximately 57% of the cases would be correctly classified based on chance. To be significantly better than chance, the model would have to predict the proper classification in about 71% of the cases. Hence, it can be said that the model corresponding to Hypothesis 3 predicted significantly better

than a chance classification model. Acceptance of the results associated with the external sample must be moderated because of the small sample size and because all of the successful male applicants (2) and none of the unsuccessful male applicants (4) were members of Beta Alpha Psi. Consequently, there was a perfect relationship between BAP and employment offer/non-offers in the small external sample. Tables 23, 24, and 25 show how this multicollinearity and the inclusion of other variables in the model at various levels of significance cause the predictive ability of the model relative to the external sample to deteriorate.

The 0.050 Level of Significance

A total of four independent variables entered the discriminant function for Hypothesis 3 at the 0.050 level of significance. The three variables other than BAP entered as follows: INTQ and DEGREE (both as defined in relation to Hypothesis 1), and AGE. Both INTQ and DEGREE can be interpreted in a manner similar to that for Hypothesis 1; consequently, no additional discussion is offered here. It was interesting to note that the variable AGE possessed a negative coefficient in the model for male students. Since the model separated male students into unsuccessful (0=non-offer) and successful (1=offer) candidates, a negative coefficient indicated that, the greater the age of

a male student, the larger the negative impact on his employment offer. Broadly interpreted, the older a male applicant was, the less likely he was to receive an entry-level employment offer from an international accounting firm. This finding supported the students' viewpoint that age was a significant factor as indicated in Table 2, Chapter 2.

As noted in Chapter 2, discussions were held with the recruitment personnel at the local office of one of the international firms in order to help identify the critical factors for entry-level employment. The question of age being a significant factor was specifically raised. The opinion held by the personnel questioned was that age was not considered a factor unless the applicant was about thirty years of age. Two reasons for this viewpoint emerged. First, the concept of cost-benefit requires that an entry-level employee not be too old. Recruitment personnel stated that more than twenty-five years of employment are needed to return to the partnership the investments it makes for training and such through the years. The second factor which concerned age was that, on infrequent occasions, an older entry- level employee being subordinated to a younger supervisor could result in dysfunctional employee relations.

Table 24 presents the classification matrix for the male discriminant function derived at the 0.050 level of

significance. The hit-ratios for the analysis and holdout samples were 85.4% and 87.8%, respectively, with the predicted group memberships in offer and non-offer groups each being 80% or better in all cases. Again, comparison of the significant proportional chance criterion (71%) to the hit-ratio for the holdout sample (87.8%) led to the conclusion that the model predicted significantly better than chance. Prediction of the offer group was 100% correct for the external sample, but the inclusion of the additional variables did not help to improve the discrimination between the successful and unsuccessful applicants in the holdout sample.

TABLE 24

Classification Matrix for Hypothesis 3: 0.050

Actual Group Membership	Number of Cases	Predicted-Group Membership Non-Offer	Offer	Percentage Correctly Classified
Analysis Sample:				
Non-Offer	15	12	3	80.0%
Offer	33	4	29	87.9%
	Hit-Ratio =	(12+29)	/48	= 85.4%
Holdout Sample:				
Non-Offer	13	11	2	84.6%
Offer	36	4	32	88.9%
	Hit-Ratio =	(11+32)	/49	= 87.8%
Total Sample:				
Non-Offer	28	23	5	82.1%
Offer	69	8	61	88.4%
	Hit-Ratio =	(23+61)	/97	= 86.6%
External Sample:				
Non-Offer	4	1	3	25.0%
Offer	2	0	2	100%
	Hit-Ratio =	(1+2)	/6	= 50.0%

The 0.100 Level of Significance

One additional independent variable entered the male discriminant function at the 0.100 level of significance: AB (the number of hours in overall courses for which the letter grades A or B had been earned). There were at least two worthwhile points related to the inclusion of variable AB. While AGPA was the most significant variable for the

discriminant function for Hypothesis 1, AGPA did not enter the discriminant model for Hypothesis 3. Instead, BAP and AB, both considered surrogates for intelligence, technical competence, and motivation (ambition), were included in the function. The variable AB was included in the survey because it was requested information on some of the candidate evaluation forms. The implication of combining letter grades A and B was that little distinction was made between these two above average grades; however, the impact of A's versus B's, as well as other grades, must be considered due to the prominence of AGPA in the discriminant function corresponding to Hypothesis 1.

Table 25 presents the classification matrix for the male discriminant function derived at the 0.100 significance level. This male discriminant function had a hit-ratio of 89.8% for the holdout sample with correct classification for this sample being equivalent to that of the analysis sample. The hit-ratio for the holdout sample was significantly better than would be expected by chance classification. Unfortunately, the male discriminant model at the 0.100 significance level did not perform well in predicting the group memberships for the external sample, correctly classifying only 33.3% of the male applicants therein.

TABLE 25

Classification Matrix for Hypothesis 3: 0.100

Actual Group Membership	Number of Cases	Predicted-Group Membership Non-Offer	Offer	Percentage Correctly Classified
Analysis Sample:				
Non-Offer	15	13	2	86.7%
Offer	33	3	30	90.9%
	Hit-Ratio =	(13+30)	/48	= 89.6%
Holdout Sample:				
Non-Offer	13	11	2	84.6%
Offer	36	3	33	91.7%
	Hit-Ratio =	(11+33)	/49	= 89.8%
Total Sample:				
Non-Offer	28	24	4	85.7%
Offer	69	6	63	91.3%
	Hit-Ratio =	(24+63)	/97	= 89.7%
External Sample:				
Non-Offer	4	0	4	0%
Offer	2	0	2	100%
	Hit-Ratio =	(0+2)	/6	= 33.3%

HYPOTHESIS 4

The objective of Hypothesis 4 was to derive a discriminant function for female accounting students only from the analysis sample and to test its predictive power on the female students from the holdout and external samples. A total of eighty-four female students (seventy five from the southwest and nine from the midwest) participated by

responding to the survey instrument. The seventy-five responses from the southwest were divided into analysis and holdout samples on the basis of a 75% - 25% split between the groups. This split was selected because there was a smaller number of responses from female students than there was from males. A 50% - 50% division of the responses from females would have resulted in an analysis sample of only thirty-eight cases. This might not have contained sufficient information to develop a model. By using a 75% - 25% split, the analysis sample for the female students (56) was larger than the analysis sample for the male students (48) even though there were fewer responses from the female students. At the same time, fewer cases were available to test the predictive power of the model.

The analysis and holdout samples were proportionately stratified for offer and non-offer responses; that is, of the seventy-five female respondents from the southwest, fifty five (or about 73%) received employment offers. Hence, 73% (forty-one respondents) of the analysis sample (and also 73% of the holdout sample) were successful female respondents. The remainder represented the proportion that was unsuccessful from the total sample. The analysis was conducted at the 0.001, 0.010, 0.050, and 0.100 levels of significance. Table 26 presents the unstandardized coefficients for the discriminant function corresponding to Hypothesis 4, whereas Table 27 indicates the standardized coefficients.

TABLE 26

Unstandardized Discriminant Functions for Hypothesis 4

Unstandardized Coefficients of Variables Significantly Affecting Employment Offers to Female Students

Variable	Levels of Significance 0.001	0.010	0.050	0.100
Constant	0.5204	0.5204	0.2420	0.2420
1. AC	-0.2626	-0.2626	-0.1483	-0.1483
2. EAB	*	*	0.1180	0.1180
3. SCHOL	*	*	0.0440	0.0440
4. HT	*	*	0.1627	0.1627
5. WT	*	*	-0.1024	-0.1024
6. EC	*	*	-0.4178	-0.4178
7. PARENT	*	*	0.0144	0.0144

*Not significant.

TABLE 27

Standardized Discriminant Functions for Hypothesis 4

Standardized Coefficients of Variables Significantly Affecting Employment Offers to Female Students

Variable	Levels of Significance 0.001	0.010	0.050	0.100
1. AC	-1.0000	-1.0000	-0.5646	-0.5646
2. EAB	*	*	0.2926	0.2926
3. SCHOL	*	*	0.7606	0.7606
4. HT	*	*	1.4654	1.4654
5. WT	*	*	-1.9485	-1.9485
6. EC	*	*	-0.6089	-0.6089
7. PARENT	*	*	0.5039	0.5039

*Not significant.

Comparison of Models

The model corresponding to Hypothesis 1 (both male and female respondents) consisted of AGPA, POISE, BAP, INTQ, DEGREE, and SCHOL. The fundamental qualifications and characteristics captured by these variables seemed to be intelligence, technical competence, maturity, and motivation. The ability to communicate was also captured to a certain extent. The model corresponding to Hypothesis 3 (male respondents only) was composed of BAP, INTQ, DEGREE, AGE, and AB. Again, the underlying characteristics seemed to be intelligence, technical competence, maturity, and motivation. The model derived for Hypothesis 4 (female respondents only) consisted of the following variables: AC (the number of hours in accounting for which the letter grade C was earned), EAB (the number of hours in English courses for which the letter grades A or B were earned), SCHOL (the percentage of college expenses provided by scholarships and grants), HT (height), WT (weight), EC (the number of hours in English ccurses for which the letter grade C was earned), and PARENT (the percentage of college expenses provided by parent support). Thus, the model derived for Hypothesis 4 was similar to the others in that it contained variables which represented intelligence and technical competence. AC and EC, because of their negative coefficients, and EAB and SCHOL, because of their positive coefficients, can be interpreted as such. The inclusion of

PARENT and SCHOL may be linked to the inclusion of the other variables representing intelligence; that is, the students who were not required to spend time to earn money to pay college expenses would, at least conceptually, have more time available to become more technically competent.

The other variables in the model for Hypothesis 4 warrant discussion. The inclusion of HT and WT, surrogates for appearance, indicated that physical appearance was important to the female recruits, more so than to the males. The absence of both POISE and INTQ from the model for female respondents may indicate that communications during the interview may not be as important for the females as for the males. When viewed in this perspective, the indication was that the critical factors for male and female recruits were different. There are perhaps two possible explanations for this difference. First, the vast majority of the recruiters are male. Consequently, they may relate to male and female applicants differently as to what they perceive as necessary for the applicant's success in public accounting. They may believe appearance is more important to the success of a female because they relate better to an attractive female. Secondly, the male recruiters may have a better concept of what they are seeking in a male recruit, either because of previous successful interviewing experience or because of previous work exposure to other males. Perhaps this means that there exists a better defined image of the successful

male recruit than that for the female recruit, due to the preponderance of males in the accounting profession until recent years. In summary, the factors noted to be significant for females were different from those noted for the male students, and more variability seemed evident in the model for female students.

Functions and Variables for Hypothesis 4

The discriminant functions for female students derived at the 0.001 and 0.010 levels of significance were identical. Table 26 shows that the model consisted of a constant and the independent variable AC. The variable AC was defined to be the number of hours in accounting for which the letter grade C was earned. As a surrogate for intelligence and the like, AC's negative coefficient implied that, the larger the number cf hours in accounting for which the letter grade C was earned, the less likely the female candidate was to receive an employment offer from an international accounting firm. The classification table for the discriminant function derived for Hypothesis 4 is presented in Table 28.

The discriminant function for female students, consisting of AC only, correctly classified 100% of the successful female students from the analysis, holdout, and external samples. The respective hit- ratios for these samples were 78.6%, 73.7%, and 77.8%. Thus, the model classified the successful female candidates well but was unable to do as

TABLE 28

Classification Matrix for Hypothesis 4: 0.001 and 0.010

Actual Group Membership	Number of Cases	Predicted-Group Membership Non-Offer	Offer	Percentage Correctly Classified
Analysis Sample:				
Non-Offer	15	3	12	20.0%
Offer	41	0	41	100%
	Hit-Ratio =	(3+41)	/56	= 78.6%
Holdout Sample:				
Non-Offer	5	0	5	0.0%
Offer	14	0	14	100%
	Hit-Ratio =	(0+14)	/19	= 73.7%
Total Sample:				
Non-Offer	20	3	17	15.0%
Offer	55	0	55	100%
	Hit-Ratio =	(3+55)	/75	= 77.3%
External Sample:				
Non-Offer	2	0	2	0%
Offer	7	0	7	100%
	Hit-Ratio =	(0+7)	/9	= 77.8%

well with the unsuccessful candidates. The proportional chance criterion showed that about 61% of the sample cases would be correctly classified by a chance classification. The model would have to predict the correct classification of about 76% of all the cases in order to be significantly better than chance. Since the hit-ratio for the holdout

sample was 73.7%, the conclusion was that the model classified better than chance, but the classification results were not significantly better.

The discriminant functions for female students derived at the 0.050 and 0.100 significance levels were identical. Table 27 shows that the relative strength of the variables were in the following descending order of importance: WT, HT, SCHOL, EC, AC, PARENT, and EAB. The negative coefficients for WT, EC, and AC, implied that, the larger the values of these variables, the less likely the female student was to receive an employment offer. Conversely, the larger the values of HT, SCHOL, PARENT, and EAB, the more likely the offer of employment to the female student.

WT and HT, surrogates for appearance, implied that being heavier and shorter were detrimental to the employment prospects for the female candidates. Variables EC, AC, and EAB all related to academics. The negative coefficient for AC indicated that, the greater the number of hours in accounting for which the grade C was earned, the less likely was the student to receive the desired employment offer. AC was thus interpreted as evidence of technical competence. It was interesting to note that English courses were so strongly associated with female students. While it is generally thought that female students do better in English courses than do male students, the degree of the actual relationship was relevant. SCHOL and PARENT both dealt with

sources of payment of college expenses other than that of the female students themselves. It was interesting to note that this seemed to support the belief that the female students were less independent than males in terms of self-support during their college career. On the other hand, male students may have been more inclined to receive spouse support during college attendance than were the female students. Nonetheless, payment of college expenses via scholarship and parental support was somewhat more related to female students than to males. The underlying characteristics and qualifications which seemed to be captured by the discriminant model for female students consisted of physical appearance, technical competence, intelligence (especially competence in English), and alternative sources of college financing.

Table 29 shows the classification matrix for the discriminant function corresponding to Hypothesis 4 at both the 0.050 and 0.100 levels of significance. As in the case of the discriminant function at the 0.001 significance level, the proportional chance criterion would indicate that 61% of the cases could be classified correctly by chance. To be significantly better than chance, the model would have to classify about 76% of the cases correctly. While the hit-ratio of the analysis sample did improve with the inclusion of the additional variables, the hit-ratios for both the holdout and external samples declined. Thus, the

additional variables did not improve the discrimination strength of the model, and although the model classified better than chance, it did not classify significantly better than chance. Perhaps it can be inferred that the role model for female accounting students is still being defined and that a better model in terms of predictive power remains to be derived.

TABLE 29

Classification Matrix for Hypothesis 4: 0.050 and 0.100

Actual Group Membership	Number of Cases	Predicted-Group Membership Non-Offer	Offer	Percentage Correctly Classified
Analysis Sample:				
Non-Offer	15	12	3	80.0%
Offer	41	0	41	100%
	Hit-Ratio =	(12+41)	/56	= 94.6%
Holdout Sample:				
Non-Offer	5	1	4	20.0%
Offer	14	2	12	85.7%
	Hit-Ratio =	(1+12)	/19	= 68.4%
Total Sample:				
Non-Offer	20	13	7	65.0%
Offer	55	2	53	96.4%
	Hit-Ratio =	(13+53)	/75	= 88.0%
External Sample:				
Non-Offer	2	0	2	0.0%
Offer	7	1	6	85.7%
	Hit-Ratio =	(0+6)	/9	= 66.7%

HYPOTHESIS 5

In 1969, the first American Institute of Certified Public Accountants' Minority Recruitment and Equal Opportunity Committee was appointed.[46] One of the resolutions passed by the committee had as its purpose to ". . . encourage hiring of minority men and women in order to integrate the accounting profession in fact as well as ideal."[47] The objective of Hypothesis 5 was to determine if there existed a difference in the characteristics of Caucasian and non-Caucasian accounting students, all of whom received employment offers from the international accounting firms. The purpose of the fifth hypothesis was to test if significantly different standards were evident in the offer of employment to Caucasian versus non-Caucasian accounting students.

A severe limitation in the planned analysis of Hypothesis 5 resulted from the minimal response and, therefore, the minimal representation of non-Caucasian accounting students in the sample. Of 172 respondents to the southwest survey, only five were American Indian (or Alaskan native), Asian or Pacific Islander, Non-Hispanic Black, or Hispanic. It was reported in Table 14 that four of the five non-Caucasian respondents were offered entry-level employment by the

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[46] Minority Recruitment and Equal Opportunity Committee, The First Decade: A Pause to Reflect, Evaluate, and Plan (New York, N.Y.: American Institute of Certified Public Accountants, ca. 1980), p. 5.

[47] Ibid.

international firms. This limited number of cases precluded a meaningful analysis; and, therefore, this hypothesis could not be tested.

HYPOTHESIS 6

A concern of accounting students is the salary offer which accompanies the employment offer from public accounting firms. Many factors affect the magnitude of salary offers from these firms, one of which is the state of the economy. In periods of economic growth, in particular, the demand for audited financial statements generally increases. One effect of increased demand for audited statements is the attendant increased demand for, and, therefore, larger salary offers to professional staff.

The relationship between the lagging supply of accounting graduates and the increased demand for public accounting recruits is shown in Table 30. The Employment Percentage column indicates an increasing demand by all public accounting firms for accounting graduates relative to the supply of accounting graduates. MacNeill and McInnes cautioned that ". . . the supply figures refer to all graduates irrespective of whether or not (they) sought or will seek employment in public accounting."[48] Thus, the relationship between the demand for public accounting recruits and the supply of accounting students who seek

[48] MacNeill and McInnes, The Supply of Accounting Graduates, p. 21.

public accounting careers cannot be determined forthright. This limitation was further compounded by the lack of decomposition of both the supply and demand figures into data related to the international firms only. (This same problem impaired the sample selection for this survey, as discussed in Chapter 3.) The consequence of the increased demand for public accounting recruits should be higher salary offers by public accounting firms.

TABLE 30

Supply and Public Accounting Demand for Graduates

Relationship Between Supply of and Public Accounting Demand for Holders of Accounting Bachelor's Degrees 1977-78 to 1982-83

Years	Supply	Demand	Employment Percentage
1977-1978	46,000	11,660	25%
1978-1979	50,070	12,150	24%
1979-1980	52,780	12,750	24%
1980-1981	54,900	14,130	26%
1981-1982	56,230	15,100	27%
1982-1983	57,140	15,830	28%

Source: James H. MacNeill and Mary McInnes, The Supply of Accounting Graduates and the Demand for Public Accounting Recruits: 1979, American Institute of Certified Public Accountants (New York: 1979), p. 21.

The objective of Hypothesis 6 was to determine if there existed a relationship between the characteristics of the

successful accounting students and the magnitude of their salary offers from the international accounting firms. If a student is confident he possesses the characteristics necessary to obtain an employment offer, he may desire to enhance those factors which demonstrated a relationship with salary offers. The purpose of Hypothesis 6 was to determine which of the characteristics of the successful accounting students possessed this relationship. As such, the purpose of the analysis was not to attempt to identify all the variables (such as supply/demand) which could have a significant effect on salary offers. The analysis was limited only to those characteristics over which the candidates may have control.

The regression model for Hypothesis 6 was derived from the information from all 133 responses by the successful candidates. Table 31 shows the variables, their order of entry into the regression model, their standardized beta values and other data. It was interesting to note that many of the variables which were found to affect significantly the receipt of an offer of employment from an international firm were also found to have an impact on the related salary offer.

TABLE 31

Standardized Coefficients and Other Data for Hypothesis 6

Variable	Beta Values	R-square	F-ratios	P-values
1. AGPA	0.342	0.248	23.045	<0.01
2. BAP	0.259	0.292	13.702	<0.01
3. INITQ	0.182	0.328	8.694	<0.01
4. LOAN	-0.121	0.342	3.845	<0.05
5. EC	-0.135	0.353	4.297	<0.05
6. ELECT	0.100	0.361	2.581	<0.10
7. DEGREE	0.102	0.371	2.527	<0.10

Tests of Significance

To determine that the fitted regression line was useful, the test for a significant regression line (F test) was performed. Table 31 includes the p-values determined with the separate inclusion of each additional variable. For example, the one-variable model (AGPA) was significant at the 0.010 level, as were the two- and three- variable models. With seven variables, the model was significant at the 0.100 level.

Variables for Hypothesis 6

As was the case of the variables which led to an employment offer from the international accounting firms, AGPA was the variable of highest significance in relation to the salary offer from the same firms. The second most

significant variable was membership in Beta Alpha Psi (BAP). The third variable was INITQ, the self-evaluation by the successful students of the number of questions or comments initiated by the students during the interview as compared to other students. Inclusion of AGPA again indicated the demonstration of technical competence required for entry-level employment with the international firms, whereas BAP may have represented the sociability aspect of having developed a rapport with the interviewer or possessing the ability to do so with the client. The variable INITQ indicated that the student's active participation during the interview had a positive relationship with the salary offer. INITQ was considered to be a surrogate for the ability to communicate.

The next two significant variables to enter the regression model were LOAN (the per cent of college expenses paid by personal loan) and EC (the number of hours in non-literature English courses for which the letter grade C was earned). Inclusion of EC, a negative surrogate for the ability to communicate, implied that poor performance in English courses has a negative impact on the salary offer. The interpretation of LOAN was unclear. The negative coefficient of LOAN indicated that those students who received higher salary offers tended not to borrow money to pay college expenses. Since no logical, causal relationship between LOAN and the salary offer was noted, the inclusion

of LOAN was interpreted as merely evidence of a statistical relationship between the independent and dependent variables.

The final two variables to enter the regression model were ELECT (the number of elective positions held by and acknowledged by the recruit) and DEGREE (possession of a previously earned undergraduate degree by the recruit). Each of these variables signalled the existence of responsibility/maturity on the part of the student. ELECT indicated that these characteristics, as observed by peers, had resulted in the placing of authority and trust in the hands of the recruit. The inclusion of DEGREE indicated a student of broader background, one who may have been offered employment in the area of management services as well as the more typical auditing employment. In both cases, these variables demonstrated a positive relationship with the magnitude of the salary offered to the recruit.

The beta values, which are the standardized coefficients for the significant variables, imply that a change in the accounting grade- point average (say from 32 to 33 using the coding scheme described elsewhere) had almost twice the impact on the salary offer as did a unit of change in a student's self-evaluation of interview participation (say from "average" to "somewhat above average"). Membership in Beta Alpha Psi was associated with twice the impact on salary offer as was a unit of change in EC. Thus, a student

who had a "good" accounting grade-point average and was a member of Beta Alpha Psi was both improving his probability of employment and the magnitude of his salary offer simultaneously.

The overall coefficient of determination was .37. This implied that 63% of the variability in the salary offer was explained by variables not included in the regression model. This was not unexpected since the purpose of the analysis was not to identify all the significant variables affecting the salary offer, but only those within the control of the applicant. While there are many other variables within the control of the students, the others do not seem to have a significant relationship to the salary offer.

HYPOTHESIS 7

Students select accounting as a career for a variety of reasons. To determine which reasons were considered most important to the respondents to the survey, they were provided an open-ended listing of suggested items. The respondents indicated the following major items to be important in choosing an accounting career: salary, advancement, training by the firms, availability of employment, status, security, experience to be gained, working with people, enjoyment (or interest, challenge, or success in previous accounting courses), and working with "things." Because of the limited number of responses to

some of these items, related responses were combined to allow for proper testing. The combinations are indicated in the tables to follow.

The objective of Hypothesis 7 was to determine if there was a significant difference in the reasons for choosing an accounting career given by students who were successful versus unsuccessful in receiving an employment offer from the international accounting firms. This was accomplished by testing the survey responses with the Chi-square test of independence. Useable responses were provided by 183, 179, and 172 respondents to the southwest and midwest surveys to test the most important, second most important, and third most important reasons, respectively, for selecting accounting as a career. The respondents were directed to rank order only the specific items they actually considered in choosing an accounting career. The findings are presented in the following sections.

The Primary Reason

The responses related to the most important reasons for choosing an accounting career are categorized in Table 32 for students receiving and not receiving an employment offer from an international firm. Table 32 shows the observed number of responses and the expected number of observations for each criterion. The criteria were defined as follows: (1) availabilty/security of employment; (2) experience to be

gained/training by the firms; (3) working with people; (4) salary/advancement; (5) enjoyment/interest/challenge; (6) working with "things;" and (7) status.

TABLE 32

Primary Reasons for Selecting Accounting as a Career

Criteria	OFFER Observed	OFFER Expected	NON-OFFER Observed	NON-OFFER Expected
Availability/ Security	34	37.2	18	14.8
Experience/ Training	28	30.1	14	11.9
Working with People	19	16.5	4	6.5
Advancement/ Salary	16	17.2	8	6.8
Enjoyment/ Interest/ Challenge	16	13.6	3	5.4
Working with "Things"	10	9.3	3	3.7
Status	8	7.1	2	2.9
	131	131.0	52	52.0

Chi-square test statistic = 5.18
Degrees of freedom = 6
P-value > 0.10

The Chi-square test statistic for this analysis was calculated to be 5.18 (p-value > 0.10). Thus, the primary reason that students selected accounting as a career was not associated with whether or not they would receive an employment offer from an international firm. Hence, the

conclusion was that knowing the main reason that students select accounting as a career gives no indication as to their future success in receiving an employment offer from an international firm. The successful students chose an accounting career for the same main reasons as did the unsuccessful students.

The Secondary Reasons

The same findings held true for the second and third most important reasons that students indicated in the selection of an accounting career. Table 33 shows the observed and expected number of responses for the second most important criterion in choosing an accounting career. Table 34 shows this information for the third most important criterion. Related responses were combined in the same manner as for the analysis of the primary reason, although slightly different combinations were required for each analysis.

In summary, the results of the analyses of the reasons that students considered in choosing a career in accounting indicate no association between the reasons and success in receiving an employment offer from an international accounting firm. Students who received employment offers from the international firms appeared to have values and attitudes similar to those students who did not receive employment offers. When all three tables were considered simultaneously, it was interesting to note that the

TABLE 33

Second Most Important Reasons for Selecting Accounting

Criteria	OFFER Observed	OFFER Expected	NON-OFFER Observed	NON-OFFER Expected
Availability/ Security	35	34.3	13	13.7
Salary	32	36.5	19	14.5
Experience/ Training	25	22.9	7	9.1
Advancement	14	14.3	6	5.7
Working with People	13	12.2	4	4.8
Status	9	7.9	2	3.1
	128	128.0	51	51.0

Chi-square test statistic = 3.42
Degrees of freedom = 5
P-value > 0.10

availability and security of accounting employment (whether with an international firm or not) were the main reasons considered by students who chose the field of accounting. Experience to be gained and training offered by the firms were generally the second most important considerations. Comments used to describe "other" reasons for choosing accounting reflected the view that accounting employment would be beneficial to entry into other areas of employment or law school. An unexpected finding of the survey was that the most frequently added primary reason for selecting accounting as a career dealt with the students' enjoyment/interest in the field or that the students wanted

TABLE 34

Third Most Important Reasons for Selecting Accounting

Criteria	OFFER Observed	OFFER Expected	NON-OFFER Observed	NON-OFFER Expected
Experience/ Training	29	26.5	8	10.5
Salary	26	24.3	8	9.7
Advancement	22	21.5	8	8.5
Status	15	13.6	4	5.4
Working with People	11	11.4	5	4.6
Availability	10	13.6	9	5.4
Security	10	12.2	7	4.8
	123	123.0	49	49.0

Chi-square test statistic = 6.60
Degrees of freedom = 6
P-value > 0.10

to accept the unique challenge offered by the profession of accounting.

HYPOTHESIS 8

The eighth specific objective of the study was to determine if the percentage of female accounting students who actually received employment offers from the international accounting firms was significantly different from this percentage for males. The purpose of testing Hypothesis 8 was to determine if there was evidence of discrimination (or reverse discrimination) in the granting (or not granting) of employment offers to female students by the international accounting firms.

The test conducted was the Chi-square test of homogeneity. Table 35 presents the observed and expected number of offers and non-offers for this analysis. The Chi-square test statistic of .54 (p-value > 0.10) indicates that no significant difference existed in the proportions of offers (and of non-offers) to male and to female accounting students. Thus, there appeared to be no discrimination or reverse discrimination on the basis of sex in this study.

TABLE 35

Chi-Square Test of Homogeneity

	OFFER		NON-OFFER		
	Observed	Expected	Observed	Expected	TOTALS
FEMALE	62	59.7	22	24.3	84
MALE	71	73.3	32	29.7	103
TOTALS	133	133.0	54	54.0	187

Chi-square test statistic = 0.54
Degrees of freedom = 1
P-value > 0.10

In view of the findings for Hypotheses 2, 3, 4, and 8, a general observation could be made that, while several underlying qualifications and personal characteristics differed for male and female accounting students, the offer of entry-level employment was made available to both male and female applicants in a non-discriminatory manner.

CHARACTERISTICS AND VIEWPOINTS

A general objective of the study was to present a composite of the typical accounting student who was successful in receiving an employment offer from the international firms. This is enhanced by a comparison to a composite of the typical unsuccessful accounting student. To augment the comparison, the presentation is separated into male and female students as appropriate.

The Successful and Unsuccessful Student

Table 36 presents the general characteristics for the successful and unsuccessful students without regard to sex. The average successful candidate in the study was able to earn an overall grade-point mean which was 0.35 points higher than his unsuccessful counterpart (3.54 - 3.19). A notable difference was the 0.50 higher accounting grade-point mean for the successful student (3.52 - 3.02). Membership in Beta Alpha Psi was also notably different for the two groups (81.2% - 40.7%). Each of these observations support the findings of the discriminant analysis discussed earlier.

One interesting distinction between the two groups was that the successful students, on the average, interviewed after completing a total of approximately 98 semester hours whereas the unsuccessful group had finished an average of only 84.5 credit hours. The difference represented almost a

TABLE 36

Selected Characteristics of All Candidates

		OFFER*	NON-OFFER*
Age:	Range.	20 - 36	20 - 36
	Mean	22.1	22.7
	Median	21.5	21.9
Overall GPA:			
	Range.	2.8 - 4.0	2.3 - 4.0
	Mean	3.54	3.19
	Median	3.54	3.21
Accounting GPA:			
	Range.	2.1 - 4.0	1.9 - 4.0
	Mean	3.52	3.02
	Median	3.53	2.99
Parental support for college.		55.0%	47.6%
Self support		23.5%	28.1%
Member of how many organizations.		3.0	2.5
Member of Beta Alpha Psi .		81.2%	40.7%
Member of sorority/ fraternity		35.3%	25.9%
Number of positions held in organizations		1.3	0.9
Accounting experience. . .		60.2%	53.7%
Meaningful work experience		85.7%	85.2%
Overall semester-hours earned:			
	A/B.	91.4	68.9
	C.	5.8	14.3
	D/Below.	0.7	1.6
	Total.	97.9	84.8
Accounting semester-hours earned:			
	A/B.	19.0	14.5
	C.	1.3	4.8
	D/Below.	0.5	0.9
	Total.	20.8	20.2
Number of:			
	Interviews	6.3	4.6
	Office visits. . .	4.1	N/A
	Offers	2.9	N/A

*N/A=not applicable.
Amounts are mean responses unless otherwise noted.

full semester of college credit. While the credit hours in accounting were similar (20.8 - 20.2), the implication was that students whose accounting grade-point average and other significant characteristics were marginal should, if possible, wait another semester in an attempt to improve their characteristics before interviewing. The breakdown of the total semester hours for the two groups revealed that successful students did perceptibly better in their overall college efforts and their accounting efforts.

Another distinction between the students receiving employment offers and those who did not was the mean number of interviews which each pursued. The successful students interviewed an average of 6.3 of the eight international accounting firms whereas the unsuccessful candidates interviewed 4.6 of the firms. The number of firms interviewed by the candidate can be roughly construed to be an indication of motivation.

Table 37 presents the general viewpoints of the successful and unsuccessful students in response to other selected questions of general interest to many accounting students. Each response was coded on the following scale: (1) clearly below average, (2) somewhat below average, (3) average, (4) somewhat above average, and (5) clearly above average. Consequently, the higher the value of the response, the higher the self-evaluation of the average respondent. For nineteen of the twenty items, the

respondents from both groups considered themselves above average. The viewpoints which differed to the largest extent were those for POISE, INITQ, INTQ, TR, and COMT, as defined in Table 37.

The successful candidates generally evaluated themselves higher than did the unsuccessful candidates. In the cases of POISE, INITQ, INTQ, and COMT, the evaluations tended to show a distinct self-ranking in favor of the successful students. (While the remarks being offered are of a general nature, it was noteworthy that some of these same variables also appeared in the discriminant models discussed previously.) INTQ, the intensity of questions asked by the interviewees, was the only viewpoint in which the composite for the unsucessful applicants was below average. This may be an indication that they generally believed their participation in the interviewing process was not totally effective. On the other hand, the willingness to travel by the unsuccessful students was distinctly above that held by the successful students. This was interpreted as an indication that the unwillingness to travel admitted by some students was not as counterproductive to their quest for employment with an international firm as thought.

The final viewpoint of interest was that the successful students were more critical of their interviewers than were the unsuccessful students. A larger per cent felt that at least one interviewer was having a bad day. Two

TABLE 37

Selected Viewpoints of All Candidates

	OFFER*	NON-OFFER*
PREP - preparation for interviews: study of firms, prepared questions, etc. . .	3.4	3.4
POISE - ease with which you handle interviews. . . .	4.0	3.6
COMM - ability to communicate.	4.0	3.8
INITQ - compared to other students, the number of questions or comments you initiated in the interview .	3.5	3.2
INTQ - compared to questions believed asked by others, the intensity of questions you raised	3.2	2.8
TR - your willingness to travel	3.1	3.4
COMT - based on your association with fellow accounting majors, your commitment to the accounting profession is.	3.7	3.3
From a business view:		
ATTR - your style of business attire.	4.0	3.8
PHYS - your physical attributes	3.8	3.7
HAIR - the style of your hair.	3.5	3.4
Students thought that interviewer was having a "bad" day.	69.9%	61.1%
Students felt that interviewer was unfair in his attitude, questions, etc.. .	51.9%	44.4%

*All amounts are mean responses.

explanations seem possible for this. Because the successful students tended to interview with more firms than did the unsuccessful students, this afforded them a greater opportunity to encounter such a situation. Also, the additional interviews for the successful students might have caused them to be less interested in the latter interviews, and perhaps more critical, especially if they had previously talked with their favorite firm or they had already received an emplcyment offer. While this might also have involved a certain amount of empathy for the interviewer, the predominant feeling probably was that he was not being an effective interviewer. A larger per cent of the successful students felt that the interviewer expressed an unfair attitude, question, or the like. Again, this may result from the fact that they tended to interview more firms; however, these findings contradicted to a degree the preconceived notion that the unsuccessful candidates may be somewhat bitter after not obtaining an employment offer from the international accounting firms and tend to place the blame on the interviewer. Since this was not the case, it bolstered the feeling that the students were not biased in their responses.

The Successful Male and Female Student

Shown in Table 38 is a comparison of the characteristics for the typical successful male and female accounting students. It was again noteworthy that the general observations which follow were supported to a large extent by the discriminant analysis.

The distinctions between the successful male and female students were not severe. A minor difference was that the female students reported more parental support for college expenses than did the male students; the male students reported twice as much self support as the female students did. However, this may indicate the existence of more spouse support for the married males. The females were more likely to be members of social organizations, and they tended to have more accounting experience which they acknowledged during the interviewing process.

The female accounting students tended to interview with slightly more international firms than did the male students (6.6 - 6.1). Perhaps because of this, the female students received slightly more invitations for office visits on the average than the males (4.3 - 3.9). The mean number of employment offers to the successful female student was identical to that for the male student. Thus, the qualified students, whether male or female, received a similar number of offers.

TABLE 38

Selected Characteristics of Successful Candidates

		MALES*	FEMALES*
Age:	Range	21 - 30	20 - 36
	Mean	22.1	22.0
	Median	21.7	21.3
Height:	Range	66 - 77"	59 - 70"
	Mean	70.7"	64.6"
Weight:	Range	125 - 280#	88 - 145#
	Mean	165#	117#
Overall GPA:	Range	2.8 - 3.9	3.0 - 4.0
	Mean	3.50	3.60
	Median	3.53	3.65
Accounting GPA:	Range	2.1 - 4.0	2.8 - 4.0
	Mean	3.50	3.57
	Median	3.49	3.59
Parental support for college		47.7%	63.2%
Self support		30.5%	15.4%
Member of how many organizations		2.8	3.6
Member of Beta Alpha Psi		85.9%	75.8%
Member of sorority/ fraternity		26.8%	45.2%
Number of positions held in organizations		1.0	1.6
Accounting experience		49.3%	72.6%
Meaningful work experience		87.3%	83.9%
Overall semester-hours earned:	A/B	92.2	90.5
	C	7.7	3.6
	D/Below	1.1	0.1
	Total	101.0	94.2
Accounting semester-hours earned:	A/B	19.8	18.1
	C	1.7	0.8
	D/Below	0.1	0.0
	Total	21.6	18.9
Number of:	Interviews	6.1	6.6
	Office visits	3.9	4.3
	Offers	2.9	2.9
Maximum salary offer		$16,816	$16,598
Minimum salary offer		$16,246	$16,260

*Amounts are mean responses unless otherwise noted.

One area of interest regarding employment with the international accounting firms was that of salary. The discussion to follow was based on salary offers in terms of 1980 dollars. The mean annual maximum salary offer for male students was only about $218 larger than that for female students. This was a difference of 1.3% if based on the mean maximum salary offer to female students. On the other hand, the difference between the mean maximum and minimum salary offers to the male students was about $570, a 3.5% difference based on the mean minimum offer to the male students. The mean minimum salary offer to female students was $14 larger than that for male students. In summary, the annual salary offers to male and female students were not markedly different. This points to no discrimination with regard to sex in the matter of salary offers.

Table 39 below presents the viewpoints to the questions of interest discussed earlier except that the responses from the successful students are divided into male and female responses.

The largest differences in viewpoint for male and female students who received employment offers from the international accounting firms pertained to INTQ and TR. The means for INTQ, the self-evaluation of the intensity of questions raised during the interview, indicated that the successful male students were, at least, of the opinion that they advanced more intense questions than the female

TABLE 39

Selected Viewpoints of Successful Candidates

	Mean Responses For MALES	Mean Responses For FEMALES
PREP	3.4	3.5
POISE	4.0	4.0
COMM	4.0	4.0
INITQ	3.6	3.5
INTQ	3.3	3.0
TR	3.0	3.4
COMT	3.7	3.8
ATTR	4.0	4.1
PHYS	3.7	3.9
HAIR	3.4	3.6
Interviewer was having a "bad" day	69%	71%
Interviewer was unfair in attitude, questions, and the like	45%	60%

students felt they did. The successful male respondents ranked themselves average as to their willingness to travel. The successful female respondents ranked themselves somewhat more willing to travel. This was perhaps due to their perception of travel as being an area of potential conflict in their attempt to secure an employment with an international accounting firm, or perhaps the female students were merely more willing to travel if the employment required it.

In the vast majority of cases, the employment offers made by the international accounting firms were for entry-level

work in the area of auditing. Table 40 shows the breakdown of the offers to male and female students by the specific area of entry. The total offers exceed the 133 indicated by the respondents because of the existence of multiple offers to individual students in that the student had a degree of flexibility in choosing to start, for example, in the auditing section or the tax section of the local office.

TABLE 40

Breakdown of Employment Offers by Areas of Entry

	MALE		FEMALE		TOTAL	
	Number	%	Number	%	Number	%
Auditing	68	82.9%	60	88.2%	128	85.3%
Tax	8	9.8	7	10.3	15	10.0
Management Services	4	4.9	0	0.0	4	2.7
Small Business	2	2.4	1	1.5	3	2.0
Total	82	100.0%	68	100.0%	150	100.0%

SUMMARY

Chapter 4 has presented the findings obtained from analyzing each of the specific research hypotheses for which meaningful analysis was possible. The results of testing Hypothesis 1, successful versus unsuccessful students, showed that the characteristics which discriminated between the students at the 0.050 level of significance were (1) AGPA, the accounting grade-point average, (2) POISE, the

ease of handling interviews by the students, and (3) BAP, membership in Beta Alpha Psi. Hypothesis 2 tested for significance the difference in the characteristics of successful male versus female accounting students. None of the factors which discriminated between students receiving offers and non-offers were found to discriminate between male and female students who received offers. The findings were that, at the 0.100 significance level, certain of the characteristics were more closely associated with female than male students. The most noteworthy findings were that successful female accounting students tended to have more accounting experience and held more elective positions than did their male counterparts.

Hypotheses 3 and 4 were tested to determine specific models by comparing the characteristics of successful males to unsuccessful males, and successful females to unsuccessful females. At the 0.050 level of significance, the discriminant function for male students indicated that the most significant variables which led to an employment offer were (1) BAP, membership in Beta Alpha Psi, (2) INTQ, the intensity of questions raised by the candidate during the interview compared to other students, (3) DEGREE, possessing another undergraduate degree, and (4) AGE (negative relationship), the age of the male candidate. As indicated, the only variable having a negative relationship with the employment offer for male students was the age of

the male candidate. The implication was that the older male candidates were less likely to receive an offer of employment than the younger male candidates.

For the female students, the discriminant function at the 0.050 significance level was composed of several significant variables. These were as follows: (1) AC (negative relationship), the number of accounting credit-hours for which the letter grade C was earned, (2) EAB, the number of English credit-hours for which the letter grades A and B were earned, (3) SCHOL, the percentage of college expenses paid by scholarship or grant, (4) HT, the height of the female candidate, (5) WT (negative relationship), the weight of the female candidate, (6) EC (negative relationship), the number of English credit-hours for which the letter grade C was earned, and (7) PARENT, the percentage of college expenses paid by parents. The main factors considered for the female candidates centered around surrogates for intelligence, appearance, and, perhaps, maturity.

Hypothesis 5 was designed to test for significant differences the characteristics of Caucasian and non-Caucasian students, all of whom received employment offers from the international accounting firms. The testing of Hypothesis 5 had to be abandoned because of the lack of sufficient responses. Thus, a comparison of the characteristics of successful Caucasian and non-Caucasian students could not be made and, therefore, no indication of

the significant differences could be made. No indication of discrimination or reverse discrimination was noted based on the observation that four of the five non-Caucasian respondents received employment offers, a proportion similar to that for Caucasians, however.

Hypothesis 6 tested for significance the relationship between the characteristics of successful accounting students and the magnitude of their maximum annual salary offer. The results indicated that, at the 0.050 level of significance, the following variables possessed the most significant positive impact on the salary offer: (1) AGPA, the accounting grade-point average, (2) BAP, membership in Beta Alpha Psi, and (3) INITQ, the number of questions and comments initiated by the candidate during the interview. The variables with the most significant negative impact on the magnitude of the salary offer were (1) LOAN, the percentage of college expenses provided by personal loan, and (2) EC, the number of English credit-hours for which the letter grade C was earned.

The test of Hypothesis 7 indicated that the students who were successful in obtaining an employment offer from the international accounting firms selected accounting careers for basically the same reasons as did the students who were not successful. The responses, however, showed that the criteria which were considered most highly were (1) the availability and security of employment, (2) the experience

and training to be received, and (3) the advancement and salary associated with the employment.

Hypothesis 8 tested the equality of the proportions of employment offers to females accounting students to that for males. The finding was that no significant differences existed; thus, no discrimination in terms of offers of employment was noted.

Chapter 4 concluded with a profile of the characteristics of the successful students compared to the characteristics of the unsuccessful students. Secondly, a comparison of the characteristics of the successful male students and the successful female students was presented. In conclusion, a breakdown of the employment offers by areas of entry to male and female students was given.

Chapter 5

SUMMARY AND CONCLUSIONS

This chapter contains the summary of the study conducted and the conclusions drawn from the results of testing each hypothesis. Additionally, the implications of the study are presented along with recommendations for future research.

SUMMARY

The underlying basis for this study was the desire of many accounting students to gain employment with the international accounting firms. The need for the study was supported by the needs of the students and the firms to identify the characteristics which qualify the students for entry-level employment. The offer of employment by the international firms results from the interaction of many variables, some of which are beyond the control of the students. However, students who possess and strengthen the important characteristics, over which they do exert some control, logically stand a better chance of receiving an employment offer. Accounting firms which are aware of the specific measures of the characteristics that are associated with students who have been offered employment in the past

are in a better position to analyze how to improve the quality of these measures and the speed and cost used to capture them. Accounting faculty who are aware of these characteristics can better evaluate and advise their students in terms of their potential to receive an employment offer from an international firm.

To identify the characteristics sought by the international firms, the campus and office interviewing process of the international firms and the characteristics sought in applicants for employment were reviewed. The characteristics selected for this study were chosen following a review of the literature, surveys of and discussions with recruitment personnel for some of the international firms, a review of candidate evaluation forms used by the firms during the interviewing process, and an inspection of the recruitment files maintained by an office of one of the international firms. A questionnaire was designed to capture measurements of the selected characteristics. The questionnaire was divided into five sections to acquire information related to personal data, activities, academic data, self-evaluation data, and interview data from and about a sample of students who had recently completed the interviewing process. The questionnaire was completed by 187 students representing eight universities from the southwest region and one university from the midwest region of the United States.

The research hypotheses were developed from the following objectives:

(1) to identify the specific measures of the characteristics of accounting students which statistically had a significant impact on the receipt of an employment offer from an international accounting firm;

(2) to determine if there was a significant difference in the characteristics of male accounting students and female accounting students who were offered employment by the international firms;

(3) to identify the specific measures of the characteristics of male accounting students which significantly differed for those who received and did not receive entry-level employment offers from the international firms;

(4) to identify the specific measures of the characteristics of female accounting students which significantly differed for those who received and did not receive entry-level employment offers from the international firms;

(5) to determine if the characteristics for entry-level employment with the international firms differed significantly for Caucasian and non-Caucasian accounting students;

(6) to identify the specific measures of the characteristics of accounting students who received employment offers from the international firms which significantly related to the magnitude of their annual salary offers;

(7) to determine if the reasons for selecting an accounting career significantly differed for students who received an entry-level employment offer from the international firms compared to those who did not;

(8) to determine if the percentage of female accounting students who received employment offers from the international accounting firms was significantly different from this percentage for males;

(9) to determine a general profile of the characteristics, the self-evaluation data, and the viewpoints on selected topics for the accounting students who were successful in receiving

an entry-level employment offer from the international firms.

Discriminant analysis was selected to test research hypotheses 1 through 5, while multiple regression was applicable to Hypothesis 6. Chi-square tests of independence and homogeneity were used to test Hypotheses 7 and 8, respectively. Objective 9 was accomplished by presenting the characteristics, viewpoints, and self-evaluation data in the form of ranges, means, and percentages. The independent and dependent variables selected for use in attempting to test Hypotheses 1 through 8 were discussed and defined, and discussions were given concerning the collection of data and the selection of the universities and student samples used in the survey and analyses.

An attempt was made to present the findings for each research hypothesis in such a way as to combine their statistical interpretations with their practical interpretations. This included the presentation of the variables and their coefficients for each model derived. Where applicable for the discriminant analysis, the predictive ability of the models was considered by the presentation of hit ratios at various levels of significance for the analysis sample and holdout sample. The external validity was considered, where appropriate, by applying the models to the external sample and presenting the resulting hit ratio.

CONCLUSIONS

The results obtained from testing each of the research hypotheses are presented below. All hypotheses tested by discriminant analyses are discussed in terms of the significant variables noted and the predictive ability of the related models.

Hypothesis 1

The specific variables which differed at the 0.050 level of significance for successful and unsuccessful accounting students seeking employment with the international firms were: (1) AGPA, the accounting grade-point average, (2) POISE, the ease with which they handled interviews, and (3) BAP, membership in Beta Alpha Psi. These measures can be interpreted to represent, respectively, the underlying characteristics of (1) intelligence, technical competence, motivation, and ambition; (2) the ability to communicate, personality, maturity, bearing (manner, poise, attitude, and self-confidence); and (3) sociability and interest in group-oriented activities (in addition to above-average academic performance).

The discriminant model including these three variables correctly predicted 112 (90.3%) of the 124 students in the southwest survey who actually received employment offers from the international firms, while only 124 of the 172 students in the survey (72.1%) were successful. The same

model correctly predicted 25 (52.1%) of the 48 students who were unsuccessful in obtaining employment offers from the international firms, compared to 48 (27.9%) of the 172 students who were unsuccessful. Thus, the model performed reasonably well in the case of both successful and unsuccessful students.

Hypothesis 2

The attempt to determine if there was a significant difference in the characteristics of male and female accounting students who received employment offers from the international firms resulted in a model which contained none of the variables found to be significantly different in Hypothesis 1. The variables for Hypothesis 1 were those which significantly differed for successful versus unsuccessful accounting students. The omission of all these variables from the model derived for Hypothesis 2 implied that the standards used to determine employment offers were essentially the same for both male and female accounting students. However, certain of the variables were significantly different for the successful males and females. The successful females tended to do better in English courses, have more accounting experience, and hold more elective positions than did their male counterparts.

Hypothesis 3

The specific variables which differed at the 0.050 level of significance for successful and unsuccessful male accounting students seeking employment with the international firms were as follows: (1) BAP, membership in Beta Alpha Psi, (2) INTQ, the self-evaluation by the male students concerning the intensity (putting the interviewer on the spot) of the questions asked compared to the questions believed to be asked by other students, (3) DEGREE, holding another undergraduate degree, and (4) AGE.

Membership in Beta Alpha Psi was viewed as evidence of interest in group-oriented activities, sociability, and evidence of above-average academic performance. Being a member of Beta Alpha Psi also can be viewed as having the opportunity to interact with the professional personnel of the international firms when attending professional and social events. This opportunity may have proved to be beneficial during the course of interviewing when the student was fortunate enough to be interviewed by an individual with whom he was familiar. INTQ was interpreted as evidence of the student's ability and willingness to conduct meaningful conversations, such as those required frequently when dealing with public accounting clients. Holding a previous undergraduate degree while seeking an undergraduate degree in accounting was interpreted as an indication of motivation (in seeking the additional degree)

and maturity (both in terms of age and in seeking a more active or desirable area of employment). The variable AGE had a negative coefficient in the model for male students. This implied that the older male applicants appeared to be less likely to receive an employment offer from the international firms than were the younger male applicants. Discussions with the recruitment personnel disclosed that age was not generally considered a negative factor unless the candidate for employment was about thirty or more years of age. The reasons for this were reported to be the inability of the firm to recover its investment in the employee (especially in the instance in early retirement), and the potential for dysfunctional relations between a younger supervisor and an older, perhaps more experienced, subordinate. In total, the model for male students can be viewed to emphasize the characteristics of motivation and maturity, except in terms of years; the ability to communicate effectively; and the tendency to engage in group-oriented activities.

The discriminant model for male accounting students at the 0.050 significance level correctly classified 61 (88.4%) of the 69 male students who actually received employment offers. Only 69 (71.1%) of the 97 male students received offers. The model also correctly classified 23 (82.1%) of the 28 male students who did not receive employment offers. Only 28 (28.9%) of the 97 male students did not receive

offers. Thus, the model did well in classifying both successful and unsuccessful male students.

Hypothesis 4

The specific variables that differed at the 0.050 significance level for successful and unsuccessful female accounting students seeking employment with the international firms were the following: (1) AC, the number of credit hours for which the female students earned the letter grade C in accounting courses; (2) EAB, the number of credit hours in non-literature English courses for which the student earned the letter grades A and B; (3) SCHOL, the percentage of college expenses paid by scholarship and grant; (4) HT, height of the applicant; (5) WT, weight of the applicant; (6) EC, the number of credit hours in non-literature English courses for which the female students earned the letter grade C; and (7) PARENT, the percentage of college expenses paid with parental support.

Both AC and EC had negative coefficients, which implied that the more C's the female students received, the less likely they were to gain an employment offer. EAB, or the more A's and B's earned in English courses, had a positive relation to the employment offer. AC and EAB were interpreted to represent intelligence, technical competence, motivation, and ambition. EAB and EC were interpreted to represent the ability to communicate correctly, especially

in written form. EAB and EC also were considered surrogates for intelligence.

Taken together, height and weight represent the underlying characteristic of physical appearance. Height had a positive relation while weight had a negative relation to the employment offer. The conclusion was that appearance played an important role for the female.

Both SCHOL and PARENT identified sources for the payment of college expenses which were significantly related to the employment offer for female students. The importance of each was interpreted to be that, because the student was not required to earn money to pay college expenses, more time was available for study.

The inclusion of seven variables in the discriminant model was interpreted as evidence that the characteristics sought in female students were not currently as sharply defined as those sought in male students. This was somewhat supported by the similarity between the model for students in general (Hypothesis 1) and male students only (Hypothesis 3). The dissimilarity of the model for females from each of these was seen as an indication that the role-model for females is in a state of evolution.

The discriminant model for female students at the 0.050 level of significance correctly predicted 53 (96.4%) of the 55 female students who received employment offers. Fifty five (73.3%) of the 75 female students received employment

offers. The model also correctly classified 13 (65.0%) of the 20 female students who did not receive employment offers; only 20 (26.7%) of the 75 female respondents did not receive employment offers. Thus, the model did reasonably well in predicting successful and unsuccessful female students.

Hypothesis 5

The attempt to compare the characteristics of successful Caucasian and non-Caucasian students was thwarted by the severely limited responses and representation of non-Caucasian accounting students. While four of the five non-Caucasian respondents did receive employment offers, no meaningful analysis could be made.

Hypothesis 6

The specific variables which were positively related to the magnitude of the annual salary offers at the 0.050 significance level were as follows: (1) AGPA, the accounting grade-point average; (2) BAP, membership in Beta Alpha Psi; and (3) INITQ, the self-evaluation response by the successful students as to the number of questions or comments initiated by the students during the interview compared to the number believed to be initiated by other students. The variables which were negatively related to the size of the salary offer were (1) LOAN, the per cent of

college expenses paid by personal loan for the student, and (2) EC, the number of hours in non-literature English courses for which the letter grade C was earned.

These variables indicated that intelligence, technical competence, motivation, ambition, and the willingness to engage in meaningful conversation by the respondents had a positive relationship to the salary offer received with the employment offer. Another finding was that the variables which impacted on the offer of employment also impacted on the size of the salary offer. Thus a student who is so inclined can work toward maximizing both of these opportunities simultaneously.

Hypothesis 7

The comparison of the reasons that students consider in selecting an accounting career to their success in receiving an employment offer from an international firm indicated no association between the two. Students who received employment offers appeared to have values and attitudes similar to students who were not successful in their search for employment with the international firms. The availability of employment in accounting and the security of employment in accounting were found to be the two most prevalent reasons for selecting a career in accounting.

Hypothesis 8

No indication of discrimination in the granting of employment offers to students on the basis of sex was found as a result of this study. The variables found to be significant for successful females were not the same as those found to be significant for successful males, however. The conclusion was that, while the criteria were somewhat different in choosing between male and female recruits, there appeared to be no significant difference in the percentage of offers (and non-offers) to the interviewing male and female students.

Profile

A general presentation was made of the responses to selected questions and characteristics of interest by respondents to the survey. The responses were separated between successful and unsuccessful recruits and also between successful male and female recruits. The characteristics and viewpoints which were observed to display the most distinct differences in means for the two groups were generally the same variables which were significantly different based on the discriminant analysis for the same groups.

In particular, the average successful candidate had an overall grade-point average of 3.54 while the accounting grade-point average was 3.52. Successful candidates tended

to be more group oriented than were the unsuccessful candidates; on the average, successful recruits were members of more organizations, including Beta Alpha Psi and social fraternity/sororities. Successful recruits tended to hold more elective positions and to have more relevant accounting experience.

The successful recruit interviewed with the international accounting firms after completing an average of ninety-eight semester hours of college credit whereas the unsuccessful candidate had completed an average of only eighty five. The successful recruit in this study interviewed an average of 6.3 international accounting firms as opposed to an average of 4.6 firms for the unsuccessful candidate. On the basis of 6.3 campus interviews, the successful recruit in this study was invited to visit an average of 4.1 offices and was granted 2.9 employment offers.

Comparison to Other Studies

The findings of this study support in general the findings of the other studies discussed in Chapter 2. The Blitstein study (Table 1) found oral communication skills, personality, and poise to be important factors in obtaining general business employment. These factors were perhaps captured in the students' rankings of their ease in handling interviews (POISE) and the intensity of their interview questions/comments (INTQ). These variables were common to the models derived for both Hypotheses 1 and 3.

On the other hand, Blitstein found the grade-point average to be of relatively low importance for business students whereas this study found AGPA, the accounting grade-pcint average (Table 16), to be the most significant variable for accounting students. Table 2 from the Adams study shows that accounting students believe that academic performance and the ability to communicate to be important. This agrees with the findings that AGPA, POISE, and INTQ, are significantly different for successful and unsuccessful candidates. Student perceptions and the model for females in Hypothesis 4 (Table 27) both included appearance as a factor.

The Seaton and White study indicates that ambition, personality, and grades are important traits sought by CPA firms of all sizes (Table 3). This study supports the importance of grades by the inclusion of AGPA and/or BAP (membership in Beta Alpha Psi) in the models for Hypotheses 1 and 3 (Table 21). Ambition was perhaps captured in AGPA or grades in general as noted by Seaton and White.

It was interesting to note that the responses from the author's survey of recruiters (Tables 4 and 5) agree rather well with the statistical conclusions of this study. Thus, a general conclusion is that the recruiters for the international accounting firms actually do consider the characteristics which they acknowledge as important in granting employment offers. Furthermore, these

characteristics are captured in their candidate evaluation forms.

Limitations

The conclusions reached as a result of discriminant analysis in this study are subject to considerable limitations as discussed here and elsewhere in the paper. The number of sample cases relative to the number of variables, the presence of nonnormality and multicollinearity among the predictor variables, the inequality of group covariance matrices, and the use of linear discriminant and regression computer packages cause the conclusions to be less than optimal. However, the procedures used were assumed to yield conclusion which were approximations of reality in view of their similarity to other studies.

IMPLICATIONS

While the conclusions of this study are subject to certain limitations, the implications are evident. In general, if a student desires to improve the probability of receiving an employment offer from an international accounting firm, the student should attempt to improve the accounting grade-point average to qualify for possible membership in Beta Alpha Psi. Furthermore, the student should take advantage of the professional and social

functions offered by Beta Alpha Psi and the international accounting firms so as to come into contact with as many as possible of the recruiters for the firms. Additionally, every effort should be made by the student to improve interviewing techniques, whether through study or mock interviews.

No significant differences were noted in the granting of employment offers to male versus female students, both in terms of the salary offers and the proportion of offers between the two groups. However, different characteristics were found to be emphasized for both males and females. The male student who wishes to enhance his employment potential should become familiar with the firms' brochures, office locations, and perform other pre-interview study so as to offer relevant, intense questions and comments during the interview. In addition, he should become a member of Beta Alpha Psi for the reasons mentioned earlier. The female student should attempt to maximize her appearance in a way considered desirable by the business community. She should also try to present evidence of good grades in the area of English as well as accounting.

Several of the same factors which were significantly different for successful and unsuccessful candidates were also associated with the size of the salary offer for the successful candidates. Thus, a student should again maximize the accounting grade-point-average and membership

in Beta Alpha Psi so as to maximize the related salary offer. By initiating a reasonable number of worthwhile comments and questions during the interviewing process, a student appears to be positively affecting the salary offer. Holding elective positions of responsibility appears to be positively related to the salary offer.

The findings related to the reasons that students choose a career in accounting indicated no relationship with the students who were successful in receiving an employment offer and those who were not. The findings indicate that students are concerned mainly with the availability and security of employment in accounting, and to a lesser extent with the experience and training to be gained by the employment. The implication is that all accounting students are concerned with having meaningful employment which will maintain or increase their job mobility.

The results of this study indicated that there was a significant difference in the characteristics and qualifications of accounting students who were successful versus unsuccessful in receiving an employment offer from an international accounting firm. If one can assume that the differences were responsible for the offer of employment, the forewarned student could concentrate on enhancing these factors so as to improve his employment and salary potential. The student should note that several factors were found to be significantly different for the successful

student, not merely "grades." The results of this study should encourage many students to broaden their selection of elective courses to prepare themselves for employment other than in public accounting if indications are that they are not best suited to meet the specialized qualifications for public accounting.

Accounting faculty members, especially those who have advising responsibilities, should be able to offer better recommendations to students concerning course selections. A further implication to the faculty is that, since the accounting grade-point average is so significant, every effort should be made to maintain its integrity.

The implication to the international firms is that the findings suggest a guide to refining the interviewing process. To a certain extent, this refinement may have already begun. Some of the international firms use high academic achievement (e.g. the accounting grade-point average) as a constraint in selecting among students interested in interviewing.[49] It is probable that an increasing number of constraints such as this will be imposed by the international firms.

A study of this nature may prove to be self-fulfilling as well as self-defeating. It is the conventional wisdom that grades are an important factor in receiving an employment

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[49] "Practitioners Forum: On-campus Recruiting by CPA Firms," The Journal of Accountancy, Vol. 152, No. 2, August, 1981, pp. 29-30.

offer. However, grades can be affected by the prudent selection of specific courses and instructors. The implication to the reader is that grades represent evidence both of the existence of intelligence and technical competence. If all students who interview have good grades, the interviewer must use other, perhaps more objective, measures of intelligence and technical competence. In all cases, grades alone are an insufficient criterion for employment.

RECOMMENDATIONS FOR FUTURE RESEARCH

Several suggestions can be made to improve and expand a study of this type. As indicated in Appendix C, the models derived in the discriminant analyses and the multiple regression are linear models. Quadratic models might provide stronger results. An improvement might result from the initial use of factor analysis in an attempt to reduce the number of variables used in the analyses.

An extension of the study would be the inclusion of graduate students in the samples. A larger sample, especially one which includes more non-Caucasians, might also make the analyses more meaningful.

While this study involved students from a limited number of universities, it should be expanded to include students from other areas of the United States. A similar study could be undertaken to derive discriminant models for

individual universities as opposed to a model involving several universities. Similar studies could be undertaken to derive models for each of the eight separate international accounting firms, if the benefit would exceed the cost.

A final suggestion would be the extension of this study to cover other areas of employment available to accounting students, such as offers of employment by regional and local accounting firms, specialized industries, and governmental agencies.

APPENDICES

Appendix A

CORRESPONDENCE

Letter to Local Offices of International Accounting Firms

BUSINESS ADMINISTRATION BUILDING
Fayetteville, Arkansas 72701

UNIVERSITY OF ARKANSAS · College of Business Administration

As an accounting educator, I am sometimes asked by accounting majors, "What are the characteristics that accounting firms are looking for in a new employee?" This question and similar questions are frequently asked by the better accounting majors in an attempt to improve their opportunities of getting a position with a big eight firm. In fact, a questionnaire developed by members of Beta Alpha Psi was submitted to representatives of seven of the big eight firms to serve as a basis for panel discussion. The questionnaire contained twenty-two areas of interests and the second question was, "Of those (accounting majors) extended job offers, how do they differ from those not extended job offers?"

This is precisely the question I am attempting to answer. Enclosed is a copy of the synopsis of my proposed study. In an effort to make certain that I include all of the characteristics of accounting majors that you consider to be important, I am requesting your help in two ways.

First, I ask that you provide me with a list of the main characteristics you consider when evaluating an applicant. If possible, please indicate the order of their importance; that is, indicate what you consider to be most important, second most important, and so on. If you prefer, you can request opinions from others in the Little Rock office that are involved in the recruiting process. From your response and those of others, I hope to include all pertinent traits in the study. Also, could you please send me a blank copy of your candidate evaluation form used in campus interviews?

I am seeking assistance from the chairmen of the accounting departments at the universities to be included in my study. I am asking them to request that the accounting majors, who interviewed this past fall (1978) and spring (1979), sign a waiver allowing me to review their information files in the offices of the big eight firms with whom they interviewed. Your assistance is needed, as you can see. For example, if I am able to obtain the signatures of the students on a statement

which releases your firm of any responsibility concerning confidentiality of the information contained in the interview files for the students, and if I obtain a cover statement from the department chairmen attesting to the authenticity of the signatures, do you see any problems with my reviewing the files of the students involved in your office under your supervision? I will be solely responsible for the information and the manner in which it is employed in my study. To be certain, no individual student, university, accounting firm, or office location (city or state), will be divulged. The purpose of my study is to statistically identify the characteristics of an accounting student that receives a job offer versus a student who does not. And the best source of these data is the interview file.

Along this line, do you maintain interview files for students to whom you choose not to make an offer of employment? If so, are they available for both the fall (1978) and spring (1979) interviews?

Thank you for your time and consideration. I assure you that I will treat all information in the strictest of confidence. If you have any questions about me, I encourage you to contact Dr. James Modisette, Chairman of the Accounting Department, at the University of Arkansas in Fayetteville. As you may notice from the enclosed synopsis, he is a member of the committee supervising this study. Chairman of the committee is Dr. Doris Cook, past national president of Beta Alpha Psi. If you have any questions concerning what I need, please call me collect at the University of Arkansas (575-4051) or at my home (521-6581 after 5:00).

Sincerely,

John M. Alvis

John M. Alvis
Accounting Instructor
University of Arkansas

Enclosure

Synopsis of Study

UNIVERSITY OF ARKANSAS
COLLEGE OF BUSINESS ADMINISTRATION

John M. Alvis Dissertation Proposal:

A dissertation committee consisting of Professor Doris M. Cook, Chairman, Professor James P. Modisette, and Professor Thomas W. Jones has been appointed to direct the dissertation of John M. Alvis. The topic and a summarization of the tentative proposal are as follows:

AN EMPIRICAL INVESTIGATION OF SIGNIFICANT PERSONAL CHARACTERISTICS AFFECTING EMPLOYMENT OFFERS TO ACCOUNTING GRADUATES FROM INTERNATIONAL ACCOUNTING FIRMS

Purposes: The principal purposes of this study are as follows:

1. To serve as a basis for faculty advice to students concerning the procurement of employment with international accounting firms;
2. To serve as a benchmark for self-evaluation by students in their pursuit of employment with international accounting firms; and,
3. To serve as a rudimentary guide for accounting firms that wish to reduce the qualitative facet of professional staff selection.

The purposes of this study will be accomplished by identifying through empirical research the statistically significant characteristics which result in offers of employment to accounting majors by international accounting firms. Through the use of multiple discriminant analysis, an attempt will be made to dichotomize a population of recent accounting majors who interviewed with at least one of the eight largest international accounting firms headquartered in the United States. Within the subset of students who were offered positions by the accounting firms, multiple regression will be used to identify the significant variables affecting starting salaries. Among other statistical tests, analysis of variance will be employed to identify significant differences between the students who were offered accounting positions and those who were not.

Justification: Many of the better accounting students are interested in obtaining employment experience with a major public accounting firm. As a result they are concerned with emphasizing those attributes in which the accounting firms seem most interested. In addition they frequently seek advice and direction from the accounting faculty in their quest for accounting employment. While there is general agreement as to the usual factors considered important by the accounting profession, there has been no definitive

study to identify the relative importance of these factors. Such a study would serve both as a basis for faculty conferences with students concerning entry into the accounting profession, and as a benchmark against which a student might compare his personal qualifications in an attempt to gauge his progress toward the achievement of employment with a major accounting firm. It is hoped that a student who finds himself at the early end of his academic career would be able to direct his efforts in such a way that he would be able to emphasize those characteristics which, based on this empirical research, should improve his probability of acquiring the desired employment.

Research Plan: The following plan provides a tentative approach to the dissertation:

1. Chapter one introduces the study by presenting the nature of the problem, hypotheses to be tested, objectives of the study, research methodology, justification, and limitations of the study.
2. Chapter two is a review of the characteristics selected for the study and the results contained in related studies.
3. Chapter three presents a discussion of the research methodology used in the study.
4. Chapter four is a presentation and analysis of the findings from the research.
5. Chapter five contains the summary, conclusions, and recommendations for further research.

Letter to Accounting Department Chairmen

BUSINESS ADMINISTRATION BUILDING
Fayetteville, Arkansas 72701

UNIVERSITY OF ARKANSAS · College of Business Administration

Many accounting majors are interested in obtaining employment with a Big Eight firm. I am conducting a study which is designed to assist these students in assessing and improving the likelihood of receiving such an employment offer.

In gathering the data to be used, I need your assistance. Please have the enclosed letter read to your senior-level accounting classes. The letter is a request that all accounting majors who have interviewed with one or more Big Eight firms permit the firms to grant me access to the students' recruitment files. From the information in the file, I hope to be able to identify and test the characteristics of the students who are offered Big Eight employment as compared to the characteristics of students who interview but receive no offer of employment. While the results of the study will not benefit the current accounting seniors, the results should aid future accounting majors. To insure confidentiality, no student, university or accounting firm will be identified in the study.

Please return the student forms to me in the stamped-addressed envelope enclosed for that purpose. If there is a need for more forms, please reproduce as many as required and bill me for them. Will you please sign and return the enclosed statement concerning the authenticity of the student signatures? I ask this in an effort to encourage participation by the Big Eight firms. I would feel honored to provide your department with the results of the study if you wish to participate and if you desire the results.

Your assistance will be greatly appreciated.

John M. Alvis

John M. Alvis
Accounting Instructor
University of Arkansas
(501)575-4051

Enclosures.

Student Waiver Form

I hereby authorize, in compliance with any applicable federal and/or state law, that John M. Alvis, instructor of accounting at the University of Arkansas, be allowed access to the information contained in the recruitment file maintained in your office concerning my interview with your firm in either fall 1978 or spring 1979.

I relieve your firm* of any and all responsibility related to the use of the information which Mr. Alvis selects to include in tests for the study, tentatively entitled, An Empirical Investigation of Significant Personal Characteristics Affecting Employment Offers to Accounting Graduates from International Accounting Firms.

I further stipulate that Mr. Alvis alone is responsible for the use to which the information included in the above-named study is placed. It is my understanding that no individual person, university or accounting firm will be identified in the study.

Signed:_____ Date:_____

University:_____

For purposes of the study, please complete the following:

*Check Big Eight Firm Interviewed (Please indicate the city and state of offices interviewed):

____1. Arthur Andersen & Co.
City_____State_____

____2. Coopers & Lybrand
City_____State_____

____3. Deloitte, Haskins & Sells
City_____State_____

____4. Ernst & Ernst
City_____State_____

____5. Peat, Marwick Mitchell & Co.
City_____State_____

____6. Price Waterhouse & Co.
City _____State_____

____7. Touche Ross & Co.
City_____State_____

____8. Arthur Young & Co.
City_____State_____

Height:____Ft.____Inches Weight:_____Pounds
Sex:_____Male_____Female Age:_____Years

Racial-Ethnic Category:_____American Indian or Alaskan Native
_____Asian or Pacific Islander
_____Black, Non-Hispanic
_____Caucasian, Non-Hispanic
_____Hispanic

In the event that information not available in the recruitment files is needed, the address at which I may be reached during 1979 is:

NAME _____
STREET _____
CITY, STATE, ZIP CODE _____

Departmental Attestation Form

To whom it may concern:

The enclosed waivers signed by students at (the University of Arkansas) have been duly signed by the proper student under my supervision or that of my representative.

Signed: _____

Position: _____

Institution: _____

Date: _____

_____ Please initial here if your department would be interested in the results of the proposed study.

Letter to Beta Alpha Psi

UNIVERSITY OF KENTUCKY
LEXINGTON, KENTUCKY 40506

COLLEGE OF BUSINESS AND ECONOMICS
DEPARTMENT OF ACCOUNTING

PHONE: (606) 257-1676

Dear Beta Alpha Psi President:

You and I can perform a meaningful service for future accounting majors. As you know, many accounting majors desire employment with one of the Big Eight firms. Many of these students wonder what characteristics the Big Eight firms use to distinguish among their recruits.

For my doctoral thesis, I am attempting to review the entire recruiting process used by the Big Eight firms. Part of my research, and what I consider most important, is to test statistically the traits of recruits who actually receive an employment offer from the Big Eight firms. In order to make the results meaningful, I need a sample of the accounting majors who will be interviewing with one or more Big Eight firms this fall.

Let me emphasize at this point that, while my study is designed to include students from nine universities, no individual student or university will be in any way identified in the results of my study. Also, I am making no attempt to distinguish between the different Big Eight firms. My purpose is to identify the characteristics that these students possessed in common so that they were offered employment with a Big Eight firm.

So that I may know the population of students with which I am working, please estimate for me the number of accounting majors who will be interviewing with the Big Eight firms this fall. May I suggest that you ask the assistance of the professors who teach upper-level courses (e.g. auditing)? Request them to take a minute of class time to make a rough count of all accounting majors who will interview with a Big Eight firm, this fall. With this information I can determine a proper sample size. (Please include all accounting majors, not just Beta Alpha Psi members and ask students to be included only once.)

Later this year (around December or January) I will be sending you a short questionnaire for a sample of these students to complete. Actual completion will not be possible until January when some offers by Big Eight firms are made. In the meantime, I will be completing a pretest to determine that my questionnaire provides valid results.

May I suggest the following procedure for administering the questionnaire?

1. Let's try to disrupt accounting classes and the Accounting Department office work as little as possible.

2. Ask the volunteer students to complete the questionnaire outside of class at their convenience. To encourage prompt completion of the survey:

   (a) Make the announcement below on Monday and Tuesday at the start of senior-level accounting classes that will include many of the students we are trying to survey. This should allow completion of the survey in one week.

   (b) Ask the students to write on the front of the questionnaire the date and location for the return of the questionnaire.

      (1) I suggest that the date be the next class meeting.

      (2) There are two possible locations that seem appropriate for return of the questionnaires:

         (i) To the classroom at the next class meeting. (This will require that you make an extra effort, but it should prove to be most efficient.)

         (ii) To a box or basket in the Accounting Department (with their approval).

Enclosed with the questionnaires are addressed, stamped envelopes for their return. If you need more postage or have some questionnaires to be returned late after the others have already been mailed, I will gladly reimburse any extra costs you incur on my behalf.

If you have any questions, please feel at ease to call me collect at (606) 258-2466 (work) or (606) 223-1996 (home). I hope you sense the importance of this survey to future accounting students and to the faculty members who advise them. I also hope you realize how much your assistance is needed and appreciated.

I sincerely thank you.

For a better Profession,

John M. Alvis

John M. Alvis, CPA
Accounting Instructor

Enclosures

Class Announcement

PLEASE ANNOUNCE

"Beta Alpha Psi is aiding the completion of a survey of undergraduate accounting majors. The survey is designed to gather information about the characteristics of accounting majors that prove to be most critical in the interview process with the Big Eight accounting firms. Since the survey is concerned with characteristics, no student will be in anyway identified in the study.

"In order to gather the information, we are asking for volunteers to complete a twenty-minute questionnaire. We need volunteers with the following characteristics:

1. undergraduate accounting majors
2. not just Beta Alpha Psi members
3. students who have already interviewed with one or more Big Eight accounting firms, whether or not they received an employment offer.

"Please complete the questionnaire fully and return it to _____ (location) by _____ (date). The results of this study should help future accounting majors in their pursuit of employment with a Big Eight firm. The results of this study will be made available to our Department of Accounting because of your help."

NOTE: After distributing the questionnaire in class, repeat the date and location for return of the questionnaire.

Letter to Respondents

Dear Participant:

Thank you for helping with this survey.

Let me take a moment to explain the purpose of this study. Since many undergraduate accounting majors view Big Eight employment as a significant professional experience, I am attempting to identify the characteristics held in common by a sample of students who have recently interviewed with the Big Eight accounting firms. The information supplied by you and hundreds of other respondents at several universities will be compiled and statistically analyzed.

By including input from perhaps a thousand students, both those who were successful and unsuccessful in receiving offers of Big Eight employment, I hope to be able to specifically identify the characteristics which lead to an offer of Big Eight employment. Your help, whether you received a Big Eight offer or not, is indispensable. Please take a few minutes to answer the following questionnaire completely. As you will see, it deals with personal and academic traits, attitudes, and interview information.

The Big Eight accounting firms to be considered in this study are the following:

Arthur Andersen & Co.	Peat, Marwick, Mitchell & Co.
Coopers & Lybrand	Price Waterhouse & Co.
Deloitte, Haskins & Sells	Touche Ross & Co.
Ernst & Whinney	Arthur Young & Co.

Please answer the questionnaire fully. Incomplete data can cause the study to be useless. Hopefully the results of this survey will help future accounting majors to improve their chances of Big Eight employment. I will provide the accounting department at your university with a summary of my findings because of your help.

Thanks again.

For a better profession,

John M. Alvis

John M. Alvis, CPA
Accounting Instructor

Request for Candidate Evaluation Forms

UNIVERSITY OF KENTUCKY
LEXINGTON, KENTUCKY 40506

COLLEGE OF BUSINESS AND ECONOMICS
DEPARTMENT OF ACCOUNTING

I am currently doing some research in the recruitment process conducted by the Big Eight firms as it relates to accounting students who are candidates for entry-level positions. Enclosed is a short description of the campus interview and the office visit as I perceive them.

Would you please glance over my description to see if I am in error? The description relates to a typical interview. Please make corrections on the enclosed copy as you see fit.

Attached to my description of the campus and office visits are three questions that I need for you to answer. Please return the information in the stamped, addressed envelope enclosed for your use.

Thank you for your time. I look forward to seeing you during the fall semester at the University of Kentucky.

Sincerely,

John M. Alvis

John M. Alvis
Accounting Instructor

JMA:bjw

1. During the office visit, do you specifically attempt to observe any characteristics in the candidates for employment other than those noted during the campus interview? If so, please describe.

2. Please describe the training, if any, that your recruitment personnel receive to aid them in the interviewing process.

3. Would you send me the candidate evaluation forms that are used for the campus and office interviews?

Appendix B

QUESTIONNAIRE

A. PERSONAL DATA

1. Name (please print) _____

2. Permanent home address (street) _____
   (city, state, zip code) _____

3. Permanent phone number: area code ( ) _____

4. Age _____ years

5. Sex (check one) _____ male _____ female

6. Height _____ feet _____ inches

7. Weight _____ pounds

8. Married (check one) _____ yes _____ no

9. Do you have any perceivable physical handicaps? (check one) _____ yes _____ no

10. Racial-Ethnic Category: (check one)
    _____ American Indian or Alaskan native
    _____ Asian or Pacific Islander
    _____ Black, Non-Hispanic
    _____ Caucasian, Non-Hispanic
    _____ Hispanic

11. Indicate the method(s) you have used to pay your college expenses:

	Per Cent
Parental support	_____
Personal loan	_____
Scholarship, grant	_____
Worked your way through	_____
Other (describe): _____	
_____	_____
Total	100%

B. ACTIVITIES

12. How many organizations of which you were a member did you point out (acknowledge) to the firms you interviewed?
    (number) _____

13. Indicate the names of any honorary organizations, such as Beta Alpha Psi, Phi Beta Lambda and the like, of which you are a member. _____
    _____

14. Were you a member of a social fraternity or sorority? (check one) _____ yes _____ no

15. How many positions (treasurer, committee chairman, and such) in the above organizations did you acknowledge to the firms you interviewed?
    (number) _____

16. Did you have any accounting or bookkeeping experience, including part-time, that you acknowledged and considered to your advantage in the interviewing process?
(check one) _____ yes _____ no

17. Did you have any other work experience, including part-time, that you acknowledged and considered to your advantage in the interviewing process?
(check one) _____ yes _____ no

C. ACADEMIC DATA

18. Basis at your university: (check one) _____ 4.00 _____ 3.00 Grade Point

_____ semester _____ quarter

Overall Courses

19. Grade point average acknowledged at time of interview: _____

Number of Hours for Which the Letter Grades Below Were Earned

20. A or B _____ hours

21. C _____ hours

22. D or Below _____ hours

Accounting Courses

23. Grade point average in accounting at time of interview: _____

24. A or B _____ hours

25. C _____ hours

26. D or Below _____ hours

Data concerning English courses (non-literature):

27. A or B _____ hours

28. C _____ hours

29. D or Below _____ hours

30. Please list any academic degrees that you have, other than the undergraduate business degree with the accounting major:

_____ Degree _____ Major

31. Which of the following is best descriptive of the trend of your grades during the past year to year and a half? (check one)

Remained somewhat low (say C-minus) . . . . . _____

Started low but steadily improved . . . . . _____

Remained somewhat average . . . . . _____

Started average but steadily improved . . . . . _____

Remained steadily high (say B plus or above) . . . . . _____

Showed moderate decline . . . . . _____

Showed significant decline . . . . . _____

Other (describe) _____

D. SELF EVALUATION

As objectively as possible, rank yourself on the basis of the following items (check one):

	Clearly Below Average	Somewhat Below Average	Average	Somewhat Above Average	Clearly Above Average
32. Preparation for interviews (study of firm, prepared questions, etc.).	_____	_____	_____	_____	_____
33. Ease with which you handle interviews	_____	_____	_____	_____	_____
34. Ability to communicate	_____	_____	_____	_____	_____
35. Compared to other students, I feel the number of questions or comments I initiated during the interview was	_____	_____	_____	_____	_____
36. Compared to the questions I feel other students asked, I judge the intensity (putting the interviewer on the spot) of my questions to be.	_____	_____	_____	_____	_____
37. My willingness to travel is	_____	_____	_____	_____	_____
38. Based on my association with fellow accounting majors, I feel my commitment to the accounting profession to be	_____	_____	_____	_____	_____

(Items 39 - 41 are to be answered from a business viewpoint.)

39. I judge my style of business attire to be	_____	_____	_____	_____	_____
40. I judge my physical attributes to be	_____	_____	_____	_____	_____
41. I judge the style of my hair to be.	_____	_____	_____	_____	_____

42. Rank in order of importance the reason(s) why you selected accounting as a career. Identify the most important factor with a "1", the second most important with a "2", etc. Choose at least one factor but as many factors as you considered.

_____ Salary
_____ Advancement
_____ Training by firms
_____ Working with "things"
_____ Availability of employment
_____ Status
_____ Security
_____ Experience to be gained
_____ Working with people
_____ Other (describe) _____

_____

E. INTERVIEW DATA

43. How many of the Big Eight firms did you interview on campus? (number) _____

44. Do you feel that the interviewer in any of your interviews was having a "bad" day? (check one) _____ yes _____ no

45. Do you feel that the interviewer in any of your interviews was unfair in his attitude, questions, and such?

(check one) _____ yes _____ no

46. How many, if any, office visits did you receive after your campus interviews? (Use zero if appropriate)

(number) _____

47. How many, if any, Big Eight employment offers did you receive? (number) _____

48. What was the highest annual salary, if any, that you were offered by a Big Eight firm? $_____ per year

49. What was the lowest annual salary, if any, that you were offered by a Big Eight firm? $_____ per year

50. In which area of Big Eight accounting, if any, were you offered a position?

(check one) _____ Auditing

_____ Tax

_____ Management (Administrative) Services

_____ Small Business

Appendix C

EXPANDED STATISTICAL DISCUSSION

Statistical programs used for the analyses of data in this study are described in Statistical Package for the Social Sciences (SPSS), second edition, as updated by SPSS Update 7-9.

DISCRIMINANT ANALYSIS

Discriminant analysis determines the linear combination of two or more independent variables that best separates the a priori defined groups. The discrimination is accomplished by the statistical decision rule of maximizing the between-group variance relative to the within-group variance, as expressed in ratio form. This linear combination can take various forms, of which one is expressed mathematically as:[50]

$$Z = W_1 X_1 + W_2 X_2 + \ldots + W_n X_n$$

where:

Z = the discriminant score.

W_i = the standardized discriminant weights.

X_i = the independent variables.

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[50] Joseph F. Hair, Jr., et al., Multivariate Data Analysis: With Readings, (Tulsa, Oklahoma: Petroleum Publishing Co., 1979); p. 85.

The SPSS subprogram DISCRIMINANT utilizes two approaches to discriminant analysis: direct and stepwise. All independent variables are entered into the analysis concurrently in the direct method. Thus, the discriminant function is created directly from the entire set of independent variables, regardless of the discriminating power of each independent variable.[51] The direct method was considered inefficient for this study because of the number of sample cases relative to the number of variables involved in the analyses. Eisenbeis and Avery contend that "significant" amounts of computer time are used once the number of variables exceeds fifteen.[52]

The use of stepwise discriminant analysis can be supported by the further comments by Klecka:

> In many instances the full set of independent variables contains excess information about the group differences, or perhaps some of the variability may not be very useful in discriminating among the groups. By sequentially selecting the "next best" discriminator at each step, a reduced set of variables will be found which is almost as good as, and sometimes better than, the full set.[53]

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[51] William R. Klecka, "Discriminant Analysis," Statistical Package for the Social Sciences (2nd ed., New York: McGraw-Hill Book Company, 1975), p. 446.

[52] Robert A. Eisenbeis and Robert B. Avery, Discriminant Analysis and Classification Procedures: Theory and Applications (Lexington, Mass.: D.C. Heath and Company), p. 74.

[53] Klecka, "Discriminant Analysis," p. 447.

While six stepwise criteria are available, the general process begins by the selection of the single variable which has the highest value of the particular selection criterion. This first variable is then matched with each of the remaining variables, and the second variable which, in conjunction with the original variable, produces the best criterion value enters the model. The procedure of locating the next variable based on the best criterion value, given the variables already in the model, continues until none of the remaining variables aid in providing a minimum level of improvement.[54]

The stepwise technique selected for use in this study was the Stepwise Rao Method. This method uses Rao's V, a generalized distance measure, as the selection criterion. Rao's V was chosen because it provides the largest overall separation between the group centroids.[55] Since the basic objective of this study was to determine the characteristics which discriminate between students who were successful and unsuccessful in their attempt to gain employment offers from the international accounting firms, this criterion was selected.

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[54] Ibid.

[55] Ibid., p. 448.

Assumptions of Discriminant Analysis

Eisenbeis and Avery state that, in general, the underlying assumptions of discriminant analysis are that

> (1) the groups being investigated are discrete and identifiable, (2) each observation in each group can be described by a set of measurements of characteristics or variables, (3) these variables are assumed to have a multivariate normal population, and (4) the variables have equal variance-covariance matrices within each group.[56]

Problem Areas

The first two assumptions hold for this study. The respondents were either offered employment by an international accounting firm or they were not. This information was taken directly from the questionnaire and was supported by the existence of a response to the request for the maximum annual salary offer. The second assumption was intuitively supported as a result of the literature review, surveys of and discussions with interview personnel for the firms, and the review of the local office candidate interview files and evaluation forms.

Nonnormality

Multiple discriminant analysis is designed to use multivariate normal variables. The multivariate normality assumption cannot hold for the variables in this study. To begin with, several of the variables were dichotomous, e.g.

---

[56] Eisenbeis and Avery, Discriminant Analysis, pp. 1 - 8.

sex and membership in Beta Alpha Psi. Many of the other variables had, at best, discrete values only, such as the accounting grade-point average and the self-evaluation data which used a five-point scale. However, Eisenbeis contends that deviations from the normality assumption appear more to be the rule rather than the exception.[57]

Nonnormality may bias the tests of significance and the estimated hit ratios. In examining the strength of linear discriminant analysis when nonnormality existed, Gilbert concluded that there was only a small loss in predictive accuracy using the linear function and that as the number of variables increased, the results should be quite stable.[58] Lachenbruch, Sneeringer, and Revo investigated the robustness of both linear and quadratic procedures using nonmultivariate normal distributions. They concluded that standard linear procedures may be quite sensitive to nonmultivariate normality. They found that the overall classification error rates were not affected as much as the individual group error rates. They suggest that data should be transformed, if possible, to approximate normality.[59] However, this researcher proceeded, as do most researchers, based on the belief that the techniques used yielded

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[57] Robert A. Eisenbeis, "Pitfalls in the Application of Discriminant Analysis in Business, Finance, and Economics," The Journal of Finance, XXXII (June, 1977), 875.

[58] Ibid., p. 876.

[59] Ibid., pp. 876-7.

reasonable approximations as if the normality assumption held.

Multicollinearity

In this study, as in most business research, the variables are not independent and tend, in general, to have some correlation. Pinches contends that negative correlation almost always increases the probability of correct classification, whereas positive correlation, unless very high, reduces the probability of correct classification. Therefore, the inclusion of the large number of variables (many of which are positively correlated) to enter the analyses may have caused the probability of misclassification to increase.[60]

Unequal Dispersion Matrices

As indicated in Chapter 3, the sample selection for this study was a formidable task. The larger the sample size, the more likely it would be that there exists significant differences between the groups being analyzed. Large sample sizes are more likely to mean unequal dispersion matrices and the need for quadratic rather than linear procedures. The probability of misclassification decreases as the sample size increases.[61] Consequently, several factors in this

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[60] George E. Pinches, "Classification Results and Multiple Discriminant Analysis," (Working Paper No. 116, University of Kansas, 1978), p. 19.

study lead to considerable limitations on the conclusions reached.

The test of equality of group covariance matrices was attempted using Box's M and its associated F test.[62] This test suffers weakness in the fact that it is based on the underlying assumption of normality. Having failed this test, the data in this study perhaps should have been analyzed for a quadratic relationship, such as can be done using BMDP- Biomedical Computer Programs package. While no such quadratic package was available with SPSS, perhaps a comparison of the linear and quadratic classification rates using an alternative statistical package would have been superior.

Relaxation of the assumption of equality of group dispersion may also effect the significance test for the differences in group means. Gilbert compared the effects on hit ratios when a linear model was used even though the dispersions were unequal. The results were summarized as follows:

> Significant differences can occur which are directly related to the differences in the dispersions, the number of variables and the separation among the groups. Agreement between the two procedures declines as the differences between the dispersions and the number of variables increase. The further apart the groups are for given dispersions, the less important are the differences between the linear and quadratic

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[61] Ibid., pp. 23-4.

[62] Klecka, "Discriminant Analysis," p. 460.

results.[63]

To compensate partially for the inequality of group variance-covariance matrices and multicollinearity of the variables, the number of variables was reduced by use of the stepwise method described previously. Rao's V, which provided the largest overall separation of group centroids, was used to minimize the differences from the quadratic results. In summary, the lack of multivariate normality and equality of the group dispersion matrices, the number of variables in relation to the sample size, and the multicollinearity between the predictor variables are all considered limitations of this study.

MULTIPLE REGRESSION

Multiple regression is a statistical technique used to analyze the relationship between a dependent variable and two or more independent variables. One of the uses of multiple regression is to evaluate the relative importance of the independent variables. The standardized regression model for this study can be expressed in the following form:

$$Y_i = C_i X_{i1} + C_2 X_{i2} + \cdots + C_k X_{ik} + e_i$$

where :

Y_i = The value of salary offer for the ith student.

---

[63] Robert A. Eisenbeis, "Pitfalls in the Application of Discriminant Analysis," p. 879.

C_j = The standardized beta coefficients of the independent variables.

X_{ij} = The value of the jth independent variable for the ith student, j = 1, 2, . . . , k.

e_i = The random error term for the ith student.

Several approaches to multiple regression are available; however, the SPSS subprogram REGRESSION provides only for the forward (stepwise) inclusion of variables. Under this approach, independent variables are entered only if they meet pre-established statistical criteria and the order of inclusion depends on the respective contribution of each variable to explained variance. While it was the only multiple regression approach available with REGRESSION, the forward inclusion method was appropriate because of the number of cases relative to the number of variables involved in the analysis.

The underlying assumptions of multiple regression include the following:

1. The expected value of the error components is zero, and the variance of the error components is constant.
2. The error components are uncorrelated.
3. The error components are normally distributed.

Visual inspection of a standardized scatterplot of the residuals and the predicted values indicated that the residuals were uncorrelated and did not display evidence of heteroscedasticity. A normal probability plot of the

standardized residuals indicated that the error components were normally distributed.

Appendix D

EXPANDED USE OF DISCRIMINANT MODELS

The derivation of the discriminant function can lead to some interesting insights into its potential use. An illustration at this point might add some depth of meaning to the model. At the 0.050 level of significance, the discriminant model for students in general (Hypothesis 1) was as follows:

$$Z = -8.0090 + 0.1241(AGPA) + 0.7923(POISE) + 1.0468(BAP)$$

Suppose two accounting students had the following values for the variables in the model:

Student A:

AGPA = 37 (meaning 3.7 on a 4.0 scale)

POISE = 2 (meaning "somewhat below average")

BAP = 0 (meaning non-membership in Beta Alpha Psi)

Student B:

AGPA = 32 (meaning 3.2 on a 4.0 scale)

POISE = 3 (meaning "average")

BAP = 1 (meaning membership in Beta Alpha Psi).

Substitution of these values into the model yields the Z-scores for Students A and B to be -1.8327 and 0.4327,

respectively. The meaningfulness of Z-scores is enhanced by Table 41 below.

TABLE 41

Probability of Group Membership

Discriminant Score	Predicted Group	Approximate Probability
1.1006	1	>.95
0.5933	1	.90
0.0414	1	.80
-0.3241	1	.70
-0.6238	1	.60
-0.7625	1	.55
-0.8985	0/1	.50
-1.0347	0	.55
-1.1742	0	.60
-1.4739	0	.70
-1.8397	0	.80
-2.3970	0	.90
-2.8997	0	>.95

Table 41 shows that Student A has, despite good grades, about an 80% probability of not receiving an employment offer, whereas Student B has between an 80%-90% probability of receiving an employment offer.

A word of caution is appropriate for students who would accept too rigorously the probabilities presented in Table 41. Certain conditions should be met for proper application of discriminant analysis. The assumptions for deriving the discriminant function are multivariate normality of the

distributions, and unknown, but equal, dispersion and covariance structures for the groups.[64] The violations of these assumptions have an impact on the magnitude of the coefficients of the variables and the probabilities of group membership. The calculation of probabilities in this study was based on the a priori probabilities of group membership from the questionnaire responses. As shown in Table 11, seventy-two percent of the respondents received employment offers from the international accounting firms, whereas the probability of receiving an employment offer for candidates in general was much less.[65] There is evidence that discriminant analysis is not very sensitive to mild violations of the assumptions above, however, particularly with large sample sizes.[66] Thus, the probabilities do have limited value.

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[64] Joseph F. Hair, Jr., et al., Multivariate Analysis, p. 86.

[65] For example, Claude Rodgers, firm director for personnel development for Arthur Andersen & Co., estimated that of 20,000 interviews in a typical year, 4,000 to 5,000 students are invited for office visits and offers are extended to three out of four of these. Thus, offers were extended to only 15% to 18% of the candidates. (From Profiles of Public Accounting Firm Careers, p. 1, Richard J. Murdock, ed.)

[66] Joseph F. Hair, Jr., et al., Multivariate Analysis, p. 87.

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ABSTRACT

AN EMPIRICAL INVESTIGATION OF PERSONAL CHARACTERISTICS SIGNIFICANTLY AFFECTING EMPLOYMENT OFFERS FROM INTERNATIONAL ACCOUNTING FIRMS TO ACCOUNTING GRADUATES

Abstract of dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy

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ABSTRACT

The basis for this study was the desire of many accounting students to gain employment with international accounting firms and to know which personal characteristics affect employment offers. Some issues addressed by this thesis follow. (1) What student characteristics had significant effects on employment offers? (2) What were significant differences in characteristics of female/male students receiving offers? (3) What were significant differences in successful/unsuccessful male students? Female students? (4) Which characteristics were important predictors of salary-offer size? (5) Were reasons for selecting accounting careers related to receiving employment offers? (6) Was there discrimination because of sex regarding employment offers? (7) What were successful students' opinions regarding their communication skills? Interviewing ability? Willingness to travel? (8) How many campus interviews, office visits, and employment offers were received by successful students?

The characteristics considered were identified by review of the interviewing process, candidate evaluation forms, and completed recruitment files. A questionnaire measuring these characteristics was completed by 187 students from nine universities. Discriminant analysis, multiple regression, and Chi-square tests were employed to reach the following findings. (1) Successful/unsuccessful students dif-

fered in regard to accounting grade-point averages, ease of interviewing, and Beta Alpha Psi membership. (2) Successful females had more accounting experience and positions in organizations than successful males; successful males had poorer English grades but more miscellaneous financial support for college expenses than successful females. (3) Successful males were more likely to be members of Beta Alpha Psi, raise intense interview questions, possess another undergraduate degree, and be younger than unsuccessful males. Successful females had better accounting/English grades, more financial support for college expenses, and more attractive appearances than unsuccessful ones. (4) Positive factors related to salary size included the accounting grade-point average, Beta Alpha Psi membership, communication initiative during interviews, positions in organizations, and another undergraduate degree. (5) Employment offers were unrelated to reasons for career choice. (6) No discrimination because of sex was noted. (7) Successful students ranked themselves higher in communication/ interviewing skills; unsuccessful students in travel willingness. (8) Successful students averaged approximately six campus interviews, four office visits, and three employment offers.