WHOM WOULD YOU HIRE?

Using the Factorial-Survey Approach

to Understand Employee Selection Preferences

of On-Campus Recruiters

by

Felinda Mottino

A dissertation submitted in partial fulfillment

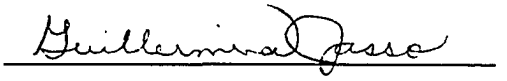
of the requirements for the degree of

Doctor of Philosophy

Department of Sociology

New York University

May, 1995



Approved

Guillermina Jasso, Adviser

ACKNOWLEDGMENTS

Special thanks and much appreciation go to my adviser, Guillermina Jasso, for direction, guidance, support and encouragement at every stage in the process of this research project and dissertation.

I would like to thank the other members of my committee: Wolf Heydebrand and Jo Dixon, for their assistance and constructive comments on my dissertation; Wolf Heydebrand also for giving me a firm foundation for studying large-scale organizations.

Thanks to my dissertation readers, David Greenberg and Richard Maisel, for their cogent and detailed reviews of my dissertation and, in the years before, for introducing me to quantitative methods.

I am grateful for the consistent administrative support from the NYU Sociology department.

Before Sociology there was Anthropology. My sincere thanks to Owen Lynch for guiding me in the study of social research theory and methods, and to David B. Kriser for the urban anthropology fellowships.

I appreciate the insights I received from the career services professionals who advised and encouraged me, and from the recruiters who participated in the study. I am especially grateful to those who participated in the

survey pre-test for their valuable feedback and suggestions.

Thanks to all my friends and colleagues at Baruch College who came to the rescue with their computer expertise and ideas for setting up and managing the data collection tasks. Special thanks to Nikki, who knows how to make things run. And many thanks to Phil, Richard, Susan, Ramon and Michelle.

To Blanche Hite, wherever you are, thank you for hiring me, opening the world of applied social research for me, and helping me refine my own oral and written communication skills, which have allowed me to accomplish many things throughout the years.

Thanks to the cheering section back in California.

Many thanks to all my friends at Friends In Deed.

And most of all, years of thanks to my best friend at MOTALEX-11-B.

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CHAPTER I

INTRODUCTION

Every year hundreds of thousands of young people graduate from college and university programs and prepare to make their way into the world of work. At the same time representatives of the leading large-scale organizations, with the most promising job opportunities, set out to evaluate and recruit prospective workers. In some way a decision must be made as to which of the candidates will receive employment offers.

At present the situation has been complicated by changing economic conditions and corporate staff reductions. Organizational recruiters are seeking a chosen few. Some graduates will get good jobs in their chosen field, others will not; some will not be able to get any job in their chosen field. Who wins and who loses? What are the traits, skills, characteristics that are most sought after by the organizations? What is the "certain something" that gives one person an edge over another? Does belonging to a particular group have an effect?

In sociological terms employee recruitment is part of a larger problem and recurring theme in labor market research that asks the question: What are the forces,

the sorting mechanisms, that match people to their work? It is a process by which people come together with particular industries, occupations, jobs and earnings and by which they move into different tracks and levels. There is a debate as to whether the sorting occurs on the basis of what someone has learned and can do (their human capital) or on who they are (their demographic features). In the larger scheme of things sorting is a process by which society reproduces its current structure of socio-economic class stratification or by which it evolves. To study how these sorting mechanisms work, it is necessary to identify certain points of passage, or gates, and those who make decisions at these points-- the gatekeepers.

This study examines one stage in one part of a labor market process-- recruitment-- among one group of gatekeepers-- on-campus recruiters from leading large-scale organizations. Recruiters receive little attention in the sociology of organizations, and yet they have a key role in interpreting, actualizing and perpetuating company culture, and in finding new employees who have the right fit for their companies. The purpose of this research is to reveal and scrutinize the mental processes of these decision-makers. It points out the selection priorities and preferences of one group of employers as they rate prospective employees, and the relative

importance or weight they place on a variety of traits or variables. It shows which skills and attributes are considered more relevant and desirable and which combinations are worth more to which types of organizations, industries and sectors.

To meet my research aims I use the factorial-survey method. In factorial survey respondents are presented sketches, or vignettes, in which they are asked to rate an outcome (such as desirability for employment), corresponding to a fictitious entity (such as a job candidate), which is described in terms of relevant characteristics (such as job skills). The respondent evaluates a large set of these vignettes, the ratings from which become the data for analysis. Statistical techniques are then used to retrieve the equation implicitly used by each respondent in making his or her rating decisions.

In this study the respondents are organizational on-campus recruiters, and they rate the relative desirability as employees in management-bound jobs of fictitious job candidates in a simulated first-round selection or screening process. The "candidates" are graduating with a Bachelor's degree in Business or Liberal Arts from a New York City college or university. They vary in terms of (1) general education and job skills, (2) demographic characteristics, and (3) personal

work styles. Corporate recruiters represent leading organizations in core industries that recruit from New York City colleges and universities. Industries include finance, insurance, business services, manufacturing, general retail, food and drink, communication and transportation.

Chapter II sets out theoretical issues and research questions. It explores the debate between human capital and demographic traits and adds a third set of characteristics based on work style, or how people approach their work tasks and interpersonal communication. Chapter III describes the methodology and procedures that were followed in setting up the research project, collecting data and preparing for the analysis. Chapter IV, V and VI present the analyses and reveal the findings. They show each step in the factorial-survey approach to answering the research questions and providing insight into the labor market debate. Chapter VII provides a summary of findings, conclusions and discussion.

CHAPTER II

THEORETICAL FRAMEWORK

II.A. THE LABOR MARKET PROCESS AND MATCHING

Labor market literature seeks to understand why some people are more successful than others in their jobs, work, careers, earnings and so on. These concerns can be organized into three main stages: (1) finding and landing the job-- recruitment and hiring, (2) moving up the career ladder-- promotions and mobility, and (3) wages and benefits-- rewards. This study focuses on recruitment, and more specifically on one of the first steps in a recruitment process. In some ways all three stages are theoretically united; therefore, the following literature review includes articles that focus on more than one aspect of the labor market process. Recruitment is a gate that leads into an industry, occupation or job that may or may not have potential for promotions and valuable rewards later on.

II.A.1. Human Capital Versus Structural Explanations

A major debate in the sociology of labor markets has centered on the question of who will earn the most money from their employment, that is on who wins in the

competition for wages. Answers to this question put people into different camps of thought regarding jobs.

One way to answer the question is with the human capital approach. Based on a neo-classical view of economics, it argues that workers, in an ideal competitive market, receive economic rewards based on their own human capital, that is, their education, job training and job experience. Differences in income are seen as differing returns to the differing investments workers have made in their productive capacities. Thus differences in groups are due to differences in human capital. For example, Polachek (1979) used the human capital approach to explain the overall lower earning of women as a group compared to men as a group-- women tend to invest less in their own human capital, therefore have different occupational attainments and wages. Human capital variables, while important, do not explain the whole story; other issues must also be considered.

An important contribution to the study of labor market earnings was made by Thurow (1975), who reasoned that since wages are determined mostly by jobs, the real issue was not wage competition at all, but job competition. In his scenario, workers enter the marketplace as potential trainees where earnings depend on what jobs are available, and more importantly, on how the individual ranks relative to other people in the job

market. This focuses attention on the question of how workers are matched with jobs. According to Thurow, workers are arranged by employers in a "labor queue" in order of their trainability. But for Thurow trainability in the end depended on workers' background characteristics and educational achievement, reverting to the human capital approach. However, the concepts of labor queue and job matching are important ones that will be referred to later in this discussion.

Continuing attempts to explain the competition for wage and job attainment have focused on the structure of work and jobs and contextual institutional forces (Kerr, 1954). Economists as well as sociologists came to the realization that both industries and people in the labor market were segmented, or divided into non-competing groups.

The concept of segmented economies (Averitt, 1968; Bluestone, 1970) refers to different industrial sectors of the economy. The designation of sectors and the assignment of specific industries to their appropriate sectors has been a subject of much debate, as well as whether or not organizations and jobs within organizations should be grouped together at all. Nevertheless, there is some agreement that general industrial distinctions can be made between core and peripheral industrial sectors. The core sector is

composed of "industries that comprise the muscle of American economic and political power" (Bluestone in Beck, Horan and Tolbert, 1978) including manufacturing, finance, real estate, insurance, communications. In contrast, the peripheral sector includes agriculture, subprofessional services, small business, and so forth. The main point is that the more powerful core industries are characterized by better opportunity structure, higher pay, better benefits, more stability, opportunities for advancement and internal labor markets (Doeringer and Piore, 1971) in which jobs are filled from within, establishing mobility or "career ladders."

II.A.2. Segmented Labor Markets

Based on this idea of segmented economies, segmented labor market theory (Gordon, 1972; Edwards, 1975,79; Edwards, Reich and Gordon, 1975; Piore, 1970,75; Bluestone, 1970) focuses on the notion that not all prospective workers compete equally in the workplace but are sorted into different non-competing groups. Here too there is much debate over the number of groups and how to characterize them, but in general there are more desirable jobs in the primary labor market and less desirable jobs in the secondary labor market. Primary labor market jobs generally provide better pay, more security, some degree of independent decision-making;

require and/or provide more training; and offer a career path. Although both types of jobs can be found in core and peripheral industries, core industries tend to have the resources to offer more primary labor jobs. So now the question is: What determines who is channeled into the good jobs? Part of the sorting process can be explained by job-specific skills, training, education (human capital). However, other variables are also at play; these are demographic characteristics, especially gender and race/ethnicity.

Bibb and Form (1977) found that workers in the favored social strata (i.e. white men) are employed in enterprises with the greatest organizational power, that is, in primary labor market jobs with core industries. Minorities and women are faced with the less desirable alternatives, in the secondary labor market.

Historically, restrictive policies and racial/ethnic antagonisms have affected minority access to rewards and privileges (Wilson, 1978) but even in more recent times the labor market has remained segmented along racial/ethnic lines (Bonacich, 1972; Lieberson, 1980; Roos and Hennessy, 1987). Piore (1979) found that good jobs in core industries remained off limits to minorities. Beck et.al. (1978) found that nonwhites were usually channelled into the peripheral sectors, or that

when given access to core industries, it was to less desirable jobs.

In his analysis of New York City during the 1980 boom years, Stafford (1985) found that blacks and Hispanics were poorly represented in growth industries in both supervisory and non-supervisory jobs. A New York Times article in May, 1987 (Hicks, 1987) reported that a 1986 survey of the nation's 1000 largest companies found just four black high-level senior executives, an increase of one since a similar 1979 survey! This could indicate barriers at any or all levels of the corporate ladder.

Also excluded historically from certain types of jobs, women are still less likely to be considered for supervisory positions (Kanter, 1977; England, 1984). According to many studies, including Kanter (1977), England (1984), Beller (1982), Bielby and Baron (1986) Reskin and Hartmann (1986) women encounter barriers to entry as well as barriers to mobility, even when they possess appropriate qualifications.

While Stafford (1985) found that in New York City between 1978 and 1982 white women had the largest increased share of jobs among managers and professionals, black female managers were concentrated in the smallest number of industries of any group in the study, and the proportion of Hispanic women employed as managers and professionals was the lowest of any group in the study.

According to the U.S. Department of Labor (1989), even though women hold more management positions than at any other time, only 1 or 2 percent of senior executive level officials are women. In finance, insurance and real estate women employed as executives, administrators, and managers make up 50.7 percent of the total, and in other services, 47.4 percent; however, in wholesale and retail trade, they make up only 42.5 percent and in manufacturing only 26.3 percent. Furthermore, when compared with their overall share of the civilian labor force (45%), women are still underrepresented in all levels of managerial occupations (39%). Statham (1987) states that financial institutions have historically been more open to women, while manufacturing firms, especially those producing heavy durable equipment, provide the fewest opportunities and least support for women.

Studies of why minorities and women have been less likely to obtain primary labor market jobs with core industries indicate that discriminatory structural elements explain more than simple human capital variables (including Stafford, 1985; Beller, 1982; England, 1984). In other words a preference to match a particular type of worker (i.e. white men) with the best jobs is embedded deep within the sorting mechanism.

Theories of segmented labor markets imply that discrimination is an integral part of labor market

processes and outcomes. Going back to the labor queue and job competition concepts of Thurow, we see that people are ranked or rated according not only to human capital skills and trainability, but also to other kinds of characteristics that make them seem more or less qualified. Discrimination can be based on personal preferences, or on error or statistical generalizations that presume correlations between demographic characteristics and work potential. Discriminatory sorting mechanisms and institutional barriers are not peculiar to matching people with jobs; they exist also in education, training and the like and take on many forms (Reskin and Hartmann, 1986; Roos and Reskin, 1984). What is of interest in this study, however, is the gatekeeping process that moves people from education into the labor market and employment.

Many studies have shown that gatekeepers including employers and prospective employers have a preference for people they feel they can relate to, that is people who are most like them (Kanter, 1977) and/or their existing workforce (Marshall and Paulin, 1984; Bielby and Baron, 1986; Rynes and Gerhart, 1990). Graves (1989) found that organizational recruiters view candidates who are similar to themselves as more qualified and suitable for hiring than candidates who are dissimilar; similarity and liking

acted as a filter through which recruiters viewed college students' qualifications.

Sometimes recruiters are looking for someone who will be the "right type", "a good fit", or "have the right chemistry" for the company. This can refer to work skills or a style appropriate to a particular company or its culture (discussed in detail in the following section), but it can also be another way of saying individuals highly similar to themselves and other current employees. Traits sometimes associated with fit, chemistry, or right type are "such attributes as personal values, political orientation, hobbies, personality traits, attire, physical characteristics, use of leisure time, and even eating habits" (Rynes and Gerhart 1990).

In some cases a person's capabilities are assumed or inferred from their gender. The now famous 1976 national survey of male managers (Rosen and Jerdee 1978) indicated that men were perceived as having aptitudes, knowledge and skills best suited to business management. Men were described as better able to: understand the "big picture", approach problems rationally, get people to work together, understand financial matters, size up situations accurately, serve as capable administrators, have leadership potential, and be independent, self-sufficient and aggressive. Women, on the other hand, were described as having clerical aptitude, being good at

detail work, enjoying routine tasks, and being sensitive to other's feelings.

In other cases a person's values or character traits are assumed or inferred from observable characteristics or known information, such as ethnicity, place of birth, or social class and life style. Some commonly held concepts are based on theories of why certain ethnic, racial, or national groups are more successful in business than others. It has been written that ethnic groups carry with them particular cultural factors-- values, attitudes and behavior patterns-- that predispose them to succeed in work and business (such as Sowell 1975 and 1981). Other writers attribute differing degrees of preparedness for work to class differences (Wilson 1978, for example).

Because there are now very clear guidelines for on-campus recruitment that prohibit discrimination on the basis of race, color, religion, sex, national origin, and so on, it has been suggested informally among employment professionals that other kinds of class and cultural cues may have come into play. That is, recruiters may be looking, consciously or unconsciously, to certain mannerisms, interests or hobbies to assess work potential.

This section has discussed how demographic characteristics as well as human capital skills can contribute to job attainment and to understanding who gets the good jobs. The following section explores work styles and notions of organizational fit based on certain characteristics of organizations themselves and the kind of people they claim to be seeking.

II.B. LARGE-SCALE ORGANIZATIONS: A NEW TWIST

Since the focus of this study is primary labor market positions in management with large-scale organizations in core industries, it is necessary here to examine current information regarding organizations, including traditional versus new organizational forms, and the styles of activity and interaction they imply.

The literature of large-scale organizations indicates that the traditional framework of bureaucracy and hierarchy, characterized by compartmentalization, giving and taking orders and following rules and procedures is giving way to a "flattening" of structures and emphasis on a new mind set. Companies are undergoing change, developing new forms, and finding the need for certain new skills and attitudes necessary in a post-industrial, more competitive environment--decentralized, fast-paced, changing, participatory, less mechanical and more cerebral.

II.B.1. Traditional versus New-Form (See also APPENDIX A for a schematic review of characteristics of organizational forms.)

Max Weber's vision of an organizational form based on ongoing and increasing bureaucratic hierarchy has been challenged by developments of the twentieth century. As technology has changed and environments have become more volatile, old standards of organizing the workplace have come to be questioned.

During the 1960s sociologists studying organizations (such as Burns and Stalker 1961, Lawrence and Lorsch 1967) found at least two different organizational forms. According to Burns and Stalker, at one extreme was the "mechanistic," bureaucratic form characterized by a hierarchic structure of control, authority and communication; positions with highly defined functions; problems/tasks broken down into specialist roles; tasks seen as distinct from the whole; and precise definitions of methods, duties and powers in each functional role. This form seemed better suited for organizations operating under relatively stable market conditions.

In contrast, the other extreme was "organic," which was less bureaucratic and was believed to be more flexible for changing or unstable environments that provide the organization with relatively unpredictable new tasks and problems. It was characterized by

continual redefinition of roles and coordination, achieved by continual meetings between managers; a great deal of lateral communication; problems not broken down/divided; tasks seen in light of the whole; jobs with less formal definition in terms of methods, duties and powers-- continually redefined through interaction; more creativity; and an increase in institutionalized values, beliefs, and conduct, in the form of commitments, ideology, and manners.

Later scholars, such as Kanter (1983), observed that since the 1960s the business environment has become increasingly more uncertain and competitive and that all companies have been forced to respond to changed times by moving faster and more creatively and depending more on workers to make the companies more competitive. This means a changing need away from employees with more obedient work styles to employees with more innovative work styles; people at all levels of the organization have to be actively and meaningfully involved in improving productivity. Kanter contrasts the more bureaucratic, segmented organizational form to a changed more integrated form. The "segmented" is characterized by stability/anti-change, fixed job assignments, work done on the basis of orders given from the top down, and tasks broken down and seen as distinct from the whole. In contrast, the "integrated" is characterized by

innovation, flexible assignments, persuasion and negotiation used in interpersonal communication, tasks seen in light of the whole, entrepreneurial spirit, and commitment to a corporate culture.

Other scholars, such as Bell (1973), and Sable and Piore (1984) see organization models and workplace changes in light of a post-industrial economy, relying less on manufacturing and more on services, and based on new technologies. Heydebrand (1989) postulates that new organizational forms are indeed emerging in identifiable ways and that they are largely the result of the transition from industrial to postindustrial capitalism. This transition is marked by environmental turbulence, rapid change, increasing complexity and uncertainty, and near-permanent crisis conditions. In addition, the nature of postindustrial capitalism itself appears to generate higher levels of complexity and uncertainty. Heydebrand contrasts a new more technocratic form to the bureaucratic form. He emphasizes that in the "new form", rigid structures and regulations are replaced with a flatter, more flexible structure that encourages problem solving, negotiation and communication both within and outside of the organization.

II.B.2. The New Organization Man/Woman

Not too surprisingly, the same skills and traits of employees well-suited to the new organizational form that are described in theoretical and empirical sociological literature of large-scale organizations also appear in material aimed at human resource practitioners and job seekers (for example, Nagle, 1987; Hallett, 1989; Career and the College Grad, 1992). Skills and characteristics most often mentioned include the following:

-entrepreneurial ability
-independence
-team player
-flexibility
-initiative
-creative/problem solver
-ability to operate in ill-defined and ever-changing environment
-capacity to deal with non-routine and abstract work process
-ability to handle decisions and responsibilities
-group work; interactive work
-ability to operate within expanding geographical and time horizons
-system-wide understanding.

The main question here is whether or not companies have actually been able to incorporate this new outlook and mentality into recruitment procedures. And, if so, how? Another interesting consideration regarding the list of skills is that it suggests its own internal paradoxes and contradictions (for example, entrepreneurial versus team player). If one had to be given preference over the other, which would it be?

And what about the question of "fit"? What sorts of orientation and style are best for a particular company culture or industry. Perhaps individualism and entrepreneurship would suit one situation whereas teamwork would suit another; specialized skills for one, generalized knowledge for another; and so on.

Previous studies of the recruitment process have indicated that recruiters rely heavily on a student's major grade point average and communication skills as pre-screening criteria (Gardener et al, 1991) and on impressions made during the interview process (Graves, 1989) for making final employee selection decisions. Would this hold true even if additional information were available?

In the past, studies of employers' selection processes have neglected to look at information about work styles. For the most part this kind of information is not made available in writing to recruiters. Even though it could potentially be culled from references and letters of recommendation, recruiters base selection primarily on interviews, with pre-screening done on the basis of resumes and transcripts. Additionally, the information is not typically part of a data set that could be used by researchers studying the process.

II.C. WHOM WOULD YOU HIRE?

Driven by the theoretical concepts and debates in the literature on the sociology of labor markets and large-scale organizations, this study seeks to obtain a better understanding of on-campus recruitment as a sorting mechanism and matching process. It focuses on the debate surrounding employer preferences in the recruitment of new employees-- are employers more interested in human capital skills or demographic traits? It also adds a focus on work style or job spirit. It presents to recruiters an array of variables organized as sketches or vignettes of fictitious individual job seekers, and as the recruiters rate the individuals, they are expressing their preferences for certain attributes. These attributes represent variables that work together as groups. There are human capital variables such as grades and communication skills. The demographic variables include gender, ethnicity and place of birth. Work style and job spirit, based on new-form versus traditional organization behavior, comprise attributes such as flexibility, macro-orientation and innovation.

A way to test the importance of variables or sets of variables is with the factorial-survey approach. This approach will reveal how individual job candidates, representing their own particular set of attributes, are ranked relative to other candidates (or other sets of

attributes). The study does not examine actual hiring patterns of companies nor actual recruiter recommendations regarding real applicants. Correspondence with reality is not known, nor the extent to which preferences are determinants of behavior.

This research will point out selection priorities and preferences of recruiters as they rate fictitious job candidates, the relative importance they place on attributes, and which attributes are desirable to more recruiters. It will indicate a mental process and whether or not recruiters use the same or different criteria in their decision-making processes. If different it will show where recruiters agree and disagree and what percentage of recruiters prefer which attributes. This, in turn, will establish recruiter priorities.

If the study finds that a large percentage of recruiters indicates preference for male employees, or for employees born in the United States, then demographic characteristics as well as these particular traits are major criteria in employee selection. If the study finds that high grades stand out as important to most recruiters, then this will be evidence of human capital skills influencing employee selection. If the study finds that recruiters as a group demonstrate a strong preference for innovative candidates, then work style as

well as this job orientation will be shown to be a priority. In other words, if different candidates consistently rate higher among respondents due to a particular common attribute, then that attribute is seen to be more important to employers and of more value to job seekers. These preferences may hold up across the board or may differ by respondent variables such as industry or type of organization. One important advantage of the factorial-survey approach is that attributes can be controlled and analyzed scientifically. Another is that issues neglected in previous studies, such as work style, can also be included and tested.

This study shows what is important to one set of gatekeepers-- corporate recruiters-- in matching people to jobs, including how individual recruiters and industries differ in their criteria of selection, and how the notion of new organizational forms relates to hiring. The findings can reinforce or modify how one sees the recruiting process and give insight to students, to educators and career counselors, and to recruiters themselves.

CHAPTER III

RESEARCH DESIGN

III.A. INTRODUCTION

Which job candidates are most desirable? What is the decision-making process of the corporate recruiter and what are the criteria used to select the most promising applicants? Does there exist in the head of each corporate recruiter some complex set of preferences and priorities weighted according to a particular set of exigencies? The task is to investigate the recruiters' preferences, through empirical research, data collection and statistical analysis.

Chapter III is devoted to a description and explanation of the process used to implement the investigation, that is, to plan and prepare for the analysis. Getting the project off the ground involved a series of steps which I have outlined in the following sections. Section B explains the methodology. Sections C and D give blueprints of the vignette and respondent populations. Section E specifies research questions. Section F describes the construction and operationalization of the data collection. Sections G and H detail the launching of the survey, the response rate, and preparation of data for analysis.

III.B. METHODOLOGY

The methodology used in this study, factorial-survey research, is well-suited to the study of decision-making processes, especially selection, because it elicits preferences of one thing or person over another. In the factorial survey, pioneered by Peter H. Rossi, respondents are asked to rate the level of a specified outcome variable (such as desirability for employment), corresponding to a fictitious unit (such as a job candidate), which is described in terms of potentially relevant characteristics (such as job skills, and so forth). The respondent is presented a large set of these units, called vignettes; the ratings made by respondents become the data for analysis. Statistical techniques are then used to retrieve the equation implicitly followed by each respondent in assigning the level of the outcome variable, such as desirability for employment.

In contrast to the more conventional questionnaire, in which questions are answered, the vignette is responded to in a less conscious way and is therefore likely to generate more accurate information. Moreover, the respondent in factorial survey is able to deal with a whole unit together rather than characteristics in the abstract. By rating a large number of vignettes, the respondent expresses interest in certain variables and in specific categories of those variables.

In this study factorial survey is used to examine the employee selection decision-making process. In particular, it investigates how fictitious job candidates possessing certain attributes or characteristics are rated in terms of their desirability as employees by actual corporate recruiters. The ratings are obtained by a number assignment technique believed to generate a continuous variable (Jasso 1988, Jasso and Choi 1990); the ratings are then analyzed using least-squares regression and other multivariate techniques.

A salient feature of the factorial-survey method as formulated by Rossi is that it permits construction of a richly varied population of vignettes. Rossi's early innovation and contribution to vignette studies was to propose that random sampling be used to draw samples from the population of all possible vignettes. By presenting the respondents with a sample, there is no need to restrict the size of the vignette population and therefore the complexity of the vignette. Accordingly, in contrast to previous (and some subsequent) vignette studies, there can be a large number of variables describing each unit, and each variable can have many levels or categories. Therefore, in this study the fictitious job candidates can be described in terms of many potentially relevant attributes.

In sum, factorial-survey design allows me to use quantitative methods that are efficient and revealing to gain insight into judgments relevant to the employee selection decision-making process. Judgments about the relative desirability as employees of a set of distinctively different fictitious job candidates can be obtained from organizational recruiters and then analyzed to answer specific research questions, as outlined in Section III.E below.

III.C. BLUEPRINT OF THE VIGNETTE POPULATION

III.C.1. Focus of Study

The labor market population of interest for this study is educated young men and women, starting out in entry-level positions, unspecialized but en route to higher-level, white-collar, leadership roles in the future. The fictitious job candidates are defined as people with various combinations of skills and attributes who have the following points in common. All the candidates:

- are in their early 20s,
- are recent college graduates with a Bachelor's degree,
- have some work experience in either part-time positions or internships in organizations similar to recruiting organizations,

•have basic technical skills and some computer experience,

•are applying for permanent, full-time, entry-level management/management-training positions.

III.C.2. Developing the List of Attributes

Literature in the fields of sociology and career counseling, as well as company materials (as outlined in Chapter II) suggest the three categories of variables for analysis: (1) human capital skills, (2) demographic characteristics, (3) work styles. Specific variables grow out of the research design and research questions presented below.

Human capital and demographic variables are common in the labor market literature. I developed a set of work-style variables to use in this study; the variables are based on sociological literature that characterizes organizational forms (see APPENDIX A).

Developing the list of variables involved not only extraction from the literature and brainstorming, but also testing to ensure good grounding in practical reality. This was particularly true for work-style variables. For this I spoke informally with corporate recruiters at university Career Fairs and other meetings and gatherings of recruiters and human resource staff.

In order to find out firsthand what recruiters were looking for, I listened to their preferences, priorities, stories and anecdotes. They shared with me what qualities they look for and how they assess these qualities in interviews and other meetings with applicants. This information served to reconfirm variables under consideration and helped shape the final list of vignette variables. This list, grouped by variable category, is presented in **TABLE 3-1** together with the variables' numerical coding to be used in the analysis.

III.D. BLUEPRINT OF THE RESPONDENT POPULATION

For reasons of proximity and accessibility I decided to use as the pool of respondents the corporate employees representing the entire population of companies recruiting on-campus at NYU during the academic year 1992-1993. To establish an industrial profile, I took a preliminary look at the firms recruiting the previous year, 1991-1992 (see APPENDIX B: Industrial Sectors.) Later, after data collection, the list of industries was revised to reflect 1993-94 survey participants.

In addition to eliciting responses to the vignettes, I needed background information regarding respondents, their companies and their industries. Here too, there are three categories of variables, which reflect

contextual attributes of the prospective employment situation: (1) demographic characteristics of individual recruiter, (2) company culture, and (3) industrial sector.

This information is gathered using a traditional questionnaire method. The respondent variables are outlined in **TABLE 3-2**.

III.E. RESEARCH QUESTIONS AND SOME CONJECTURES

The conjectures and expectations presented here were developed on the basis of the literature as well as on the basis of extensive conversations with recruiters as described above.

Stage 1: Ratings and Inter-Respondent Agreement

This stage looks in general ways at how the participants respond and determines the appropriate way in which to conduct the regression analyses.

1. In each respondent's judgment, are the attributes of the proposed job candidates of some interest to recruiters in the employee selection process or is the process blind to the qualifications and characteristics presented in the vignettes?

It is expected that the vignette attributes will be of interest, and that respondents will use the attributes

selectively in assigning different desirability scores to candidates with different qualifications and characteristics.

2. What is the general desirability of the candidates presented in the vignettes?

Desirability will vary, but generally it will be positive because vignettes are constructed using attributes known to be of interest to recruiters.

3. Is there inter-respondent agreement on the desirability of candidates presented in the vignettes? on the criteria to be used in rating prospective employees? Are all the recruiters looking for the same things?

From talking to recruiters, I know disagreement exists; this procedure allows me to render precise the amorphous aspects of recruiter preferences.

4. What, in the respondent's judgment, is the direction and magnitude of the effect of each attribute on the applicant's desirability score?

It is expected that direction will vary by respondent. It cannot be predicted which respondents would care more about human capital, demographic or work-style characteristics.

Stage 2: Selection Criteria and Preferences

This stage deals with general patterns and trends in respondent preferences.

1. What are the preference directions for recruiters? What matters to more organizational on-campus recruiters?

Section III.D.1 above discusses the development of the list of attributes and variables, which are presented in **TABLE 3-1**. The general direction of anticipated preference is reflected, for the most part, in the variable coding. I set up both binary and categorical variables so that the higher or highest number category is the attribute I expected recruiters would prefer. Notable exceptions are Ethnic Groups (ETHNICITY), Place of Birth (NATIVITY), and the work-style variable, ENTREPRENEURIAL, which are explained below:

-Ethnic Groups are coded in alphabetical order. Also, in the case of ETHNICITY, I expected that recruiters, who are highly aware of prohibitions against racial/ethnic discrimination would give me only an "official story" on race and ethnicity. As another way to get at underlying discrimination, I wanted a way to tap into class, and outside activities

and hobbies (INTERESTS) seemed like one possible approach.

-For NATIVITY it could be argued that native-born candidates are preferable because they are assumed to have better facility with the English language, to know more about local culture and ways of doing things, and to lack immigration problems. However, it could also be possible that foreign-born persons are perceived as having more seriousness of purpose, better attitudes and a stronger work ethic. Therefore there are reasons to expect either category.

-In the case of ENTREPRENEURIAL, there also were reasons to expect strong preferences for both categories. Companies often describe the ideal candidates as possessing both entrepreneurial drive as well as a cooperative team-spirit. Because I see these attributes as somewhat contradictory, I wanted to force a choice between the two.

2. Which of the candidate attributes/skills/qualities suggested by the literatures of labor markets and large-scale organizations figure most prominently in recruiters' decision-making processes?

It is the purpose of the research project to reveal these preferences; it is not possible to predict the outcome.

3. What part will grades and communication skills play in the rating priorities?

It is logical that companies would prefer employees with good grades to those with low or failing grades. However, there is some debate among human resource staff as to how much emphasis should be placed on grade averages within the good range. Is there a substantial difference among A+, A, B+, B?

It is expected that communication skills will be very important.

4. How much effect will demographic characteristics have in the selection ratings?

A gender preference may be canceled out by attempts not to discriminate, or to correct past imbalances, especially at an entry level. On the other hand, bias may show up either as a preference for one gender over the other (primary) or channeled through double standards for males and females (secondary)-- that is, some work-style attributes may be perceived as better for men and others better for women.

Recruiters, highly aware of prohibitions against racial/ethnic discrimination, may play out only the "official story". In this case INTERESTS and NATIVITY variables may count more than ethnicity alone in assessing bias.

5. Will new-form work styles be preferred over more traditional, hierarchical styles? And in cases of contradictory values, which one will win out?

It is expected that companies, in general, will seek new-form traits.

In the case of the seemingly contradictory attributes of entrepreneurship versus cooperative team spirit, it is expected (on the basis of the frequency with which the term is used in business materials) that entrepreneurship will be considered more desirable.

Stage 3: Determinants of Respondent Preferences

This stage brings in the respondent characteristics. It is concerned with ways in which the individual recruiter, company and industry characteristics contribute to the ratings.

1. How will respondent and industry characteristics vary the effect that demographic characteristics have in the selection ratings?

It is anticipated that recruiters may prefer candidates most like themselves.

It is expected that women will do best in FIRE (finance, insurance and real estate), moderately well in retail, and least well in manufacturing.

2. How does company culture affect/explain preferences?

Companies characterized as more new-form than traditional are expected to prefer the attributes of the new organizational man or woman even more than companies characterized as more traditional.

3. How much agreement/consensus exists among individual recruiters across industries and company cultures?

It is expected that there will be some attributes found to be desirable across all industries while others will vary.

4. How do industry and sector affect/explain preferences? How do priorities differ among individual recruiters within industries?

It is expected that certain attributes will be more desirable to certain industries. For example, employees with extroverted personality may be more important to the retail industry than to manufacturing. Detail-orientation may be more important to accounting firms,

whereas macro-orientation may be more important to financial institutions.

5. Along what industrial/sectoral lines will companies vary in their preferences for new-form work styles over more hierarchical styles?

It is expected that service sector companies will show a greater preference, than either manufacturing or retail companies, for new-form traits, especially the ability to communicate effectively with all levels both inside and outside the organization.

III.F. CONSTRUCTING AND OPERATIONALIZING DATA COLLECTION

Having established the vignette population, the respondent population and the research questions, data collection materials could be prepared.

III.F.1. Drawing the Vignette Samples

The first step was to generate the full-factorial vignette population of all possible combinations of the values assigned to the attribute variables. The total number of possible combinations came to 1,966,080. The next step in factorial-survey procedures is to check for any logically impossible vignettes. This check revealed that although some of the characteristics seemed inconsistent with each other, all combinations were

possible and satisfactory, mirroring the real world in which real people often appear paradoxical.

From the universe of all possible vignettes (the vignette population) I drew random samples (decks) for the survey. Because the decks, or sets of vignettes, needed to be large enough to enable estimation of the equations, yet small enough to ensure respondent participation and cooperation, and because the vignettes are complex, I decided on 40 vignettes per deck. Each potential respondent received one deck; seven decks were used for the survey. **TABLE 3-3: Characteristics of the Job Candidate Vignette Sample** reports summary information about vignettes both deck by deck and for all combined. (In the vignette population the vignette characteristics are perfectly uncorrelated. However, the samples drawn from the population are likely to have nonzero correlations. These correlations are presented in APPENDIX C.)

III.F.2. Survey Instruments

After exploring possibilities for conducting the survey I decided that it was necessary to administer it as a mail-out packet with an inner mail-back packet for return response. The combination of a factorial-survey vignette study presented by mail to unsuspecting target respondents was somewhat experimental and risky, and thus

this study lays the groundwork for further development of mailed administration of factorial surveys. With a mail-out survey in mind I developed all relevant instruments and materials, including an introductory letter, instruction sheet, respondent questionnaire and the set of vignettes. Sample packet materials are presented in APPENDIX D.

Because I was asking respondents to rate job candidates, I set up the vignette form in the style of a one-page resume or information sheet. The samples drawn from the total vignette population as number-coded data sets were converted into their descriptive terms and inserted into the vignette form for the mail-out survey packet. (See sample vignettes in APPENDIX D.)

Data collection materials and procedures were pre-tested in a mini mail-out survey distributed to 16 people, most of whom had experience in corporate recruiting or human resource management. On the basis of the pre-test results and feedback from participants, the survey packet was revised and finalized.

III.F.3. Respondent Sample: Survey Mailing List

I developed the survey mailing list to include companies doing on-campus recruiting through the undergraduate career services office at NYU, during the academic year 1992-93. (The criterion was any company,

firm, business or organization, excluding universities and private non-profit organizations.) This information is available to NYU students through career and employment service lists and files and through on-campus activities involving employers. Where possible I obtained names of individual corporate representatives. In cases where more than one individual represented the same company, I randomly selected one name for each separate department or location. The process was problematic in that there was no way to ensure non-overlapping, up-to-date, thorough and complete information. As a cross check, I obtained from NYU career services staff estimates of the number of employees involved in on-campus recruiting during the period of interest. Based on the procedures I used to compile and check the list, I believe the list to be as good as possible for this type of research.

III.G. LAUNCHING THE SURVEY AND RESPONSE RATE

The survey went out in waves over a period of 6 months beginning in late May 1993. Packets were mailed to 476 individuals representing 304 companies. The initial mail-out was followed up with call-backs, reminder calls and re-sends where necessary.

Of the total number of packets sent out, some were returned by the Post Office or company mail rooms as

undeliverable. Others were returned by recipients who did not qualify for various reasons (for example, one such reason was that their company was no longer recruiting at NYU). Still others were later determined to be mis-sent, leaving approximately 89% that appear to have reached an appropriate destination. Based on the differences between these numbers and the NYU staff assessments of the total number of on-campus recruiters, I estimate the percent of eligible recruiters actually contacted to be 70-80%.

Of those contacted the individual response rate was 15.4%, with a company response rate of 18%. This comprises responses from 9 states and includes 17 industries (which are reviewed in detail in Chapter VI).

The response rate is less than ideal but better than expected. I was advised by professionals involved in marketing and market research to expect 10% with a standard familiar-looking questionnaire. Considering the experimental nature of the data collection task and the sheer bulk of the data collection packet, a rate of 15-20% is very good. Furthermore, the survey produced an adequate sample of 65 respondents, representing 55 companies. In follow-up work selectivity correction may be used to assess and adjust possible bias. For now the analysis that follows cannot be generalized to the universe of all recruiters everywhere, but it provides an

in-depth study of one group of dynamic employees representing a cross section of industries and organizations from local to multi-national. Industries include finance, insurance, accounting, manufacturing and retail.

III.H. PREPARING DATA FOR ANALYSIS

Vignette data, originating from computer-generated numerically encoded data sets, required only the input of respondent rating scores to prepare for the analysis. Respondent questionnaire data, on the other hand, required more work, such as coding, inputting, and in some cases interpreting, recoding, combining and generating new variables. Details of coding procedures and decisions are detailed in APPENDIX E.

III.I. SUMMARY

This research project uses the factorial-survey method to investigate the desirability of young, college-educated job candidates for management/management-training positions with large-scale organizations as rated by on-campus recruiters from these organizations. The study measures and examines the direction and magnitude of the effects of job seeker attributes as well as contextual attributes of the recruiter and prospective company and industry.

The analyses are described and the findings reported in the following three chapters: ratings and inter-respondent agreement in Chapter IV, selection criteria and preferences in Chapter V, and determinants of respondent preferences in Chapter VI.

TABLE 3-1:
VIGNETTE VARIABLES

INDEPENDENT VARIABLES
Deck Number (DECK)

Respondent ID Number (RESPID)

Vignette ID Number (VIGID)

Human Capital Skills:
Area of Study (MAJOR)
0. Liberal Arts
1. Business

Grades (GRADES)
1. B (3.0)
2. B+ (3.3)
3. A- (3.7)
4. A (4.0)

Oral Communication Skills (ORAL)
0. Weak oral skills
1. Good oral skills

Written Communication Skills: (WRITTEN)
0. Weak written skills
1. Good written skills

Schools (SCHOOLS)
1. Pace
2. Fordham
3. St. Johns
4. CUNY
5. NYU

Clubs (CLUBS)
0. Not a member
1. Member university business club

Officer (OFFICER)
0. No office
1. Held office in university business club

Demographics:
Gender (GENDER)
0. Female
1. Male

Ethnic Groups (ETHNICITY)
1. African-American
2. Asian-American
3. European-American
4. Latino-American

Place of Birth (NATIVITY)
0. Born outside the U.S.
1. Born in the United States

Interests, Activities, Hobbies (INTERESTS)
0. Community sports league, community social club.
1. Travel group, ski club.

Work Styles:

Flexible (FLEXIBLE)
0. Comfortable working within structure, adjusts to routine, deals well with predictable situations, stability-oriented.
1. Deals well with uncertainty, flexible, change-oriented.

Macro-oriented (WHOLE)
0. Detail-oriented, attention to specific task, specialist.
1. Macro-oriented, sees big picture, generalist.

Innovative (INNOVATIVE)
0. Follows directions, accepts and obeys orders from supervisor.
1. Innovative, problem solver, makes suggestions to supervisor.

Persuasive (PERSUASIVE)
0. When in a leadership position, organizes efficiently, assigns tasks; maintains hierarchical protocols.
1. When in a leadership position, bargains, negotiates and persuades; communicates freely with people at all levels of the organization.

Entrepreneurial (ENTREPRENEURIAL)
0. Cooperative, team player.
1. Entrepreneurial, independent, autonomous, competitive.

Life (LIFE)
0. Devoted to work; participates little in outside interests.
1. Participates actively in outside interests and hobbies.

Personality (PERSONALITY)
0. Quiet, serious, introvert; task-oriented.
1. Bright, lively, extrovert; people-oriented.

DEPENDENT VARIABLE

Rating (RATING)

TABLE 3-2:
RESPONDENT VARIABLES

Organization Information:

A. Primary business/industrial sector
- -Financial Services
- -Business Services
- -Accounting
- -Insurance
- -Data Processing
- -Manufacturing
- -Equipment/Computers
- -Apparel
- -Pharmaceuticals
- -Food Processing
- -Publishing
- -Retail Equipment/Computers
- -Computer Systems/Software
- -Apparel
- -Food/Lodging
- -Telecommunications
- -Transportation
- -Utilities
- -Other

B. Description of organization culture/structure
1. New-form
   - -Entrepreneurial
   - -Fast-paced
   - -Strong Culture
   - -Open systems
   - -Innovative
   - -Integral systems
   - -Informal
   - -Teamwork
   - -Participate
   - -Like a family
2. Traditional, hierarchical
   - -Traditional
   - -Hierarchical
   - -Rigid structure
   - -Clear boundaries
   - -Job descriptions
   - -Segmented
   - -Task-oriented
   - -Rules
   - -Formal
3. Changing
4. Other

C. Position recruiting for at NYU?
[OPEN]

D. New York City area schools where organization recruits for similar position
1. CUNY
2. St. Johns
3. Fordham
4. Pace
5. Other

E. Number of people from your organization/division who do on-campus recruiting for the same position?
[OPEN]

Educational and Professional Background of Recruiter:

A. Education
[0. Less than a Bachelors Degree]
1. Bachelors Degree
2. Masters Degree[/MBA/JD]
[3. More than Masters/ABD/PHD/]

B. Function/position/job title
1. Staff in Corporate Human Resources
2. Staff in Division Human Resources
3. Line Position outside Human Resources
[4. Management in Human Resources]
[5. General Management]
[6. Other Staff]

C. How long recruiting for your company?
[OPEN]

Demographic Characteristics of Recruiter:

A. Gender
0. Female
1. Male

B. Ancestry/ethnicity
1. Afro-American
2. Asian-American
3. European-American
4. Latino-American
5. Other

C. Age
1. Under 30
2. 30-39
3. 40-49
4. 50-59
5. 60 or over

TABLE 3-3:
CHARACTERISTICS OF THE JOB CANDIDATE VIGNETTE SAMPLE

Variable	Values/Coding	Deck 1	N=40	Deck 2	N=40	Deck 3	N=40	Deck 4	N=40
		Mean D-1	S.D. D-1	Mean D-2	S.D. D-2	Mean D-3	S.D. D-3	Mean D-4	S.D. D-4
MAJOR	0=Liberal Arts 1=Business	0.525000	0.505736	0.625000	0.490290	0.425000	0.500641	0.450000	0.503831
GRADES	Lowest=3.0 Highest=4.0	3.557500	0.401847	3.482500	0.418721	3.547500	0.389600	3.522500	0.363380
PACE	Dummy 0/1	0.200000	0.405096	0.275000	0.452203	0.075000	0.266747	0.175000	0.384808
FORDHAM	"	0.250000	0.438529	0.200000	0.405096	0.150000	0.361620	0.200000	0.405096
STJOHNS	"	0.225000	0.422902	0.225000	0.422902	0.275000	0.452203	0.100000	0.303822
CUNY	"	0.125000	0.334932	0.225000	0.422902	0.225000	0.422902	0.300000	0.464095
NYU	"	0.200000	0.405096	0.075000	0.266747	0.275000	0.452203	0.225000	0.422902
CLUBS	0=Non-Member 1=Member	0.750000	0.438529	0.725000	0.452203	0.675000	0.474342	0.525000	0.505736
OFFICER	0=Not Officer 1=Club Officer	0.275000	0.452203	0.325000	0.474342	0.275000	0.452203	0.300000	0.464095
ORAL	0=Weak 1=Good oral comm. skills	0.400000	0.496139	0.600000	0.496139	0.475000	0.505736	0.475000	0.505736
WRITTEN	0=Weak 1=Good written comm. skills	0.550000	0.503831	0.400000	0.496139	0.600000	0.496139	0.425000	0.500641
FLEX	0=Stability 1=Change	0.700000	0.464095	0.475000	0.505736	0.450000	0.503831	0.300000	0.464095
WHOLE	0=Detail 1=Macro-orientation	0.475000	0.505736	0.500000	0.506370	0.375000	0.490290	0.425000	0.500641
INNOVATE	0=Direction following 1=Innovation	0.725000	0.452203	0.500000	0.506370	0.450000	0.503831	0.525000	0.505736
PERSUADE	0=Hierarchy 1=Negotiation	0.425000	0.500641	0.575000	0.500641	0.475000	0.505736	0.550000	0.503831
ENTREP	0=Cooperation 1=Entrepreneurship	0.550000	0.503831	0.575000	0.500641	0.475000	0.505736	0.400000	0.496139

Variable	Values/Coding	Deck 1	N=40	Deck 2	N=40	Deck 3	N=40	Deck 4	N=40
		Mean D-1	S.D. D-1	Mean D-2	S.D. D-2	Mean D-3	S.D. D-3	Mean D-4	S.D. D-4
AFRO	Dummy 0/1	0.275000	0.452203	0.275000	0.452203	0.275000	0.452203	0.350000	0.483046
ASIAN	"	0.125000	0.334932	0.225000	0.422902	0.200000	0.405096	0.200000	0.405096
EURO	"	0.250000	0.438529	0.250000	0.438529	0.225000	0.422902	0.275000	0.452203
LATIN	"	0.350000	0.483046	0.250000	0.438529	0.300000	0.464095	0.175000	0.384808
GENDER	0=Female 1=Male	0.500000	0.506370	0.500000	0.506370	0.500000	0.506370	0.500000	0.506370
NATIVITY	0=Not Born U.S. 1=Born U.S.	0.525000	0.505736	0.550000	0.503831	0.650000	0.483046	0.425000	0.500641
INTEREST	0=Community 1=Travel,ski	0.450000	0.503831	0.400000	0.496139	0.500000	0.506370	0.350000	0.483046
PERSON	0=Quiet,introvert 1=Bright,extrov.	0.475000	0.505736	0.425000	0.500641	0.625000	0.490290	0.550000	0.503831
LIFE	0=Workaholic 1=Outside activities	0.425000	0.500641	0.475000	0.505736	0.450000	0.503831	0.350000	0.483046

Variable	Values/Coding	Deck 5	N=40	Deck 6	N=40	Deck 7	N=40	All	N=2600
		Mean D-5	S.D. D-5	Mean D-6	S.D. D-6	Mean D-7	S.D. D-7	Mean All	S.D. All
MAJOR	0=Liberal Arts 1=Business	0.425000	0.500641	0.575000	0.500641	0.600000	0.496139	0.501538	0.500094
GRADES	Lowest=3.0 Highest=4.0	3.637500	0.395285	3.470000	0.370170	3.550000	0.396135	3.543923	0.387812
PACE	Dummy 0/1	0.225000	0.422902	0.175000	0.384808	0.300000	0.464095	0.201538	0.401226
FORDHAM	"	0.250000	0.438529	0.225000	0.422902	0.225000	0.422902	0.211923	0.408749
STJOHNS	"	0.175000	0.384808	0.200000	0.405096	0.100000	0.303822	0.175000	0.380040
CUNY	"	0.150000	0.361620	0.175000	0.384808	0.175000	0.384808	0.210769	0.407933
NYU	"	0.200000	0.405096	0.225000	0.422902	0.200000	0.405096	0.200769	0.400653
CLUBS	0=Non-Member 1=Member	0.775000	0.422902	0.625000	0.490290	0.700000	0.464095	0.669231	0.470581
OFFICER	0=Not Officer 1=Club Officer	0.475000	0.505736	0.275000	0.452203	0.375000	0.490290	0.331538	0.470857
ORAL	0=Weak 1=Good oral comm. skills	0.575000	0.500641	0.450000	0.503831	0.575000	0.500641	0.508462	0.500025
WRITTEN	0=Weak 1=Good written comm. skills	0.575000	0.500641	0.575000	0.500641	0.550000	0.503831	0.508462	0.500025
FLEX	0=Stability 1=Change	0.500000	0.506370	0.450000	0.503831	0.400000	0.496139	0.450385	0.497628
WHOLE	0=Detail 1=Macro-orientation	0.600000	0.496139	0.525000	0.505736	0.475000	0.505736	0.473077	0.499371
INNOVATE	0=Direction following 1=Innovation	0.500000	0.506370	0.475000	0.505736	0.575000	0.500641	0.538846	0.498585
PERSUADE	0=Hierarchy 1=Negotiation	0.475000	0.505736	0.525000	0.505736	0.475000	0.505736	0.503846	0.500081
ENTREP	0=Cooperation 1=Entrepreneurship	0.475000	0.505736	0.475000	0.505736	0.575000	0.500641	0.491923	0.500031

Variable	Values/Coding	Deck 5	N=40	Deck 6	N=40	Deck 7	N=40	All	N=2600
		Mean D-5	S.D. D-5	Mean D-6	S.D. D-6	Mean D-7	S.D. D-7	Mean All	S.D. All
AFRO	Dummy 0/1	0.325000	0.474342	0.275000	0.452203	0.225000	0.422902	0.296154	0.456648
ASIAN	"	0.200000	0.405096	0.225000	0.422902	0.275000	0.452203	0.203462	0.402650
EURO	"	0.200000	0.405096	0.250000	0.438529	0.275000	0.452203	0.248462	0.432204
LATIN	"	0.275000	0.452203	0.250000	0.438529	0.225000	0.422902	0.251923	0.434201
GENDER	0=Female 1=Male	0.500000	0.506370	0.500000	0.506370	0.500000	0.506370	0.500000	0.500096
NATIVITY	0=Not Born U.S. 1=Born U.S.	0.550000	0.503831	0.400000	0.496139	0.300000	0.464095	0.490000	0.499996
INTEREST	0=Community 1=Travel,ski	0.500000	0.506370	0.400000	0.496139	0.575000	0.500641	0.444615	0.497019
PERSON	0=Quiet,introvert 1=Bright,extrov.	0.500000	0.506370	0.525000	0.505736	0.450000	0.503831	0.511538	0.499963
LIFE	0=Workaholic 1=Outside activities	0.575000	0.500641	0.575000	0.500641	0.250000	0.438529	0.424231	0.494321

CHAPTER IV

RATINGS AND INTER-RESPONDENT AGREEMENT

IV.A. INTRODUCTION AND SUMMARY OF RATINGS

Sixty-five respondents rated 40 vignettes each for a total of 2600 desirability ratings. Once the respondents have rated the desirability for employment of the fictitious job candidates, each described in terms of some combination of relevant attributes, the ratings can be analyzed to determine preferences and to retrieve the equations in respondents' heads as they worked their way through the selection process. This section will examine these ratings and it will focus on the question of inter-respondent agreement-- were respondents using the same decision-making process or criteria to arrive at their ratings?

The overall mean of all 2600 ratings is 8.29 with a standard deviation of 31.65, a minimum of -100.00 and a maximum or +100.00. Individual respondent scales varied from a spread of 2 points (0 and 1) to a spread of 200 points (-100 to +100). Forty seven of the 65 respondents (72.3%) gave positive ratings to every candidate. No respondent gave all zero or negative ratings.

Descriptive statistics for the ratings of individual respondents are presented in **TABLE 4-1**.

The summary statistics tell us among other things that, in each respondent's judgment, the attributes of the proposed job candidates are of some interest to recruiters in the employee selection process and that the process is not blind to the qualifications and characteristics presented in the vignettes. A respondent who ignores, overlooks, or is unconcerned with the given attributes would assign all prospective employees the same score, whereas a respondent who considers and prioritizes according to the attributes included in the vignette will assign them differing desirability scores. In this study no respondent assigned the same score to every candidate.

The respondent ratings together with the vignette variables become the data set for the factorial-survey analysis. The data set includes 2600 observations (65 respondents times 40 vignettes per respondent). There are 23 variables used as regressors. These include the quantitative variable, GRADES, and dichotomous variables, as follows: MAJOR, CLUBS, OFFICER, ORAL, WRITTEN, FLEXIBLE, WHOLE, INNOVATIVE, PERSUASIVE, ENTREPRENEURIAL, GENDER, NATIVITY, INTERESTS, PERSONALITY AND LIFE. The remaining variables are dummy variables from the categorical characteristics. For degree-granting school,

the regressors are CUNY, St.Johns, Fordham and Pace; NYU is the omitted category. For ethnic group, the regressors are African-American, Asian-American and Latino-American; European-American is the omitted category.

IV.B. ANALYSIS

This first phase of the factorial-survey process uses regression to test for inter-respondent agreement (respondent homogeneity). In other words, is there one regression model that describes all respondents or do they differ sufficiently so that no single equation can describe all of them?

The appropriate procedure for analysis is a framework with three models that form a hierarchy of tests. That is, three basic statistical models are estimated leading to tests of three main homogeneity hypotheses. The models and tests are explained below.

IV.B.1. Statistical Models

Model I: Model I specifies a common equation for all respondents:

$$Model\ I\text{: } R_{iv} = \beta_0 + \sum \beta_k X_{kiv} + \epsilon_{iv}$$

where R_{iv} denotes the rating made by the ith respondent about the vth vignette, β_o denotes the common intercept, the β_k are the (common) slope coefficients associated with the vignette characteristics, the X_{kiv} are the K attributes of the fictitious job candidates, and ϵ_{iv} is an error assumed to vary independently across respondents and vignettes.

Model I thus imposes the restriction that the behavior of all respondents obeys the same rules, that is, can be described by the same intercept and the same slope vector.

The number of parameters estimated in Model I is (K+1). In the present research, K, the number of explanatory regressors is 23, so that the number of parameters estimated in Model I is 24.

Model II: The next model in the hierarchy, Model II, specifies an equation with a common vector of slope coefficients but different intercepts for each respondent.

$$Model\ II\text{: } R_{iv} = \beta_{0i} + \sum \beta_k X_{kiv} + \epsilon_{iv}$$

This model removes the restriction of a common intercept, where β_{oi} denotes the intercept of the ith respondent. Therefore the number of parameters estimated increases

to (K+N). Since N is 65 in this research, the number of parameters estimated is 88.

Model III: The last model, Model III, specifies a unique vector of slope coefficients as well as a unique intercept for each respondent:

$$\textit{Model III: } R_{iv} = \beta_{0i} + \sum \beta_{ki} X_{kiv} + \epsilon_{iv}$$

where β_{ki} denotes slope coefficients for the kth attribute and the ith respondent. Removing the common slope vector constraint further increases the number of parameters estimated to [N(K+1)]. In the present case, the number of parameters estimated in Model III is 65(23+1)=1560.

IV.B.2. Homogeneity Tests

The tests appropriate to this analysis are three.

Test 1: The first tests the hypothesis of a common intercept, that is, that all respondents can be described by the same intercept, conditional on a common slope:

$$H_0: \quad \beta_{01} = \ldots = \beta_{0N}.$$

Test 1 compares Models I and II.

Test 2: The second tests the hypothesis of a common slope vector, that is, that all respondents can be described by the same vector of slope coefficients:

$$H_0: \quad \mathbf{B}_{k1} = . . . = \mathbf{B}_{kN}.$$

where B_k denotes the slope vector. Test 2 compares Models II and III.

Test 3: Finally, the third tests the hypothesis of overall homogeneity of the regressions across respondents, that is, that all respondents can be described by the same intercept and the same slope vector:

$$H_0: \quad \mathbf{B}_1 = . . . = \mathbf{B}_N.$$

where B denotes the full parameter vector. Test 3 compares Model I and Model III.

IV.B.3. Estimation Strategy

The estimation procedure used in this analysis is classical ordinary least squares (OLS). This is appropriate because (1) the ratings in this study are reasonably assumed to constitute a continuous scale of a

quantitative variable and (2) the experimental design ensures orthogonality.

For Model I, I estimate a regression in which rating is the dependent variable and the 23 vignette attributes are the regressor variables, with all 65 respondents included in one equation. Given that each respondent rated 40 vignettes, the total number of observations for Model I is 2600. The regression yields one coefficient for each regressor variable and an estimated intercept, as well as a summary R^2 of .12469. Estimation via conventional OLS may produce biased standard errors due to the clustering of observations within respondents. To correct such bias, I estimate Huber standard errors (Huber, 1967; White, 1980).

For Model II, I estimate a regression using rating as the dependent variable and the 23 attribute variables plus a binary dummy variable for each respondent, totaling 88 regressor variables. This estimates one grand pooled regression in which each respondent's intercept is the sum of the equation constant and the corresponding respondent coefficient. At the same time I perform a GLM anova-type procedure, using rating as the dependent variable and 23 attribute regressor variables, with respondent ID as a class variable. These two procedures produce the same results in terms of the model, as well as the residual sum of squares and mean

square for use in the testing procedures described below. The overall summary R^2 is .5165 and significant.

For Model III, I estimate 65 separate regressions using rating as the dependent variable and the 23 attribute regressor variables. This produces a separate intercept and vector of slope coefficients for each respondent. The total Model I sum of squares minus the total of the residual sum of squares from the 65 separate regressions divided by the Model I sum of squares gives an overall regression matrix R^2 of .9403 and significant.

Once I obtain all of the parameter estimates and residual sums of squares, I am able to perform the homogeneity tests using a conventional F-test.

IV.B.4. F-Tests

F-test 1, compares Model I and Model II:

$$F = \frac{(RSS_1 - RSS_2) / (Model\ df_2 - Model\ df_1)}{RSS_2 / (No.\ of\ Obs. - Model\ df_2)}$$

F-test 2, compares Model II and Model III:

$$F = \frac{(RSS_2 - RSS_3) / (Model\ df_3 - Model\ df_2)}{RSS_3 / (No.\ of\ Obs. - Model\ df_3)}$$

F-test 3, compares Model I and Model III:

$$F = \frac{(RSS_1 - RSS_3) / (Model\ df_3 - Model\ df_1)}{RSS_3 / (No.\ of\ Obs. - Model\ df_3)}$$

IV.C. RESULTS

TABLE 4-2 summarizes the OLS estimates of the three models and the OLS-based tests of the three homogeneity hypotheses.

The first test contrasts Models I and II and demonstrates that Model II is better. The F-ratio for the test is 15.95 with degrees of freedom 23 and 2576 and significant, so that one can reject the hypothesis of a common intercept (conditional on a common slope vector) at well beyond the .001 level.

Next, I test the null hypothesis of a common vector of slope coefficients by comparing Models II and III. This produces an F-statistic of 30.85, with 87 and 2512 degrees of freedom and significant, so that one can reject the null hypothesis at well beyond the .001 level.

Finally, I test the null hypothesis of overall homogeneity across respondents. Contrasting Models I and III yields an F-statistic of 10.52, with 1559 and 1040 degrees of freedom and significant, leading to rejection of the null hypothesis, again beyond the .001 level.

Thus, the results of **TABLE 4-2** indicate pervasive inter-respondent disagreement, or heterogeneity.

Given the failure of the homogeneity hypotheses, the appropriate model for analysis is Model III, which uses separate regression equations for each of the 65 respondents. In other words, respondents have different formulas in their heads and a different system of priorities and exigencies as they evaluate, rank and rate prospective employees. (APPENDIX F shows the 65 within-respondent regression coefficients.)

FIGURE 1 graphs respondents' values of R^2. In the entire respondent group the values of R^2 range from .5713 to .9994. The median is .8936. Ninety percent of the 65 exceed .7781 (75% exceed .8419). Thus, it appears that the included characteristics of prospective employees are used by all 65 respondents in an internally ordered and coherent fashion, and that for most of these respondents, omitted factors and chance account for relatively small amounts of the variation in the desirability ratings.

IV.D. SUMMARY

Respondents differ significantly in their criteria for selecting employees. They may differ in terms of the magnitude of the effect of each attribute. They also may differ regarding the direction of the effect of each attribute on the applicant's desirability score. That

is, one respondent may prefer men whereas another may prefer women, one may prefer a macro-oriented work style whereas another may prefer a detail-oriented work style, and so forth. These directions are analyzed in the following chapter.

TABLE 4-1: CHARACTERISTICS OF THE RESPONDENTS' RATINGS OF THE DESIRABILITY OF JOB CANDIDATES

	VIGNETTE RATINGS N=40 per respondent						
RESPONDENT ID	MEAN	STANDARD DEVIATION	MIN-IMUM	MAX-IMUM	PERCENT NEGATIVE	PERCENT ZERO	PERCENT POSITIVE
1	14.3000	2.1025	10	18.00	.	.	100.0
2	13.7500	33.4693	-50	100.00	15.0	45.0	40.0
3	-0.0250	2.9220	-5	7.00	47.5	7.5	45.0
4	7.3000	1.5884	4	10.00	.	.	100.0
5	3.1500	0.6622	2	5.00	.	.	100.0
6	4.5750	3.0288	-4	10.00	2.5	15.0	82.5
7	22.5000	29.3301	-50	80.00	20.0	5.0	75.0
8	20.5000	62.7142	-100	80.00	35.0	.	65.0
9	-30.6250	61.1240	-100	90.00	62.5	12.5	25.0
10	-1.1250	5.1250	-10	10.00	42.5	30.0	27.5
11	3.3750	3.6843	-1	9.00	37.5	.	62.5
12	0.5625	3.5648	-5	5.00	40.0	5.0	55.0
13	-0.3750	12.0569	-30	25.00	40.0	20.0	40.0
14	9.5000	18.5638	-20	50.00	17.5	25.0	57.5
15	62.2500	20.6916	20	90.00	.	.	100.0
16	60.2000	22.4867	0	88.00	.	7.5	92.5
17	7.5938	0.7504	6	8.75	.	.	100.0
18	0.8000	3.0060	-4	8.00	40.0	12.5	47.5
19	9.2500	36.9607	-40	90.00	47.5	7.5	45.0
20	0.1500	12.2528	-20	20.00	50.0	2.5	47.5
21	0.4000	0.4961	0	1.00	.	60.0	40.0
22	13.3000	4.6476	1	24.00	.	.	100.0
23	0.5000	2.1602	-4	5.00	20.0	30.0	50.0
24	-3.3750	25.6802	-50	50.00	50.0	10.0	40.0
25	3.2750	2.6889	-1	8.00	5.0	17.5	77.5
26	42.2500	15.8902	20	70.00	.	.	100.0
27	-6.9500	4.4489	-10	4.00	80.0	.	20.0
28	-5.3750	29.4911	-50	85.00	60.0	10.0	30.0
29	3.0500	1.2999	1	5.00	.	.	100.0
30	-8.3750	17.4086	-25	25.00	77.5	.	22.5
31	2.7500	3.5859	-2	7.00	40.0	.	60.0
32	-0.2500	23.0370	-40	40.00	50.0	10.0	40.0
33	68.5000	30.8470	-10	100.00	10.0	.	90.0
34	-20.0000	79.5017	-100	100.00	47.5	.	52.5
35	-2.3750	27.6885	-35	40.00	55.0	.	45.0
36	-38.7500	85.3781	-100	95.00	65.0	.	35.0
37	4.1500	4.4465	-5	10.00	17.5	7.5	75.0
38	4.5000	2.8284	-1	10.00	2.5	7.5	90.0
39	-1.9000	5.8257	-10	10.00	50.0	25.0	25.0
40	3.9000	1.1503	1	7.00	.	.	100.0
41	8.7500	19.5051	-50	50.00	27.5	2.5	70.0
42	43.3750	23.9762	0	100.00	.	12.5	87.5
43	2.8750	4.0458	-8	10.00	17.5	5.0	77.5
44	-2.6250	6.1423	-9	9.00	60.0	.	40.0
45	26.5000	44.5807	-100	85.00	27.5	.	72.5
46	22.9250	10.4572	9	60.00	.	.	100.0
47	11.5500	5.0330	4	25.00	.	.	100.0
48	1.4000	5.5136	-9	9.00	32.5	12.5	55.0
49	5.0000	51.3285	-100	100.00	42.5	12.5	45.0
50	-3.7500	5.4006	-10	10.00	65.0	20.0	15.0
51	2.8250	1.5752	1	5.00	.	.	100.0

RESPONDENT ID	VIGNETTE RATINGS MEAN	STANDARD DEVIATION	MIN-IMUM	MAX-IMUM	N=40 per respondent PERCENT NEGATIVE	PERCENT ZERO	PERCENT POSITIVE
52	-0.6750	5.1609	-6	10.00	55.0	12.5	32.5
53	52.3750	20.5373	20	85.00	.	.	100.0
54	-13.0000	24.3057	-70	70.00	72.5	22.5	5.0
55	1.8500	2.7601	-4	8.00	25.0	12.5	62.5
56	-2.0000	23.7724	-50	80.00	45.0	27.5	27.5
57	0.6250	1.7930	-2	4.00	30.0	20.0	50.0
58	-0.1000	3.1768	-5	5.00	50.0	10.0	40.0
59	11.6250	27.6282	-35	50.00	37.5	.	62.5
60	1.8750	4.3571	-5	9.00	47.5	.	52.5
61	-2.9375	5.8224	-8	9.00	72.5	2.5	25.0
62	50.8500	17.8190	20	83.00	.	.	100.0
63	1.7500	4.5784	-8	9.00	32.5	2.5	65.0
64	1.6750	4.5256	-7	10.00	22.5	27.5	50.0
65	49.5000	28.2571	10	90.00	.	.	100.0

TABLE 4-2: SUMMARY OF ESTIMATED MODELS AND HETEROGENEITY TESTS: OLS on Full Sample of Original Data (65 Respondents and 2600 Ratings)

Model/Test	R^2	F-ratio
Model I: Common Slope and Common Intercept (24 parameters) $R_{iv} = \beta_0 + \Sigma \beta_k X_{kiv} + \varepsilon_{iv}$	.12469	15.95 (23,2576)
Model II: Common Slope and Differential Intercepts (88 parameters) $R_{iv} = \beta_{0i} + \Sigma \beta_k X_{kiv} + \varepsilon_{iv}$	.5165	30.85 (87,2512)
Model III: Differential Slopes and Differential Intercepts (1560 parameters) $R_{iv} = \beta_{0i} + \Sigma \beta_{ki} X_{kiv} + \varepsilon_{iv}$	.9403454	10.52 (1559,1040)
Test 1: Test of Differential Intercepts: Model I Versus Model II H_0: $\beta_{01} = \ldots = \beta_{0N}$		31.80825 (64,2512)
Test 2: Test of Differential Slopes: Model II Versus Model III H_0: $B_{k1} = \ldots = B_{kN}$.		5.01972 (1472,1040)
Test 3: Test of Differential Regressions: Model I Versus Model III H_0: $B_1 = \ldots = B_N$.		9.257762 (1536,1040)

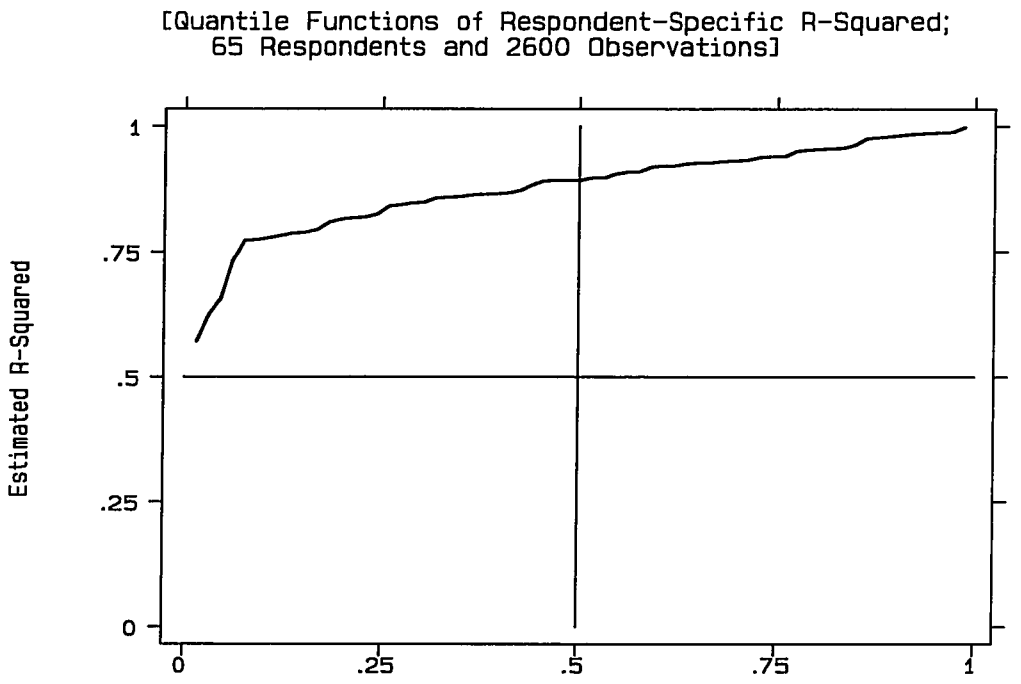


Figure 1. Respondents' Values of R-Squared

CHAPTER V

SELECTION CRITERIA AND RECRUITER PREFERENCES

V.A. INTRODUCTION

Chapter V is a continuation of the factorial-survey analysis process. The previous chapter established that the corporate recruiters in this study differ significantly in how they rank and rate fictitious prospective employees. This chapter begins to examine the variables of interest to reveal specific ways in which respondents agree and disagree in prioritizing job-candidate attributes. Pending rigorous analysis of possible selectivity bias and subsequent correction, I present this preliminary examination of determinants of coefficients. First I analyze general patterns and trends in respondent preferences, and then I explore some of the patterns in more detail. In Chapter V respondents are viewed as one group, undifferentiated by individual, company or industry characteristics. Later, Chapter VI brings in information about the respondent and seeks to explain particular choices or preferences.

V.B. OVERVIEW OF RESPONDENT PREFERENCES

The analyses conducted for this section consist of summarizing and grouping the regression coefficient point

estimates and examining patterns and trends in individual respondent preferences.

These analyses are based on and summarize the regression coefficient point estimates obtained by conducting a separate OLS regression for each of the 65 individual respondents (as described in detail in Chapter IV). The summaries refer to the actual value of the estimates, ignoring the reliability of the estimates. This is done because there are many reasons why a coefficient may not be significant, including sample size, multicollinearity, error variance, small value together with large standard error. Significance, also referred to as "discernibility of effect" (Wonnacott and Wonnacott 1979) may be just that and lack of discernibility does not necessarily mean that a coefficient is unimportant. In this analysis the point estimates are assumed to be meaningful.

Discernibility of effect is different for each variable across the sample. The following examples show the proportion of 65 coefficients significant at the .05 level for the given variable, or attribute.

PERSONALITY	31%
ENTREPRENEURIAL	11%
ORAL	82%

Another concern may be the effect of multicollinearity of regressors. Because of the experimental design, there is no intercorrelation in the vignette population. However, in the process of randomly selecting sample groups, inadvertent correlation may occur within vignette decks. APPENDIX C is a presentation of the overall correlation matrix for the seven vignette decks used in this study. In the cases where regressors are correlated, the intercorrelation affects the standard error of the estimate and therefore the reliability, but it does not affect the estimate itself. Little is currently known about stability of preferences over time and it is hoped that future research will be longitudinal and resurvey the same respondents.

V.B.1. Preliminary Summary of the Coefficients

TABLE 5-1 shows the variable coefficient means, standard deviations, minimums and maximums. In general, a positive mean indicates a positive effect of the regressor in terms of the overall rating, whereas a negative mean indicates that as the value of the regressor increases the value of the rating decreases thereby having a negative effect. The standard deviation demonstrates the width of dispersion about the mean. Minimum and maximum values show the entire range.

Sizes of coefficients vary greatly. For example among the coefficients for the variable PERSONALITY, the range is from -48.35 to 152.04. The size of the coefficient cannot be compared among respondents because the size reflects not only the respondent's judgment but also the respondent's style of expression. Because the respondents were free to establish their own rating scale (see Instructions to Respondents presented in APPENDIX D), some people used wider ranges and others narrower ones, as evidenced by the summary statistics of ratings presented in **TABLE 4-1.**

V.B.2. Positive/Negative Ratios for Dichotomized Preferences

For all the non-categorical, non-quantitative variables, I recoded respondents' coefficients into positive and negative and then generated frequencies for each.

TABLE 5-2 presents the number and percent of the 65 respondents who perceived each attribute as good or desirable in a prospective employee. For most variables, the outcomes were expected and in accordance with conjectures set forth in Chapter III.

Respondents reveal a preference for:

-Business over liberal arts majors,

-Club officers over non-officers,

-Good oral and written communication skills over poor ones,
-Outgoing extroverted candidates over introverted, task-oriented ones,
-Candidates with outside interests over those with little life outside of work,
-Travel/ski interests over community organization activity.

Regarding the work-style variables, the respondents show a preference for:

-Flexibility and change-orientation over stability-orientation.
-An ability to see the whole, big picture over attention to detail.
-Innovation over contentment with following directions.
-Leadership by negotiation and persuasion over management by rules and regulations.

In all but one case, the variables with more than 50% positive also have a positive sign on the mean from Table 1 and vice versa. The exception is the work-style variable, ENTREPRENEURIAL. For this variable the mean is

low, but positive, indicating entrepreneurship had more effect on increasing the rating score that did its flip side, cooperation. According to the frequency count however, somewhat fewer than 50% (44.6) indicate a preference for entrepreneurship and individualism over cooperation and team spirit. For this variable it was expected that the choice would be a difficult one; therefore the outcome was not surprising.

Contrary to expectation, club membership was not given preference over non-membership. One could speculate about reasons for this, and further work is planned on this issue.

The place of birth variable, NATIVITY, was expected to be interesting because there were reasons to believe that recruiters might prefer either native-born or foreign-born candidates. As it turned out the respondents reveal a preference for prospective employees born outside the United States. Nativity is of particular interest in combination with ethnicity, which is discussed below.

V.B.3. Category Rankings

Some regressors work together as a group. Namely these are the regressors created as bivariate dummy variables from the original categorical variables--schools from which a candidate graduated and ethnicity of

the candidate. For these I conducted analyses comparing the 65 respondent regression coefficient point estimates within each group. The variables left out of the regression, NYU for schools and EUROPEAN-AMERICAN for ethnicities, have a coefficient of zero; the coefficients of the other regressors in the group indicate a preference relative to the omitted group.

V.B.3.a. Schools: First, I looked at each respondent's coefficients for each school relative to all other schools, and I ranked the coefficients from 5 (highest ranking) to 1 (lowest ranking). Second, I ordered the rankings producing a 5-digit number with each university represented by a different digit or position in the following order: NYU (in the 10000 place), CUNY (1000), St.Johns(100), Fordham(10), Pace(1). Third, I produced a frequency distribution showing how many respondents had indicated the same rank order. These results are shown in **TABLE 5-3A.**

The number of possible configurations or permutations theoretically possible would be 120 and the additional limitation imposed by the total number of respondents makes the number of possible configurations equal to 65. As demonstrated by **TABLE 5-3A** there is much inter-respondent variability with 49 configurations represented. There are several groups of 2 respondents,

and at the rank orderings 24513 and 53142 there are groups of 3 respondents. Rank ordering 24513 means that the highest rated school was St. Johns, followed in order by CUNY, Pace, NYU and Fordham. Rank ordering 53142 means that the highest rated school was NYU followed in order by Fordham, CUNY, Pace and St. Johns.

TABLE 5-3B offers a companion summary showing the mean rank and the proportion of respondents ranking each school most desirable. NYU leads with a mean rank of 3.35 followed in order by Fordham (3.17) Pace (3.11) St. Johns (2.78) and CUNY (2.58). NYU also leads with 27.7% of the respondents ranking it the most desirable school followed by Pace (21.5%), St. Johns and Fordham (both 20.0%) and CUNY (10.8%).

Both the means of the coefficients and the percent of respondents ranking the school most desirable suggest that the most favored school is NYU and that the least favored is CUNY, with Pace, Fordham and St. Johns falling in between.

V.B.3.b. Ethnic Groups: As with the schools, I looked at each respondent's coefficients for each ethnic group relative to all other ethnic groups and ranked the coefficients from 4 (highest ranking) to 1 (lowest ranking). Then, I ordered the rankings producing a 4-digit number with each ethnicity represented by a

different digit or position in the following order: African-American (in the 1000 place), Asian-American (100), European-American (10), Latino-American (1). Here again, as with schools, I produced a frequency distribution showing how many respondents had indicated the same rank order. The results for ethnic groups are presented in **TABLE 5-4A.**

The number of possible configurations or permutations theoretically possible here is 24. Here also, there is inter-respondent variability (22 configurations represented), but less so than in the schools. There are groupings of 2,3,4,5 and 6 respondents. The 6 respondents are grouped at the rank ordering 2134, which indicates highest preference for Latino-Americans followed in order by European-Americans, African-American and Asian-Americans. Five respondents are grouped at 2413, 4132 and 4321.

TABLE 5-4B, the companion summary showing the mean rank and the proportion of respondents ranking each ethnic group most desirable, indicates a preference for African-Americans (2.66 and 30.8%) followed in order by Latino-Americans (2.63 and 29.2%), Asian-Americans (2.37 and 21.5%) and European-Americans (2.34 and 18.5%).

In the ethnicity group both the means of the coefficients and the percent of respondents ranking the group most desirable suggest a trend by respondents to

give priority to African-Americans over Latino-Americans, Asian-Americans and European-Americans. In other words, an admirable Affirmative Action plan for diversity in the workplace. These preferences or priorities are discussed below in more detail.

In the following sections I continue with a more complex level of analysis, using interaction of variables, and in-depth case studies. The focus is on variables most relevant to the research questions raised in Chapters II and III, and on issues intrinsically difficult to address, especially the effects of ethnicity and gender. And finally, I examine the quantitative variable, GRADES, and take another look at communication skills.

V.C. A CLOSER LOOK AT ETHNICITY

Going back to a previous stage of analysis, I conduct additional regressions, similar to the first but instead of using ethnicity categories alone as regressors, I use interaction terms as regressors. The first of these regressions tests the interaction of ETHNICITY and NATIVITY (place of birth). Place of birth, either in the United States or outside the United States, may signal to recruiters not only native origins but also

some kind of cultural conditioning or influence, values or attitude.

A second regression tests the interaction of ETHNICITY and INTERESTS, which is an attempt to bring in some indicator of class. To review, the interests variable described candidates as participating in either (a) community sports league, community social club, or (b) travel group, ski club. It is assumed that these interests would invoke an image of someone with a more working class as compared with a more elite socioeconomic class background and an accompanying set of values and behaviors.

V.C.1. Results of Interactions

The results of the interaction of ETHNICITY and NATIVITY are presented in **TABLE 5-5: Summary of Rank Ordering for Ethnic Group with Nativity/Culture.** This table includes both mean rank and percent of respondents ranking each group most desirable. Using the percent ranking each group most desirable, it can be summarized that within ethnic groups respondents prefer:

-African-Americans to be foreign-born (10.8% to 7.7%/a difference of 3.1 points),

-Asian-Americans to be born in the U.S. (15.4% to 9.2%/6.2 points difference),

-Latino-Americans also to be born in the U.S. (18.5% to 12.3%/6.2 points difference),

-and for the European-Americans it was very close, with a slight preference for foreign-born (13.8% to 12.3%/1.5 points difference).

The percentage point difference is much lower for the European-American group than for the other groups.

The mean rank numbers support this summary for Asian-Americans and European-Americans, but contradict it regarding African-Americans and Latino-Americans.

The results of the interaction of ETHNICITY and INTERESTS are shown in **TABLE 5-6: Summary of Rank Ordering for Ethnic Group with Interests/Class.** Again, based on the percent ranking each group most desirable, it can be summarized that within ethnic groups respondents prefer:

-African-Americans who ski and travel (15.4% to 10.8%/4.6 points difference),

-and Asian-Americans who ski and travel (17.9% to 4.6%/13.3 points difference).

-They show a slight preference for European-Americans who ski and travel (7.7% to 6.2%/1.5 points difference).

-However, respondents show a preference for Latino-Americans involved in community sports

and social clubs (18.5 to 7.7%/10.8 points difference)!

The percentage point difference is much lower for the European-American group than for the other groups.

Once again the mean rank numbers support this summary for Asian-Americans and European-Americans, but contradict it regarding African-Americans and Latino-Americans.

V.C.2. Discussion

I emphasize the percent ranking each group most desirable because I think a first choice is a better indicator of preference than where the group ranked when it did not rank first. Based on these percentages, the preference profiles that emerge for each group are presented below. I order the ethnic groups based on the category ranking in the previous section. I refer to nativity as foreign-born or US.-born; for interests I use the terms travellers/skiers and community-oriented.

African-Americans: foreign-born, travellers/skiers

Latino-Americans: U.S.-born, community-oriented

Asian-Americans: U.S.-born, travellers/skiers

European-Americans: foreign-born, travellers/skiers

The higher percentage point difference for the minority versus the European-Americans suggests more of a pattern of preference among the 65 respondents.

V.D. THE EFFECTS OF GENDER

Does the gender of the vignette candidate matter? There are two ways in which gender can affect the selection process-- primary and secondary.

Primary gender selection bias is when a recruiter expresses a preference for one gender over another. We saw in **TABLE 5-2** that there was, in general, a small preference for males over females (55.4%). Additionally, the mean ratings score for the male half of the vignette population (1300/2600) is 8.69 as compared to a mean ratings score of 7.89 for the female half. This slightly higher overall score for men is another indication of the male preference.

Secondary gender selection bias, on the other hand, is an interaction effect. It answers questions such as: Given the gender of the candidate do preferences for other characteristics vary by gender? Is the way recruiters manipulate attributes gender-typed, and are there different standards for men and women? Do recruiters look for some attributes in men and other attributes in women? For example, would recruiters prefer men to be more macro-oriented but women to be more detail-oriented? men to be more entrepreneurial but women to be more cooperative team players? and so forth.

In order to look at both the primary and secondary effects, I conducted sets of statistical data analysis to

look for relationships or patterns that may exist. In this phase the division of the vignette population into male and female halved the sample size, meaning that the number of variables had to be reduced to satisfy degrees of freedom requirements. Moreover, the specific area where different standards seemed most likely to be applied was within work-style variables. Therefore, the reduced set of variables includes FLEXIBLE, WHOLE, INNOVATIVE, PERSUASIVE, ENTREPRENEURIAL, INTERESTS, PERSONALITY and LIFE as well as MAJOR, ORAL, WRITTEN, AFRO, ASIAN, LATIN and NATIVITY. These variables are used in two ways: individually or combined with GENDER to create the interaction regressors.

First, I conducted one regression for each of the 65 respondents in which I regressed rating on individual variables for all 40 (male and female) vignettes. This replicates the original regression, but for the reduced set of variables. Of the 65 coefficients for gender only 5 are statistically significant. For these 5 we can reject the hypothesis that the coefficient for gender is equal to zero, but for the remaining 60 respondents that hypothesis cannot be rejected using the current sample size.

Second, I conducted two parallel regressions for each of the 65 respondents-- one for the male vignettes and one for the female vignettes. Here I could see from

a visual examination of the results that there seemed to be some interaction effects.

In order to test these interactions statistically I performed 65 analyses of variance using an F-test for the effect of the interaction terms. Of the 65 cases only 2 had F-tests that are statistically significant. For these 2 we can reject the hypothesis that regressions for men and women are equal, but for the other 63 we cannot reject that hypothesis using the current sample size.

As a result of these statistical tests I would have had to conclude that there was no evidence of gender bias. A major problem is that existing relationships may not be statistically discernible. As noted above statistical significance is difficult because it is determined not only by substance but also by sample size. Sample size is a special problem for vignette studies where there is by necessity a small sample size because there always exists the limitation of how many vignettes one person can rate.

Due to the possibility that small sample size precluded statistical significance, and because visual examination indicated some interesting secondary effects of gender, I examined point estimates in more detail. For respondents who displayed the most consistent interaction of gender with other selection criteria I conducted intensive case study analysis. Using the

separate male and female regressions, I examined pairs of coefficients with opposite signs and selected the respondents with the highest numbers of such preference reversals. They are identified as A, B, C, D, E and F, and the case studies are presented below.

V.D.1. Case Studies

Case studies include primary and secondary gender effects. Also, though more complete examination of respondent data comes in the next chapter, I will introduce some characteristics relevant here. **TABLE 5-7** offers an overview of gender bias and case study details. Both the text and the table use male as the reference point and male statistics precede female ones. (To refer to exact wording of variable categories, see **TABLE 3-1.**)

Case A:

The primary effect of gender indicates that in the process of considering all available selection criteria, this respondent appears to favor women to men. The coefficient is -.1295 and, based on a rating range of 6 points, it is somewhat substantial, but it is not statistically significant.

To look at the secondary effect I compared the R^2 values of the separate gender-specific regressions to the R^2 of the pooled regression, and found a substantial increase (from .7580 to .9401 and .9244). Therefore, gender-specific models fit much better than the pooled model; the selection criteria have a much stronger effect when separated along gender lines.

I then look to see which variables have different signs in male and female regressions (coefficient reversals). They are MAJOR, FLEXIBLE, WHOLE, INNOVATE, ENTREPRENEURIAL, PERSONALITY, LIFE. This respondent's preferences, attribute by attribute, where they vary by gender are as follows:

MAJOR
business for men,
liberal arts for women.
FLEXIBLE
flexible men,
stable women.
WHOLE
macro-oriented men,
detail-oriented women.
INNOVATE
men who follow directions,
women who innovate.
ENTREPRENEURIAL
cooperative men,
entrepreneurial women.
PERSONALITY
introverted men,
extroverted women.
LIFE
men with outside interests,
women devoted to work.

This respondent, a male in his 30s, is in health care.

Case B:

The primary effect of gender indicates that this respondent appears to favor men. The coefficient is +2.741 and, based on a rating range of 130 points, it is somewhat substantial, but it is not statistically significant.

As for the secondary effect, the R^2 values of the separate gender-specific regressions compared to the pooled regression show a very substantial increase (from .5899 to .9099 and .8894). This respondent's selection criteria are unambiguously different for men and women.

The variables that reversed direction are MAJOR, WRITTEN, PERSUASIVE, AFRO, ASIAN, LATIN, NATIVITY, PERSONALITY, LIFE.

MAJOR
liberal arts for men,
business for women.
WRITTEN
written communication less important for men
than for women.
PERSUASIVE
men who negotiate, communicate across the organization,
women who maintain hierarchical communication.
ETHNICITY
african/asian/latino-american men
european-american women.
NATIVITY
men born in the U.S.,
women born abroad.
PERSONALITY
extroverted men,
introverted women.
LIFE
men devoted to work,
women with outside interests.

This respondent is a male in his 20s in general retail.

Case C:

The primary effect of gender indicates that in the process of considering all available selection criteria, this respondent appears to favor women. The coefficient is -.3586 and, based on a rating range of 10 points, it is somewhat substantial, but it is not statistically significant.

As for the secondary effect, the R^2 values of the separate gender-specific regressions compared to the pooled regression show little increase (from .9209 to .9662 and .9920).

The variables that reversed direction are MAJOR, FLEXIBLE, WHOLE, INNOVATE, ENTREPRENEURIAL, PERSONALITY, LIFE.

MAJOR
business for men,
liberal arts for women.
FLEXIBLE
flexible men,
stable women.
WHOLE
detail-oriented men,
macro-oriented women.
INNOVATE
men who follow directions,
women who innovate.
ENTREPRENEURIAL
cooperative men,
entrepreneurial women.
PERSONALITY
extroverted men,
introverted women.
LIFE
men with outside interests,
women devoted to work.

This respondent, a female in her 40s, works for a government or regulatory agency.

Case D:

The primary effect of gender indicates that this respondent definitely favors women. The coefficient is -3.427 and, based on a rating range of 14 points, it is very substantial, and it is statistically significant at the .05 level of significance.

As for the secondary effect, the R^2 values of the separate gender-specific regressions compared to the pooled regression show substantial increase for women. The R^2 value goes from .7771 to .7815 for men, but to .9175 for women. This respondent is more sure about which criteria matter in the hiring of women; for men there is more room for randomness or the operation of chance in the selection process.

The variables that reversed direction are MAJOR, FLEXIBLE, WHOLE, INNOVATIVE, PERSUASIVE, ENTREPRENEURIAL, PERSONALITY.

MAJOR
business for men,
liberal arts for women.
FLEXIBLE
flexible men,
stable women.
WHOLE
macro-oriented men,
detail-oriented women.
INNOVATE
men who follow directions,
women who innovate.
PERSUASIVE
men who follow hierarchical communication,
women who negotiate, communicate across organization.
ENTREPRENEURIAL
cooperative men,
entrepreneurial women.
PERSONALITY
extroverted men,
introverted women.

This respondent is a female her 30s in the accounting industry.

Case E:

The primary effect of gender indicates that in the process of considering all available selection criteria, this respondent appears to favor women. The coefficient is -.1085 and, based on a rating range of 6 points, it is decent, but not statistically significant.

As for the secondary effect, the R^2 values of the separate gender-specific regressions compared to the pooled regression show substantial increase (from .4083 to .6263 and .6616).

The variables that reversed direction are FLEXIBLE, WHOLE, INNOVATE, PERSUADE, ENTREPRENEURIAL, PERSONALITY, LIFE.

FLEXIBLE
stable men,
flexible women.
WHOLE
macro-oriented men,
detail-oriented women.
INNOVATE
men who innovate,
women who follow directions.
PERSUASIVE
men who communicate hierarchically,
women who negotiate, communicate across organization.
ENTREPRENEURIAL
entrepreneurial men,
cooperative women.
PERSONALITY
extroverted men,
introverted women.
LIFE
men devoted to work,
women with outside interests.

This respondent, a female in her 30s, is in the equipment/computer manufacturing industry.

Case F:

The primary effect of gender indicates that this respondent appears to favor women. The coefficient is -.3602 and, based on a rating range of 21 points, it is decent, but it is not statistically significant.

As for the secondary effect, the R^2 values of the separate gender-specific regressions compared to the pooled regression show somewhat substantial increase (from .7911 to .9376 and .9642).

The variables that reversed direction are ORAL, WRITTEN, FLEXIBLE, WHOLE, ENTREPRENEURIAL, PERSONALITY, LIFE.

ORAL/WRITTEN
less important for men
than for women.
FLEXIBLE
flexible men,
stable women.
WHOLE
macro-oriented men,
detail-oriented women.
ENTREPRENEURIAL
cooperative men,
entrepreneurial women.
PERSONALITY
extroverted men,
introverted women.
LIFE
men devoted to work,
women with outside interests.

This respondent, a male in his 30s, is in law.

V.D.2. Discussion

Five of the six case study respondents express a general preference for female candidates. Some of the highlights of the case studies are that:

-Four of the six indicated a preference for men, but not women to be flexible and change-oriented and deal well with uncertainty; and to be macro-oriented, generalists and see the big picture.

-Four of the six indicated a preference for women to be entrepreneurial, independent, autonomous and competitive; and for men to be cooperative team players.

-Five of the six favored men who were bright, lively, extroverted and people-oriented.

V.E. GRADES

Of the total 65 point-estimate coefficients for grade average, 46 (71%) are positive and 19 (29%) are negative. A positive coefficient indicates a positive effect of this regressor on the overall vignette rating; a negative coefficient indicates a negative effect. Since the values given for grade average ranged from a low of "B" to a high of "A" (B,B+,A-,A), a negative coefficient indicates a preference for a "B" over an "A" grade average.

Because it was difficult to understand a 29% preference for low grades, I re-examined the coefficients in more detail using the 95% confidence interval rather that the point estimate. Of the 46 positive point estimate coefficients, 9 clearly fall within an interval above zero, indicating with 95% certainty that these respondents expressed a clear preference for higher grades. This leaves 37 positive responses that appear to prefer higher grades but with less statistical certainty; there is more than 5% chance that the coefficient is equal to zero, which would mean that grade average was not considered in the decision-making process.

Of the 19 negative point estimate coefficients there is more than 5% chance that most (17) could be zero. However, two responses are clearly negative, indicating a distinct preference for the lower end of the grade average spectrum presented in the vignettes. Since this seemed somewhat curious, I looked further to see what characterized these two respondents (identified as case X and case Y) and their companies.

V.E.1. Case Studies

Both are European-American women working in Human Relations staff positions.

Recruiter X is in her 30s with an MA, working for a general retail business with a

traditional culture. In addition to grade average, attributes of definite interest to her in rating the vignette candidates are (in order of importance): good oral communication, good written communication, innovation, macro-orientation, and interests outside of work.

It is also interesting to note the following: For Recruiter X each additional point of GPA (from 3.0 to 4.0), makes a candidate 59.87 points less desirable. This is almost the same as the difference between NYU and CUNY (-59.99). That is, the difference between a grade of B and a grade of A renders a candidate less desirable to the same extent as the difference between graduating from NYU and graduating from CUNY. It is also similar to the degree of difference between innovative and not innovative (+52.36).

Recruiter Y is in her 20s with a BA, working for a bank with a new form culture. The other attributes of definite interest to her are good written and oral communication skills.

V.E.2. The Importance of Good Communication Skills

This foray into grades reconfirms recruiters' interest in good oral and written communication skills. Of all 65 coefficients for both oral and written communication, most are clearly positive and statistically significant (ORAL=82% and WRITTEN=66%). Of those not clearly positive, none was clearly negative based on the 95% confidence interval. That is, some recruiters may have ignored communication skills, but no one had a clear preference for poor/weak communication skills.

Communication skills appear to be more important than any other attribute, including grades. Grade averages in fact may sometimes be used as an indicator of these skills. In a perfect world where recruiters had a way to assess the full range of a candidate's communication skills, it would most likely eclipse other indicators of success.

Referring back to the case of Recruiter X presented above: Oral (+86.11) and written (+72.40) communication have the largest coefficients. Even given that candidates are being considered for jobs in management, the oral communication coefficient is almost 15 times greater than that for major in business (5.91). Oral communication is nearly 8 times stronger than the gender

(11.38) preference for males, and about 7 times stronger than the nativity (-12.18) preference for foreign-born.

In terms of Recruiter Y, the span from lowest to highest school is comparable to good oral communication (6.19); written communication is even more important (8.19). Oral communication is 5 times greater than gender (-1.22) preference for female and written communication is 7 times stronger than gender preference.

Recruiter X prefers foreign-born men while Recruiter Y favors U.S.-born women, but they still both agree on the preeminence of communication skills.

V.F. SUMMARY

Respondents in this study were sent a packet of 40 vignettes describing fictitious job candidates with various combinations of skills and attributes, and they were instructed to rate the overall person based on this first impression from written information. They were told that all "candidates" were in their early 20s, recent college graduates with a Bachelor's degree, some work experience and basic technical skills/ computer experience. The job situation was described as a permanent, full-time, entry-level management/management-training position. The context in which the respondents were to view the vignette candidates was with emphasis on organizational fit rather than details of a specific job.

Overall these respondents favor business majors, good oral and written communication skills, and candidates with experience as officers of a university business club. They prefer outgoing extroverted candidates, candidates with outside interests such as travelling and skiing, and candidates who participate actively in their outside interests. They also prefer candidates born outside the United States.

For work style and job spirit, recruiters look for flexibility, change-orientation, innovation, the ability to see the big-picture, and leadership by negotiation and persuasion. Company representatives appreciate both entrepreneurial skill and dedication to cooperation and team spirit, but given the task of choosing between the two, more respondents opted for cooperation.

Of the five New York-area degree-granting schools presented in the vignettes, the one deemed most desirable by more respondents was NYU, followed by Pace, Fordham, St. Johns and CUNY.

Ethnicity is a complex issue. The regression coefficients for ethnicity alone used as a regressor indicate a desire to give preference in the following order: African-Americans, Latino-Americans, Asian-Americans, and European-Americans. This order supports affirmative diversity, at least in theory. However, using regressors composed of interactions of ethnicity,

and first nativity and then interests, a more complex picture emerges.

Asian-Americans and Latino-Americans were rated higher if born in the United States while African-Americans and European-Americans were rated higher if born outside the United States. Percentage point differences between preferences for U.S.-born and foreign-born are highest for Asian-Americans and Latino-Americans, followed by African-Americans; European-Americans are less differentiated.

In terms of interests, used as an indicator of class, the more elite activities of travel and ski were found most desirable among African-Americans, Asian-Americans and European-Americans. Latino-Americans, however, were rated higher if they participated in community sports and community social clubs. Percentage point differences between preferences for U.S.-born and foreign-born are highest for Asian-Americans, Latino-Americans and African-Americans; European-Americans are less differentiated.

Gender preferences can be demonstrated through both primary and secondary channels. Although the primary effect of gender indicated only a small preference for males, gender double standards come through in differences between work-style preferences for men and those for women. Detailed examination of individual

cases indicates some interesting examples of the secondary effect of gender. In the six case studies there is a greater preference for men rather than women to be flexible and change-oriented and deal well with uncertainty; and to be macro-oriented, generalists and see the big picture. Moreover, there is a greater preference for men to be bright, lively, extroverted and people-oriented. On the other hand there is a greater preference for women to be entrepreneurial, independent, autonomous and competitive; and for men to be cooperative team players.

TABLE 5-1:
SUMMARY STATISTICS FOR THE 65 RESPONDENT COEFFICIENTS

Variable	Values/Coding	Coefficient Mean	S.D.	Minimum	Maximum
MAJOR	0=Lib.Arts 1=Business	4.4232552	14.5264099	-12.3618423	104.9774338
GRADES	3.0-4.0	2.1478106	11.4257711	-59.8676578	39.4710868
CLUBS	0=None 1=Member	-1.0382472	9.4450097	-31.4666913	53.1921174
OFFICER	0=No 1=Club officer	0.6682387	7.4413211	-28.3923581	19.7570843
ORAL	0=Weak 1=Good oral comm. skills	16.5042693	20.1912519	-1.1912602	94.5340584
WRITTEN	0=Weak 1=Good written comm. skills	10.5269293	17.0171137	-16.0102047	98.4764841
FLEXIBLE	0=Stability 1=Change	1.9994033	7.6044160	-29.5144735	20.4787062
WHOLE	0=Detail 1=Macro-orientation	2.1900156	8.3045191	-9.4071188	45.8609127
INNOVATIVE	0=Direction following 1=Innovation	1.0534578	8.6441280	-30.2993138	52.3571569
PERSUASIVE	0=Hierarchy 1=Negotiation	0.5993978	6.6246170	-17.7112746	33.3124927
ENTREPRENEURIAL	0=Cooperation 1=Entrepreneurship	0.1804923	6.8858218	-25.0805952	33.0489304
GENDER	0=Female 1=Male	0.1143661	6.1404783	-32.1433123	11.3827795
NATIVITY	0=Not U.S. 1=U.S.	-0.5882382	5.1432237	-27.0447021	12.9227965
INTERESTS	0=Community 1=Travel,ski	0.7621903	5.5409159	-14.6032442	29.6443867
PERSONALITY	0=Quiet 1=Bright,extrovert	6.5500238	22.8503246	-48.3549100	152.0433427
LIFE	0=Workaholic 1=Outside activities	1.2635855	9.1340245	-34.3082636	39.5318896
SCHOOLS: Relative to NYU					
NYU		0	0	0	0
CUNY		-3.5400720	11.4642273	-59.9887695	37.5084092
ST.JOHNS		-3.6685722	12.3989027	-67.0735125	10.3830501
FORDHAM		-0.5564191	9.5647243	-42.5734716	37.5109007
PACE		-3.0142344	11.4768502	-70.1898188	14.2829809
ETHNIC GROUPS: Relative to European-American					
AFRICAN-AMER.		0.1762611	8.8009155	-34.3711290	29.0272743
ASIAN-AMER.		-2.5860961	9.2636053	-37.2935693	11.0158625
EUROPEAN-AMER.		0	0	0	0
LATINO-AMER.		-0.4154170	9.3236664	-44.4459467	30.8634237

TABLE 5-2:
DICHOTOMIZED PREFERENCES: POSITIVE/NEGATIVE RATIOS
(Number and Percent of 65 Respondents Preferring One Attribute Over Another)

Variable	Explanation of preference	Respondents Indicating Preference	
		Number	Percent
MAJOR	Business over liberal arts.	43	66.2
CLUBS	Membership over non-membership.	29	44.6
OFFICER	Club officer over non-officer.	37	56.9
ORAL	Good over poor oral communication skills.	63	96.9
WRITTEN	Good over poor written communication skills.	60	92.3
FLEXIBLE	Change-oriented over stability-oriented.	41	63.1
WHOLE	Macro-oriented over detail-oriented.	35	53.8
INNOVATIVE	Innovation over following directions.	42	64.6
PERSUASIVE	Leadership by negotiation over hierarchy.	39	60.0
ENTREPRENEURIAL	Entrepreneurship over cooperation/team spirit.	29	44.6
GENDER	Male over female.	36	55.4
NATIVITY	U.S.-born over foreign-born.	23	35.4
INTERESTS	Travel/ski over community organizations.	36	55.4
PERSONALITY	Extrovert over introvert/people over tasks.	51	78.5
LIFE	Outside interests over workaholism.	39	60.0

TABLE 5-3A:
RANK ORDERINGS FOR SCHOOL VARIABLES

ASCENDING RANK ORDERING (5 high)

SCHOOLS:
Column A=NYU
.B=CUNY
..C=St.Johns
...D=Fordham
....E=Pace

	Frequency	Percent
12345	1	1.5
12354	1	1.5
12534	1	1.5
13245	1	1.5
14523	1	1.5
15243	1	1.5
15342	1	1.5
21435	1	1.5
21534	2	3.1
23154	2	3.1
23451	1	1.5
24315	1	1.5
24351	1	1.5
24513	3	4.6
25431	1	1.5
31245	1	1.5
31254	1	1.5
31425	2	3.1
31542	1	1.5
32145	2	3.1
32154	2	3.1
32451	1	1.5
32541	2	3.1
34251	2	3.1
35124	1	1.5
41235	1	1.5
41352	1	1.5
41523	2	3.1
41532	1	1.5
42135	1	1.5
42153	1	1.5
43125	1	1.5
43215	2	3.1
45123	1	1.5
45132	1	1.5
45231	1	1.5
51243	2	3.1
51342	1	1.5
52134	1	1.5
52143	1	1.5
52314	2	3.1
52341	2	3.1
52413	1	1.5
53142	3	4.6
53214	1	1.5
53412	1	1.5
53421	1	1.5
54123	1	1.5
54312	1	1.5

TABLE 5-3B:
SUMMARY OF RANK ORDERING FOR SCHOOLS

SCHOOL	MEAN RANK w/ Order Ascending-- 5=High	% of Respondents Ranking Each School Most Desirable
NYU	3.3538462	27.7
CUNY	2.5846154	10.8
ST.JOHNS	2.7846154	20.0
FORDHAM	3.1692308	20.0
PACE	3.1076923	21.5

TABLE 5-4A:
RANK ORDERINGS FOR ETHNICITY VARIABLES

ASCENDING RANK ORDERING (4 high)

ETHNIC GROUPS:
Column A=African-American
.B=Asian-American
..C=European-America
...D=Latino-American

	Frequency	Percent
1234	1	1.5
1243	2	3.1
1324	3	4.6
1342	1	1.5
1423	4	6.2
1432	2	3.1
2134	6	9.2
2143	1	1.5
2314	3	4.6
2341	1	1.5
2413	5	7.7
3124	4	6.2
3142	3	4.6
3214	2	3.1
3241	4	6.2
3412	3	4.6
4123	1	1.5
4132	5	7.7
4213	3	4.6
4231	3	4.6
4312	3	4.6
4321	5	7.7

TABLE 5-4B:
SUMMARY OF RANK ORDERING FOR ETHNIC GROUPS

ETHNIC GROUP	MEAN RANK w/ Order Ascending-- 4=High	% of Respondents Ranking Each Group Most Desirable
African-American	2.6615385	30.8
Asian-American	2.3692308	21.5
European-American	2.3384615	18.5
Latino-American	2.6307692	29.2

TABLE 5-5:
SUMMARY OF RANK ORDERING FOR ETHNIC GROUP W/NATIVITY/CULTURE

Ethni-Culture	MEAN RANK w/ Order Ascending-- 8=High	% of Respondents Ranking Each Group Most Desirable
African-American Native	4.5538	7.7
African-American Foreign	4.5231	10.8
Asian-American Native	4.4462	15.4
Asian-American Foreign	4.2769	9.2
European-American Native	4.2769	12.3
European-American Foreign	4.4923	13.8
Latino-American Native	4.6154	18.5
Latino-American Foreign	4.8154	12.3

TABLE 5-6:
SUMMARY OF RANK ORDERING FOR ETHNIC GROUP W/INTERESTS/CLASS

Ethni-Class	MEAN RANK w/ Order Ascending-- 8=High	% of Respondents Ranking Each Group Most Desirable
African-American Ski	4.3692	15.4
African-American Comm	4.4615	10.8
Asian-American Ski	4.5714*	17.9
Asian-American Comm	3.8308	4.6
European-American Ski	4.6615	7.7
European-American Comm	4.0615	6.2
Latino-American Ski	4.8769	7.7
Latino-American Comm	4.6923	18.5

*Missing category in Deck #1 (9/65 respondents)

TABLE 5-7:
CASE STUDIES

Of the 2600 vignettes one-half (1300) were male candidates and one-half (1300) were female candidates. The mean rating score were:
-for the 1300 males 8.6929
-for the 1300 females 7.8938

RNUM	R-SQUARED			COEFFICIENT REVERSALS * (Sign for Male)															RESPONDENT CHARACTERISTICS:		
	Pooled	Male	Female	Maj	Oral	Wrt	Flx	Whle	Innv	Pers	Entr	Afr	Asn	Ltn	Ntvty	Int	Person	Life	Gender	Age	Industry
A	.7580	.9401	.9244	(+)	|/|	|/|	(+)	(+)	(-)	|/|	(-)	|/|	|/|	|/|	|/|	|/|	(-)	(+)	M	30s	Health Care
B	.5899	.9099	.8894	(-)	|/|	(-)	|/|	|/|	|/|	(+)	|/|	(+)	(+)	(+)	(+)	|/|	(+)	(-)	M	20s	General Retail
C	.9209	.9662	.9920	(+)	|/|	|/|	(+)	(-)	(-)	|/|	(-)	|/|	|/|	|/|	|/|	|/|	(+)	(+)	F	40s	Govt/Regulatory
D	.7771	.7815	.9175	(+)	|/|	|/|	(+)	(+)	(-)	(-)	(-)	|/|	|/|	|/|	|/|	|/|	(+)	|/|	F	30s	Accounting
E	.4083	.6263	.6616	|/|	|/|	|/|	(-)	(+)	(+)	(-)	(+)	|/|	|/|	|/|	|/|	|/|	(+)	(-)	F	30s	Equip/Computers
F	.7911	.9376	.9642	|/|	(-)	(-)	(+)	(+)	|/|	|/|	(-)	|/|	|/|	|/|	|/|	|/|	(+)	(-)	M	30s	Law

*Footnote: Cases where a particular coefficient has different signs for the male and female regressions (coefficient reversal) are indicated using the sign for the male regression. The symbol |/| indicates cases where the coefficient has the same sign for both male and female regressions.

CHAPTER VI

DETERMINANTS OF RESPONDENT PREFERENCES

VI.A. INTRODUCTION

Chapter VI introduces data provided by participants on the Respondent Questionnaire (shown in APPENDIX D). This information allows me to include in the analysis some characteristics about the respondents themselves, their companies, and the industries and larger industrial sectors they represent; and these characteristics shed light on particular recruiter preferences or selection priorities. However, before going into the analysis I present below a summary of the respondent data, which includes sectors and industries, company culture, and personal and demographic data. (Additional details regarding coding and classification of variables are available in APPENDIX E.)

VI.A.1. Industries and Industrial Sectors

I have classified companies within industries (each industry category has between one and 12 cases) and industries within sectors (each sector category has between two and five industries). The breakdown of industries by sector for the 65 respondent sample is shown in **TABLE 6-1A.**

VI.A.2. Company Culture

Of the characteristics presented to them, 42 respondents selected descriptive terms associated with a more new-form culture; for the purposes of this analysis I have classified their corporate cultures as new-form. The other 23 selected the more traditional, hierarchical terms, and I have classified their corporate cultures as traditional. (Lists of new-form and traditional characteristics are outlined in APPENDIX A.)

Of the 65 respondents, 36 indicated a changing culture. Of these 36, 75% represent new-form companies. Of the 42 new-form companies, 64.3% indicated changing culture compared to 39.1% of the 23 traditional companies.

VI.A.3. Getting Personal

The respondents in this study have been recruiting for their companies anywhere from a low of less than one year to a high of 20 years. Their positions at the time they completed the survey are presented in **TABLE 6-1B**. Almost two-thirds (60.3%) of those who answered the question work full-time in Human Resources (HR) whereas 39.6% recruit in addition to or as part of other full-time responsibilities. Nearly one quarter (22.2%) are managers of non-HR divisions.

Levels of education vary from less than a BA to a PhD, with the largest number (57.8%) holding a Bachelor's degree, or the same level of education as the fictitious candidates. More than one third (35.9%) have a Masters degree or higher while only 6.3% have no college degree. (See **TABLE 6-1C.**)

The breakdown of respondent gender (shown in **TABLE 6-1D**) indicates nearly even numbers of male (46.9%) and female (53.1%) respondents.

Ethnicity of respondents is primarily European-American (75%), and age is mostly young, with 81.3% under the age of 40. Respondent ethnicity and age are presented in **TABLES 6-1E** and **6-1F**.

The following sections present a picture of recruiter preferences based on the incorporation of these respondent characteristics. They are (1) the effect of industry, (2) the effect of culture on candidate work-style preferences, and (3) the effect of respondent demographics on selected candidate attributes.

VI.B. THE EFFECT OF INDUSTRY

This section examines ways in which the industrial sector affected respondent ratings. Much of this analysis refers to the **Table of Dichotomized Preferences** (**TABLE 5-2**). With the introduction of data from the Respondent Questionnaire, it is possible to see if any of

the positive/negative ratios can be explained by industry or industrial sector. (In addition to the tables referenced in the text below, see **TABLE 6-6: Preference Profiles by Industry** for summary information.)

VI.B.1. Industry and Candidate Human Capital Variables

The candidate variables examined here are major field of study, oral communication and written communication.

We saw in the original **Table of Dichotomized Preferences** (**TABLE 5-2**) that overall 66.15% of the respondents preferred a major in business to a major in liberal arts. When broken down by sector (**TABLE 6-2**) we see that the strongest preference for a business major is expressed by Communication/Infrastructure (100%), Manufacturing (87.5%), and Business Services (70%).

A further breakdown by industry indicates that:

- o Within the FIRE sector the preference for a business major is 80% among respondents representing securities firms, 67% among those representing insurance companies, 50% among those representing banks and 0% among those representing traders. In other words traders express a preference for liberal arts majors, and banks for either liberal arts or business.

o In the other sectors, industries follow the same pattern as the sector as a whole. In the Retail sector, for example the pattern points to a preference for liberal arts to business majors in both general retail (63%-37%) and retail food (67%-33%).

There is a uniform preference across all sectors and industries for higher grade average and especially for good oral and written communication skills.

VI.B.2. Industry and Candidate Demographic Variables

These comparisons are shown in **TABLE 6-3A** and **6-3B.** Here the candidate variables of interest are GENDER, NATIVITY and ETHNICITY.

Gender preferences vary by sector and within sector somewhat by industry. The overall preference for men seen in the original Positive/Negative Ratios (55%) is duplicated in three sectors: Communication/Infrastructure (55.56%), FIRE (66.67%), and Retail (72.73%). The other sectors, however, reveal a preference for women (with preference for men among only 37.50% of the respondents in Manufacturing and 20% in Business Services).

At the industry level the preference for women is expressed by Equipment/Computers and Pharmaceutical/Personal (in Manufacturing), and by Accounting and Consulting (in Business Services). This same preference is expressed by Traders (FIRE), Government/Regulatory (Communication/Infrastructure), and Health Care (Communication/Infrastructure).

The sectoral and industrial breakdowns of nativity show that the overall preference for non-native employees generally holds true across the board, with the exception in Business Services (especially Accounting and Consulting).

Ethnic ranking (**TABLE 6-3B**) broken down by sector produces interesting results:

- o Of the 27 recruiters representing one of the FIRE industries, nearly all (96.3%) express a preference for minority candidates.
- o There were good attempts at diversity in all sectors. The sector expressing the highest preference for European-American was Communication/Infrastructure, especially Government/Regulatory, Health, and Transportation, where minority representation may already be higher than in other sectors.

VI.B.3. Industry and Candidate Work-Style Variables

It should be remembered that work-style variables (which address ways of handling tasks and interactions, perspective, and job spirit) were purposely worded so that both dichotomous choices were positive. They were coded "0" and "1", with "1" being the style hypothesized to be most in demand especially by new-form organizations. Therefore, a positive coefficient is a preference for the "1" category; a negative coefficient is a preference for the "0" category.

Work-style variables broken down by industrial sectors are presented in **TABLE 6-4**. Included variables are FLEXIBLE, WHOLE, INNOVATIVE, PERSUASIVE, ENTREPRENEURIAL, LIFE AND PERSONALITY.

For FLEXIBLE, a positive coefficient indicates a preference for an employee who deals well with uncertainty and is flexible and change-oriented; a negative coefficient indicates a preference for someone comfortable working within the structure who adjusts to routine, deals well with predictable situations and is stability-oriented.

Overall, respondents prefer change-orientation over stability-orientation (63.08%). This preference is strongly supported by Business Services (80%). In FIRE (overall 70.37%), the strongest support is from Securities and Insurance. In Retail (overall 72.73%),

the support for change-orientation is from General Retail rather than Retail Food. On the other hand, Manufacturing industries are either divided evenly (Equipment/Computers) or opt for stability-orientation.

For WHOLE, a positive coefficient indicates a preference for an employee who is macro-oriented, sees the big picture, and is a generalist; a negative coefficient indicates a preference for someone who is detail-oriented, pays attention to the specific task, and is a specialist.

Overall respondents show a slight preference for macro- over detail-orientation (53.85%). The strongest support comes from Accounting and Consulting (Business Services) and from General Retail and Food (Retail).

There is also support from Securities and Traders, but not Banks and Insurance (FIRE), from Pharmaceutical (Manufacturing) and from Media, Health Care, and Utility (Communication/Infrastructure).

For INNOVATIVE a positive coefficient indicates a preference for an employee who is innovative, a problem solver, and makes suggestions to a supervisor; a negative coefficient indicates a preference for someone who follows directions, accepts and obeys orders from a supervisor.

Overall, 64.6% consider innovation more desirable than following directions. In the sector breakdown,

innovation is preferred across the board in Business Services (70%) and Manufacturing (75%). In FIRE it is preferred in Securities and Insurance. In Retail it is preferred in General Retail. Except for Media, it is not preferred by Communication/Infrastructure, where the preference is shown to be for following directions.

For PERSUASIVE a positive coefficient indicates a preference for an employee who, when in a leadership position, bargains, negotiates, persuades, and communicates freely with people at all levels of the organization; a negative coefficient indicates a preference for someone who, when in a leadership position, organizes efficiently, assigns tasks, and maintains hierarchical protocols.

Overall the preference is for leadership by negotiation over hierarchy (60%). This is supported in all sectors. Business Services (overall 50%) is straddling the line with Consulting preferring negotiation, but Law and Accounting preferring hierarchical protocols. In Communication/Infrastructure (overall 55.56%) Media, Health Care and Transportation also prefer hierarchical protocols, but Government/Regulatory and Utility prefer negotiation.

For ENTREPRENEURIAL a positive coefficient indicates a preference for an employee who is entrepreneurial, independent, autonomous and competitive; a negative

coefficient indicates a preference for someone who is cooperative and a team player.

Overall the **Table of Dichotomized Preferences** (**TABLE 5-2**) indicated a slight preference for cooperation. However, it should be remembered that this variable was less clear cut. (The coefficient mean was low, but positive, indicating entrepreneurship had more effect than cooperation on increasing the rating score; however, the percent positive showed that fewer than 50% (44.6) indicated a preference for entrepreneurship and individualism over cooperation and team spirit.)

Sector breakdowns reveal a Manufacturing preference for entrepreneurship (62.5%), especially in Equipment/Computers and Pharmaceutical/Personal. Entrepreneurship is also preferred in Accounting (Business Services) and Retail Food (Retail), Media and Utility (Communication/Infrastructure).

For LIFE a positive coefficient indicates a preference for an employee who participates actively in outside interests and hobbies; a negative coefficient indicates a preference for someone who is devoted to work and participates little in outside interests.

Overall outside interests are preferred to workaholism by 60% of the respondents. This preference is supported overall by each sector except Retail, but with disagreement within all sectors.

For PERSONALITY a positive coefficient indicates a preference for an employee who is bright, lively, people-oriented and an extrovert; a negative coefficient indicates a preference for someone who is quiet, serious, task-oriented and an introvert.

Overall, extroverted, people-oriented candidates are considered more desirable (78.46%) than introverted, task-oriented candidates. This is supported by all sectors. The largest preference for extroverted is in Retail (90.91%); the largest preference for introverted is in Communication/Infrastructure (55.56%).

VI.C. THE EFFECT OF CULTURE ON CANDIDATE WORK-STYLE PREFERENCES

The candidate work-style variable preferences are broken down by culture category in **TABLE 6-5**. The percent preferring one attribute over another are very similar for both categories of respondents for most variables. An interesting difference appears within the variable, PERSUASIVE. Respondents representing traditional corporate culture prefer adherence to hierarchical communication and leadership, whereas those respondents representing new-form companies prefer leadership by negotiation and more open communication. It is also interesting that the traditional company respondents are split almost evenly between

entrepreneurship and cooperative team spirit; however, new-form company respondents favor cooperative, team spirit 60% to 40%.

The summary of organizational culture and preferences for major area of study and work-style variables can be seen in **TABLE 6-6: Preference Profiles by Industry.**

IV.D. THE EFFECT OF RESPONDENT DEMOGRAPHICS ON SELECTED CANDIDATE ATTRIBUTES

Rank orderings of ethnic preferences among the candidates broken down by ethnicity of the respondent indicate that 12 of the 65 recruiter respondents (18.5%) show preference for their same ethnicity.

Candidate gender preferences broken down by gender of the respondent indicate that 50% of the women express a preference for women, while 60% of the men show a preference for men.

Candidate work-style preferences broken down by whether the respondent is or is not working in the Human Relations (HR) area of their company are presented in **TABLE 6-7**. This table shows that in this study HR recruiters prefer macro-orientation 63% to 37%, whereas non-HR respondents prefer detail-oriented 56% to 44%. HR recruiters are split 50%-50% between entrepreneurial and cooperative/team spirit, whereas non-HR prefer

cooperative/team spirit 64% to 36%. HR and non-HR respondents both indicate a preference for having a life outside of work, but the HR preference (66%) is stronger than the non-HR preference (56%).

VI.E. SUMMARY

In this study, recruiter preferences across all divisions of industry, company culture and personal data are most in agreement on good oral and written communications and higher grades. Their preferences are more differentiated regarding field of study, demographics and work-style variables.

VI.E.1. Field of Study and Demographics

A major in business is preferred by most industries. Of the 17 industries represented in this sample, 13 favor business, 3 favor liberal arts and one is split evenly between the two majors.

Preferences for male or female candidates varies substantially among both men and women recruiters, but with men having a slightly higher preference for their own gender. The highest preference for women is in Business Services and Manufacturing sectors. These two sectors also indicate a preference for innovation and for employees having life interests outside of work.

Most recruiters express a desire for ethnic diversity and are not unduly partial to their own ethnicity. More that 80% indicate a relative preference for an ethnicity other than their own and preferences are spread across the full range of given ethnicities. The FIRE industries demonstrate the highest degree of affirmative action.

The general, preference for foreign-born workers holds up across most industrial sectors. The only sector preferring native-born candidates is Business Services.

VI.E.2. The Organization Person

New-form work style traits-- flexibility, macro-orientation, innovation and persuasive negotiation-- are generally popular among recruiters as are an extroverted personality style and life interests outside work. When forced to choose between entrepreneurial and cooperative, cooperative is the modal preference of most industries.

When divided along job titles between HR and non-HR, the HR recruiters group expresses a larger preference for macro-orientation, entrepreneurship and life outside work than does the non-HR group-- perhaps a more long term view of the prospective employee.

When divided along corporate culture, the more traditional companies indicate work-style preferences very similar to new-form companies except in one very

revealing way-- they show themselves to be more taken with leadership through structured communication and hierarchy than with open communication, negotiation, cooperation and team spirit.

The attributes that score highest across the 17 industries are extroverted personality (13 out of 17) and innovation (10 out of 17). Innovation is preferred across the board in Business Services and Manufacturing sectors.

The sector labeled Communication/Infrastructure, which comprises organizations generally thought to be more bureaucratic, shows an aggregate preference for more traditional, bureaucratic employee work styles, especially orientation to stable, predictable routine over flexibility, uncertainty and change; and following directions over innovation.

Retail is seeking liberal arts majors and General Retail wants employees who are flexible, innovative and extroverted. Retail especially needs outgoing personalities to sell in an increasingly competitive market place.

The story Manufacturing tells is a need for employee innovation, as well as a good dose of entrepreneurial spirit, and persuasive communication. But at the same time there is a sector preference for stability and detail-orientation.

The Insurance industry shows a desire for workers who are flexible and innovative. The Accounting industry seeks workers who are flexible, innovative and macro-oriented.

The Securities industry also stands out for giving high priority to employee flexibility and innovation, and for revealing a profile with consistently new-form work style modal preferences (flexibility, macro-orientation, innovation and negotiation). The Business Consulting industry gives priority to flexibility and macro-orientation and, like Securities, has a profile of consistently new-form work style modal preferences. Not surprisingly, a large majority of Securities and Business Consulting respondents also characterize their companies using new-form descriptive terms.

Flexibility, or change-orientation, looks like a priority for all the Business Services (Law, Accounting and Consulting), also for FIRE industries of Securities, Insurance and for the General Retail industry. This makes sense given that these are places it is often necessary to change or refocus skills and work with flexibility to meet changing client and customer needs or to be more competitive within the industry. It is surprising that Manufacturing industries and Banks would not be clamoring for employees who deal well with uncertainty and who are flexible and change-oriented.

In the aggregate, Banks appear ambivalent in their preferences for traditional or new-form work styles. This was unexpected because in recent years and with the disintegration of the Glass-Steagall Act (legislation separating activities of banks and securities firms) banks have become more like, and in some cases have patterned their corporate cultures after, securities firms. (See Mottino, 1987 and Rogers, 1993.) Their preferred selection criteria, however, does not mirror the new-form work style preferences of the securities industry.

Regarding macro-orientation, or ability to see the bigger picture, the strongest preference is similar to that for flexibility, that is among recruiters representing Accounting and Consulting (Business Services) and from General Retail and Food (Retail). There is also support from Securities and Traders, from Pharmaceutical (Manufacturing) and from Media, Health Care, and Utility (Communication/Infrastructure), but not Banks and Insurance (FIRE).

Outgoing personality seems crucial, not only in Retail, but in numerous industries including Securities, Manufacturing of equipment and computers, Health Care, Insurance and Accounting. One on-campus recruiter told me during an informal conversation that while Accounting firms need employees skilled in accounting theory and

methods, it is equally important that employees be able to communicate effectively with clients. This involves not only office contact regarding financial matters but social contact and the ability to speak comfortably and engagingly about a variety of subjects. True to this form, the Accounting industry as a group expressed a preference for employees who have interests outside work and who are bright, lively, people-oriented and extroverted.

TABLE 6-1:
RESPONDENT DATA

A: RESPONDENT COMPANY INDUSTRIES BY SECTOR

SECTOR 1: FIRE (Finance, Insurance and Real Estate)
1-Banks
2-Securities
3-Traders
4-Insurance

SECTOR 2: BUSINESS SERVICES
1-Law
2-Accounting and Financial Consulting
3-Business Consulting and Data Services

SECTOR 3: MANUFACTURING
1-Equipment and Computers
2-Software
3-Pharmaceutical and Personal Care

SECTOR 4: RETAIL AND PRODUCT SALES
1-General
2-Food

SECTOR 5: COMMUNICATION AND INFRASTRUCTURE
1-Media
2-Government and Regulatory Agencies
3-Health Care
4-Transportation
5-Utility

B: RESPONDENT'S POSITION WITHIN THE ORGANIZATION

POSITION	Number	Percent
Corporate HR	29	46.0
Division HR	7	11.1
Line Position	7	11.1
Management HR	2	3.2
Management non-HR	14	22.2
Other Staff	4	6.3

(Number Missing = 2)

C: RESPONDENT'S EDUCATION

EDUCATION	Number	Percent
Less than a BA	4	6.3
Bachelor's Degree	37	57.8
MA/MBA/JD	21	32.8
More than MA/PhD	2	3.1

(Number Missing = 1)

D: RESPONDENT'S GENDER

GENDER	Number	Percent
Female	34	53.1
Male	30	46.9

(Number Missing = 1)

E: RESPONDENT'S ETHNICITY

ETHNIC GROUP	Number	Percent
African-American	4	6.3
Asian-American	3	4.7
European-American	48	75.0
Latino-American	1	1.6
Other	8	12.5

(Number Missing = 1)

F: RESPONDENT'S AGE

AGE GROUP	Number	Percent
Under 30	22	34.4
30-39	30	46.9
40-49	10	15.6
50-59	2	3.1

(Number Missing = 1)

INDUSTRY WITH HUMAN CAPITAL VARIABLES:

TABLE 6-2:
Preference for One Attribute over Another of Human Capital Variables:
Number and Percent for Full Sample and by Industrial Sector

		TOTAL	FIRE	BUSINESS SERVICES	MANUFAC-TURING	RETAIL	COMMUNI. & INFRA.
N=		65	27	10	8	11	9
Variable	Description of preference	Overall Preference					
MAJOR	Business over liberal arts.	43 66.15%	16 59.26%	7 70.00%	7 87.50%	4 36.36%	9 100.00%
ORAL	Good over poor oral comm.	63 96.92%	26 96.30%	10 100.00%	8 100.00%	10 90.91%	9 100.00%
WRITTEN	Good over poor written comm.	60 92.31%	24 88.89%	9 90.00%	8 100.00%	10 90.91%	9 100.00%

*Footnote: In this table each row reports the number of respondents and percentage of total sample (or sector sub-sample) indicating a preference for the variable attribute described at the left of the table. For example, 43 of the total sample of 65 respondents indicated a preference for candidates with a major in business. Of these 43, 16 were in the FIRE sector, constituting 59.26% of sector-specific respondents.

INDUSTRY WITH DEMOGRAPHIC VARIABLES:

TABLE 6-3A:
Preference for One Attribute over Another of Demographic Variables:
Number and Percent for Full Sample and by Industrial Sector

		TOTAL	FIRE	BUSINESS SERVICES	MANUFAC-TURING	RETAIL	COMMUNI. & INFRA.
N=		65	27	10	8	11	9
Variable	Description of preference	Overall Preference					
GENDER	Male over female.	36	18	2	3	8	5
		55.38%	66.67%	20.00%	37.50%	72.73%	55.56%
NATIVITY	U.S.-born over foreign-born.	23	8	7	2	3	3
		35.38%	29.63%	70.00%	25.00%	27.27%	33.33%

TABLE 6-3B:
Preference for Ethnicities:
Number and Percent for Full Sample and by Industrial Sector

	TOTAL	FIRE	BUSINESS SERVICES	MANUFAC-TURING	RETAIL	COMMUNI. & INFRA.
N=	65	27	10	8	11	9
Ethnicity Ranked High	Overall Preference					
African-American	20 30.77%	7 25.92%	2 20.00%	5 62.50%	3 27.27%	3 33.33%
Asian-American	14 21.54%	9 33.33%	2 20.00%	1 12.50%	2 18.18%	0 0.00%
Latino-American	19 29.23%	10 37.04%	3 30.00%	0 0.00%	4 36.36%	2 22.22%
European-American	12 18.46%	1 3.70%	3 30.00%	2 25.00%	2 18.18%	4 44.44%

*Footnote: In this table each row reports the number of respondents and percentage of total sample (or sector sub-sample) indicating a preference for the ethnic group by ranking it highest in comparison with the other ethnic groups listed. For example, 20 of the total sample of 65 respondents indicated a preference for African-Americans. Of these 20, 7 were in the FIRE sector, constituting 25.92% of sector-specific respondents. In this table the categories of "Ethnicity Ranked Highest" are mutually exclusive, therefore the columns sum to 100%.

INDUSTRY WITH WORK-STYLE VARIABLES:

TABLE 6-4:
Preference for One Attribute over Another of Work-Style Variables:
Number and Percent for Full Sample and by Industrial Sector

		TOTAL	FIRE	BUSINESS SERVICES	MANUFAC-TURING	RETAIL	COMMUNI. & INFRA.
N=		65	27	10	8	11	9
Variable	Description of preference	Overall Preference					
FLEXIBLE	Change-oriented over stability-oriented.	41 63.08%	19 70.37%	8 80.00%	3 37.50%	8 72.73%	3 33.33%
WHOLE	Macro-oriented over detail-oriented.	35 53.85%	12 44.44%	8 80.00%	3 37.50%	7 63.64%	5 55.56%
INNOVATIVE	Innovation over following directions	42 64.62%	18 66.67%	7 70.00%	6 75.00%	7 63.64%	4 44.44%
PERSUASIVE	Leadership by negotiation over hierarchy.	39 60.00%	17 62.96%	5 50.00%	6 75.00%	6 54.55%	5 55.56%
ENTREPRENEURIAL	Entrepreneurship over cooperation/team spirit.	29 44.62%	12 44.44%	4 40.00%	5 62.50%	4 36.36%	4 44.44%
LIFE	Outside interests over workaholism.	39 60.00%	17 62.96%	7 70.00%	5 62.50%	5 45.45%	5 55.56%
PERSONALITY	Extrovert over introvert/ people over tasks.	51 78.46%	22 81.48%	8 80.00%	6 75.00%	10 90.91%	5 55.56%

WORK STYLE BY CULTURE CATEGORY:

TABLE 6-5:
Preference for One Attribute over Another of Work-Style Variables:
Number and Percent for Full Sample and by Culture Category

		TOTAL	TRADITIONAL	NEW FORM
N=		65	23	42
Variable	Description of preference	Overall Preference		
FLEXIBLE	Change-oriented over stability-oriented.	41 63.08%	15 65.22%	26 61.90%
WHOLE	Macro-oriented over detail-oriented.	35 53.85%	13 56.52%	22 52.38%
INNOVATIVE	Innovation over following directions	42 64.62%	15 65.22%	27 64.29%
PERSUASIVE	Leadership by negotiation over hierarchy.	39 60.00%	9 39.13%	30 71.43%
ENTREPRENEURIAL	Entrepreneurship over cooperation/team spirit.	29 44.62%	12 52.17%	17 40.48%
LIFE	Outside interests over workaholism.	39 60.00%	14 60.87%	25 59.52%
PERSONALITY	Extrovert over introvert/ people over tasks.	51 78.46%	20 86.96%	31 73.81%

TABLE 6-6:
PREFERENCE PROFILES BY INDUSTRY

	FIRE SECTOR INDUSTRIES:			
	Banks	Securities	Trading	Insurance
CULTURE				
Percentage of respondents who characterized their organization culture as more "New Form":	75%	80%	100%	67%
MODAL PREFERENCES				
MAJOR:	//*	Business	Lib.Arts	Business
WORK STYLE:				
Flexible	//	Change	Stability	Change
Whole	Detail	Macro	Macro	Detail
Innovative	//	Innovation	//	Innovation
Persuasive	//	Negotiation	Negotiation	Negotiation
Entrepreneurial	//	Cooperation	//	Cooperation
Life	//	Outside	Outside	Outside
Personality	//	Extrovert	Extrovert	Extrovert

*Slanted parallel lines (//) indicate that there was an even breakdown between the dichotomous variable categories.

	BUSINESS SERVICES SECTOR INDUSTRIES:		
	Law	Accounting	Consulting
CULTURE:			
Percentage of respondents who characterized their organization culture as more "New Form":	0%	25%	100%
MODAL PREFERENCES			
MAJOR:	Business	Business	Business
WORK STYLE:			
Flexible	Change	Change	Change
Whole	Detail	Macro	Macro
Innovative	Innovation	Innovation	Innovation
Persuasive	Hierarchy	Hierarchy	Negotiation
Entrepreneurial	Cooperation	Entrepreneurship	Cooperation
Life	Work	Outside	Outside
Personality	Extrovert	Extrovert	Extrovert

	MANUFACTURING SECTOR INDUSTRIES:		
	Equip/ Computers	Software	Pharm/ Personal
CULTURE:			
Percentage of respondents who characterized their organization culture as more "New Form":	25%	100%	67%
MODAL PREFERENCES			
MAJOR:	Business	Business	Business
WORK STYLE:			
Flexible	//	Stability	Stability
Whole	Detail	Detail	Macro
Innovative	Innovation	Innovation	Innovation
Persuasive	//	Negotiation	Negotiation
Entrepreneurial	Entrepreneurship	Cooperation	Entrepreneurship
Life	//	Work	Outside
Personality	Extrovert	Extrovert	Extrovert

	RETAIL SECTOR INDUSTRIES:	
	General Retail	Retail Food
CULTURE:		
Percentage of respondents who characterized their organization culture as more "New Form":	63%	67%
MODAL PREFERENCES		
MAJOR:	Liberal Arts	Liberal Arts
WORK STYLE:		
Flexible	Change	Stability
Whole	Macro	Macro
Innovative	Innovation	Follow
Persuasive	//	Negotiation
Entrepreneurial	Cooperation	Entrepreneurship
Life	//	Work
Personality	Extrovert	Extrovert

	COMMUNICATION/INFRASTRUCTURE SECTOR INDUSTRIES:				
	Media	Govt/ Regulatory	Health Care	Transport.	Utility
CULTURE:					
Percentage of respondents who characterized their organization culture as more "New Form":	100%	50%	100%	0%	100%
MODAL PREFERENCES					
MAJOR:	Business	Business	Business	Business	Business
WORK STYLE:					
Flexible	Change	Stability	Stability	Change	Stability
Whole	Macro	Detail	Macro	//	Macro
Innovative	Innovation	//	Follow	//	Follow
Persuasive	Hierarchy	Negotiation	Hierarchy	Hierarchy	Negotiati.
Entrepreneurial	Entrepren.	Cooperation	Cooperation	//	Entrepren.
Life	Work	//	Outside	//	Outside
Personality	Extrovert	//	Extrovert	//	Introvert

WORK-STYLE PREFERENCE BY RESPONDENT JOB CATEGORY:

TABLE 6-7:
Preference for One Attribute over Another of Work-Style Variables: Number and Percent for Full Sample and by Respondent Job Category

		TOTAL	HUMAN RELATIONS	NON-H.R.
N=		65	38 *	25 *
Variable	Description of preference	Overall Preference		
FLEXIBLE	Change-oriented over stability-oriented.	41 63.08%	23 60.53%	17 68.00%
WHOLE	Macro-oriented over detail-oriented.	35 53.85%	24 63.16%	11 44.00%
INNOVATIVE	Innovation over following directions	42 64.62%	23 60.53%	17 68.00%
PERSUASIVE	Leadership by negotiation over hierarchy.	39 60.00%	22 57.89%	16 64.00%
ENTREPRENEURIAL	Entrepreneurship over cooperation/team spirit.	29 44.62%	19 50.00%	9 36.00%
LIFE	Outside interests over workaholism.	39 60.00%	25 65.79%	14 56.00%
PERSONALITY	Extrovert over introvert/ people over tasks.	51 78.46%	29 76.32%	20 80.00%

*Frequency Missing = 2

CHAPTER VII

CONCLUSION

Using the factorial-survey method, this study investigated the direction and magnitude of the effects of human capital, demographic and work-style attributes of job candidates on their desirability as employees, as rated by organizational on-campus recruiters. Analysis of the ratings revealed variation in respondent preferences and a complex weave of agreements and disagreements concerning the desirability of candidates in this stage of the employee selection process. The statistical tests dictated rejection of all homogeneity hypotheses, suggesting that the decision-making approach of each respondent was guided by a personal and unique candidate-selection equation with a unique intercept and unique weights attached to the job applicant attributes.

The study provides insight into one labor market sorting mechanism for primary labor market positions in management with leading organizations in core industries. By participating in this exercise of rating fictitious job candidates, the respondents, who serve as gatekeepers for their organizations, revealed what they look for when faced with the difficult task of deciding whom they will consider as possible employees. What were the

characteristics most sought after by this group of organizational recruiters?

VII.A. PREFERRED ATTRIBUTES

Oral and written communication skills were a priority for the largest number of recruiters. This was followed by outgoing and people-oriented personality. Grades were also important to many recruiters but not to as large a majority as communication skills.

Both as individuals and grouped by industry, respondents favored business majors to liberal arts majors, and candidates with experience as officers of a university business club. They preferred candidates to be born outside the United States and to belong to travel groups and ski clubs rather than community sports or social clubs.

For work style and job spirit, recruiters looked for flexibility, change-orientation, innovation, the ability to see the big-picture, and leadership by negotiation and persuasion. Given the difficult choice between entrepreneurial skill and dedication to cooperation and team spirit, more respondents found cooperation more desirable at this level.

VII.B. COMMUNICATION A PRIORITY

In this particular study human capital skills proved to be important. Overall good oral communication skills were important to 97% of the respondents, good written skills to 92%, and higher grades to 71%. As noted above in the theoretical framework, Gardener et al. (1991) wondered if recruiters would rely heavily on a student's major grade point average and communication skill as pre-screening criteria, even if additional information were available. Based on the current research, the answer is yes. Communication is still number one both on its own and as an integral part of work-style preferences (as evidenced by high desirability ratings for candidates with attributes such as the ability to persuade and negotiate, outgoing personality and people-orientation, and so on).

And what about demographics? Does belonging to a particular group have an effect? How does it affect "fit", "chemistry"? Results indicate that male gender was important to 55% of the respondents, foreign nativity to 65%, and upper-class interests to 55%. Ethnicity described as African-American was ranked highest by 31% of the respondents, Latino-American by 29%, Asian-American by 22%, and European-American by 18%. These demographic preferences are discussed in greater detail in the following sections.

VII.C. GENDER-- PRIMARY AND SECONDARY EFFECTS

Overall the primary effect of gender indicated a small preference for males. This reconfirms the findings of Olian, Schwab and Haberfeld (1988). In their meta-analysis of experimental studies of employment access discrimination, they too found marginal evidence of preference for males.

In terms of a secondary effect of gender, the case studies presented in Chapter V indicated a greater preference for men rather than women to be (1) flexible, change-oriented and deal well with uncertainty; (2) macro-oriented, generalists and see the big picture; and (3) bright, lively, extroverted and people-oriented. However, there was a greater preference for women to be entrepreneurial, independent, autonomous and competitive; and for men to be cooperative team players.

This picture could suggest the explanation that a man is perceived as a potential leader who needs to look with flexibility at the big picture of the future in order to lead members of the organization in change; whereas a woman is perceived as needing strong skills such as entrepreneurship to work hard but more independently, managing herself rather than others-- maintaining the status quo, working on tasks and attending to detail.

This explanation would be in line with the Rosen and Jerdee (1978) study cited in the theoretical framework. In their survey of male managers, men were described as better able to: understand the "big picture" (macro-oriented) and get people to work together (teamwork). They were perceived as better able to serve as capable administrators, have leadership potential, and be independent, self-sufficient and aggressive. Women, on the other hand, were described as being good at detail work, enjoying routine tasks, and being sensitive to other's feelings.

However, an alternative explanation is that recruiters seek equalization or convergence. Attributes usually associated with men are more sought after in women and vice versa. Perhaps men, already deemed entrepreneurial (in Rosen and Jerdee: independent, self-sufficient, aggressive), are prized for a spirit of cooperation; whereas women, already people-oriented (in Rosen and Jerdee: sensitive to other's feelings), are thought to be better off as task-oriented and entrepreneurial. These possibilities would have to be explored in future research.

Another way to view the results is to consider that some of the attributes presented in opposition to each other in the dichotomous variables may actually work in unison. Statham (1987) found that while men and women

managers behave differently, women were both task and people-oriented, while men seemed to be neither! Women focused more on the task to be done and the people working for and with them, paying careful attention to what was happening in their areas of responsibility and interacting with others a great deal. Men focused on themselves and the need to "back away" from those who work for them, emphasizing their power and the contributions they make. These attributes place women in a favorable position in regard to Kanter's (1983) description of effective new-form managers-- seeing across organizational boundaries, focusing on total tasks rather than isolated segments, and serving as people-centered managers less concerned with bureaucratic dictate of preserving one's traditional power base. Again, these are considerations for future research.

In this study the highest preference for women was in Business Services and Manufacturing sectors, which also indicated a preference for innovation and for employees having life interests outside of work. These preferences taken together seem to auger well for women.

The findings both support and contradict the Department of Labor report (1989) where industries with the highest percentages of female executives, administrators and managers were FIRE--fire, insurance and real estate-- (50.7%), other services (47.4%) and

wholesale and retail trade (42.5%). In that report manufacturing was low with only 26.3%. The current findings also contradict Statham (1987) who states that financial institutions have historically been more open to women, while manufacturing firms provide the fewest opportunities and least support for women. Of course, fuller analysis awaits examination of respondent sample selectivity mechanisms.

VII.D. ETHNICITY-- A COMPLEX ISSUE

Most respondents expressed a desire for ethnic diversity, with more than 80% indicating a preference for an ethnicity other than their own. The strongest preference for minority candidates was among recruiters from the FIRE industries.

The order of ethnicity preferences among all recruiters (African-Americans, Latino-Americans, Asian-Americans, and European-Americans) supports affirmative diversity, at least in theory and in the abstract. With the interaction of ethnicity and nativity and of ethnicity and interests a more complex picture emerged.

The trend among recruiters was to prefer Asian-Americans and Latino-Americans born in the United States but African-Americans and European-Americans born outside the United States. Nativity might reveal a number of recruiter assumptions. Where there are language and

culture differences separating those born in the United States from those born abroad (Asian, Latino), there may be a preference for U.S. nativity because it assumes U.S. education and life-style. This could account for the substantial preference for Asian-American and Latino-American born in the United States. For African-Americans, a preference for those born abroad might reveal a belief that West Indians, Africans or others bring with them more suitable values or patterns of behavior.

Another trend among recruiters was to prefer African-Americans, Asian-Americans and European-Americans with more elite interests but Latino-Americans with community interests. Are Latino-Americans somehow identified with community rather than with elite activities more than other ethnic groups? These possibilities would have to be explored in additional research.

The combined findings suggest that consciously or unconsciously recruiters are looking for something--something familiar, something expected. I was reminded of a statement made to me by a former human resource person: "Companies are anxious to create diversity; however, recruiters are hoping to find 'different' people who are 'just like them'."

VII.E. DIVERSITY

For both ethnicity and gender, choices recruiters make may be very complex and may be made without complete knowledge of the candidate and through an awareness conditioned by effects beyond the control of the individual. In any case it is clear that many organizations and their representatives are aware that diversity is a positive goal.

Diversity has become the buzz word of the 90s. It replaces and purports to improve on the concept of affirmative action. It is not a legal obligation but has become a corporate state of mind. It ignores numbers but exalts differences. In reality there is much debate on what it does and how well it is working. According to the Wall Street Journal (Wynter 1994) "most firms still don't hire and promote women and minorities as readily as they do white males-- no matter how much they embrace, support, manage, nurture, foster or promote diversity."

On the other hand, according to one female African-American 21-year-old psychology major (interviewed as part of a New York Times article on college seniors finding jobs: Kilborn 1994) "Race is such a big issue.... It might even be to my advantage. People are consciously trying to get more minorities into their businesses."

In this study recruiters expressed the desire to try, as evidenced by theoretical preferences for minority

candidates. Some companies do take diversity seriously. Of the 65 companies in this study, seven are included as best companies for "hiring and promoting minority professionals and creating an environment in which minority workers will advance and enjoy their careers" (The Best Companies for Minorities, 1993). Nine of the sample companies are cited as offering "the best opportunities and most amenable workplaces for women" (The Best Companies for Women, 1988).

For some companies recruiting policy may be unclear. In other cases recruiters may be unaware of subtleties of their own decision-making processes. This is an area where studies such as this one can make a sizable contribution.

VII.F. ORGANIZATIONAL FIT

Before discussing what organizations are looking for, it is worthwhile to look at the organizations themselves.

VII.F.1. Organizations

One interesting aspect of this study is to note who is actually doing the recruiting of new employees for their companies. Of the 65 company representatives included in the sample, 38 work in human resources, but 25 do not (and 2 did not indicate their position in the

organization). These 25 non-HR respondents work in line positions, management or other staff positions. Schuler (1990) notes that environmental changes are confronting organizations with people issues of great importance and uncertainty, and that as people issues come to be seen as significant business issues, line managers are reaching out to take control and ownership over the human resource function. He also states that linkages between human resources activities and business needs tend to be the exception at all times. However, during times of turbulence, organizations typically define, or redefine their strategic business needs.

This recalls one of the original questions regarding new-form as opposed to traditional organization structure and character. In the Burns and Stalker formulation of "mechanistic" (traditional, bureaucratic) and "organic" (new-form), the former was thought to be related to stable conditions while the latter to more changing, turbulent conditions. Is the "new-form" actually a new form or is it a temporary solution for organizations in flux, a culture of transition?

Although the current study cannot answer this question, it does indicate a relationship between a new-form corporate climate and change. First, of the respondents representing companies characterized as new-form, 64.29% indicated changing culture, whereas of those

representing companies characterized as traditional only 39.13% indicated a changing culture. Second, of those indicating culture change, 75% were new-form and 25% traditional.

VII.F.2. Work Style and Job Spirit

It was expected that the recruiting trend among all companies, but especially those characterized as new-form would be toward new-form attributes in prospective employees-- that is, a work style or job spirit characterized by:

-flexibility,
-macro-orientation (tasks seen in light of the whole),
-innovation,
-persuasion and negotiation used in interpersonal communication and management,
-entrepreneurship,
-cooperation and team spirit.

And also by outgoing, people-orientation and outside interests and hobbies (a well-rounded perspective).

For the most part there was a general preference among all companies for new-form work-style candidate attributes. However, new-form companies showed a preference for leadership through persuasion and negotiation whereas traditional companies preferred a

hierarchical protocol. Also, new-form companies seemed more committed to cooperation and team spirit.

The work-style variables preferred by more recruiters overall were innovation, flexibility and persuasion as well as lively personality. The desire for innovation is understandable in that changing economic conditions require companies to generate new ideas in order to survive. And going along with that is the need for flexibility. Kilborn emphasizes the need for innovation and flexibility in the following excerpt from his New York Times article (1994): "Employers say today's hotly competitive job market demands that they be ready to respond to changes in their business and be cautious about hiring." And he quotes one recruiter as saying, "There's a lot of applicants to talk to. But to find quality ones to fold into an organization, that's a very selective process." (Emphasis added.)

The need for employees who can communicate both within and outside the organization is reaffirmed in preferences for a persuasive style, good communication skills and an outgoing personality. This was seen in the Retail industry and across the board in industries as diverse as Manufacturing, Accounting and Health Care. Another recruiter quoted in the New York Times (Kilborn 1994) looks for recruits with work experience and a knack for making customers happy. "A while back it was, 'Give

us the ones with the best grades, the best record of achievement, the president of 15 things.' Those are still pluses. But if you don't have the desire to run the business the way we want to run it, pretty soon we're going to be unhappy."

VII.F.3. Implications for Organizations

From a theoretical perspective of the sociology of large-scale organizations, one might wonder if organizations will continue to reproduce themselves as they are or if they will innovate, evolve and change their forms. Working from the premise that what animates change is increased uncertainty and unpredictability, will change take place in all organizations or only in some? Will organizations design and orchestrate change or will precipitators of change seep into the organization? In performing their duties, recruiters, whether human resource personnel or line staff and managers, are on the front line of maintaining or transforming company structure and culture. They can look for new employees to "fit in" to the current form or they can look for employees to take the organization farther, toward some future vision.

Empirical findings of this study can shed some light on organizational change. Companies characterized as traditional for this study were so characterized because

recruiters used descriptive terms such as traditional, hierarchical, rigid structure, clear boundaries, job descriptions, segmented, task-oriented, rules, and formal to describe the current structure or culture of their organization. However, when rating prospective employees, these same companies indicated an overall preference for flexibility, macro-orientation and innovation, outside interests and extroverted personalities.

If new employees carry with them certain attributes and perspectives different from the company executives or the existing work force, change can seep in. Another related point that may encourage change in more traditional companies is that organizations and employees have ceased to make long-term commitments to each other. It has become an acceptable fact of work that employees will have multiple employers, perhaps even multiple careers. Therefore companies will share employees for whom change is an integral part of the work experience. Non-traditional behavior practiced at one organization will be carried along to the next.

These factors have implications for all organizations. Companies appear to be undergoing change in general away from Burns and Stalker's mechanistic, bureaucratic form characterized by hierarchic structures of control, authority and communication. Empirical

findings support Heydebrand (1980) that new-form organizations have emerged that encourage problem solving, negotiation and communication, necessary both within and outside the organization; these companies are leading a pervasive change away from traditional forms.

VII.G. WHO WILL BE HIRED?

The study has focused on the debate surrounding employer preference in the recruitment of new employees--are employers more interested in human capital skills or demographic traits? It has also added a focus on work style and job spirit. Which attributes or category of attributes are of most value to job seekers? As suggested by **FIGURE 2**, the search for employment is commonly viewed as a matter of who the candidate is rather than what the candidate can do. However, based on the preferences expressed by recruiters who participated in this study, there is some good news.

The best news is that communication skills stand out as more important than any other attribute. It is good news because it is a human capital skill that can be learned and perfected by anyone through study and practice. It is good news unless individuals are viewed as members of groups, and whole groups are perceived as less articulate or less able to express themselves. On the other hand, recruiters express a desire to create

diversity. Therefore, a candidate from an underrepresented minority group with strong oral and written communication skills may have an opportunity to demonstrate what he or she can do for the company of interest.

Other traits preferred by more respondents also are attributes that can be developed through education, training and life experience, such as one's major, innovation, flexibility, cooperative team spirit and an outgoing orientation to people.

VII.G.1. Consequences of Findings for Students

Recruiter priority for oral and written communication skills points to the importance for students of developing these skills through classes, outside activities, career services workshops, internships and so on. Even more importantly, students need to actively demonstrate these skills at any opportunity including career fairs and informal meetings with recruiters as well as part-time work, internships and interviews.

During my informal research talking to recruiters at Career Fairs, I observed that fewer students than I expected seem to take advantage of that forum for easy access to recruiters and organizations. Some students who did visit Career Fairs actually seemed intent on

making a bad impression. At the table of a major retail store, one student began to complete an employment application and then abandoned it. When the recruiter reminded him to fill it out carefully, completely and neatly, the student replied hastily that he did not have time. When the recruiter looked surprised, the student explained that he had to rush to class and would return later. The student then returned within a few seconds to announce that he could "blow off that class-- it was only Ethics"!

In the brief encounter described above, this one student demonstrated many things relevant to the current study. On the negative side he demonstrated poor written and oral communication skills, lack of outgoing personality, lack of both people and task-orientation, lack of both macro and detail-orientation, lack of both the ability to problem solve innovatively and follow directions, lack of ability to persuade or negotiate, lack of cooperation and team spirit as well as entrepreneurial ability. On the positive side there was perhaps some flexibility.

It is also important that students assess all their potential attributes, not just what they have studied in the classroom. Knowing that companies profess to want diversity and teamwork, it is important that students not overlook or neglect attributes or strengths in that area.

Barry Rand, an African-American and a corporate Vice President at the Xerox Corporation commented for a New York Times article (Hicks 1987) that it was the athletic teamwork, working with athletes of all ethnic backgrounds, that best prepared him for the kind of cooperation that would became crucial in his ascent through sales groups at Xerox.

Most importantly, it is critical that students investigate not only the line of business of a prospective employer, but also the work style of the industry and particularly of the company.

VII.G.2. Consequences of Findings for Companies

In an article in Personnel Psychology, 1990, Rynes and Gerhart point out that many organizations fail to give recruiters and hiring managers consistent, systematic information about organizational priorities and preferences; they fail to devote adequate resources to training recruiters about the specifics of the corporate culture as it pertains to what to look for in job applicants, especially at the entry level.

The current survey focused attention on these issues, and these findings or a company-specific follow-up study could be used not only to analyze current decision-making processes but also as a prelude to discussion and future planning. During this research

project some respondents commented that the survey was an interesting, challenging and revealing exercise for them. As one recruiter said, "We often use the terms 'fit' and 'chemistry' but rating the sketches made me think about what we really mean." Another recruiter photocopied the survey packet for her manager so that all the recruiters in the organization could examine their own employee selection preferences.

VII.H. GOING FORWARD

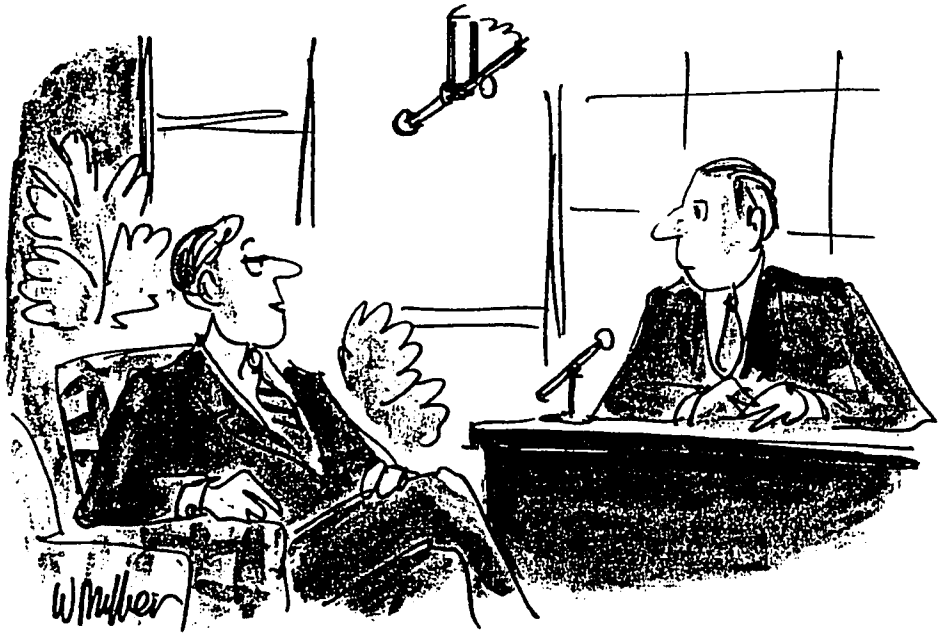
This empirical study of recruitment has expanded the debate between human capital versus segmented labor markets to include a consideration of work style and job spirit. Is this another form of human capital?

Work style is not the same as education or years of experience and cannot be inferred from these. A prospective employee may have excellent credentials for accounting as well as experience in the workplace and not be able to communicate effectively with clients at a social function. Nor can work style be inferred from demographic data. In spite of commonly held stereotypes, gender, ethnicity, class or place of birth will not ensure workers who can innovate or take a macro-perspective of an organization.

It is recommended here that work style be included in future labor market and employee selection research as

a separate set of variables of interests. A recent National Science Foundation Human Capital Initiative includes a priority area described as "Employing a Productive Workforce." Research questions include: How are workers and jobs effectively matched? And how are the skills demanded by employers changing? One answer to how these demands are changing may lie within this realm of work style and job spirit.

From a methodological perspective, Rossi's factorial-survey method appears to be a precise and insightful instrument for the sociological investigation of employee selection. The current research along with much other work in sociology has pointed to the need for further study in the area of labor market job matching processes and sorting mechanisms, but it is an area difficult to penetrate in part for lack of available data. The process itself involves situations not readily observed and easily missed by conventional methods of data collection and analysis. The factorial-survey approach provides a good tool for taking a close-up look at this elusive decision-making process.



"Actually, Lou, I think it was more than just my being in the right place at the right time. I think it was my being the right race, the right religion, the right sex, the right socioeconomic group, having the right accent, the right clothes, going to the right schools..."

Figure 2. The Job Candidate

APPENDIX A:
CHARACTERISTICS OF ORGANIZATIONAL FORMS

TRADITIONAL/BUREAUCRATIC VERSUS NEW-FORM

A. From Burns and Stalker (1961):

Mechanistic
-hierarchic structure of control, authority and communication
-positions with highly defined functions
-problems/tasks broken down into specialist roles
-tasks seen as distinct from whole
-precise definition of methods, duties, powers in each functional role.

Organic
-continual redefinition of roles and co-ordination, achieved by continual meetings between managers
-great deal of lateral communication
-problems not broken down/divided
-tasks seen in light of whole
-jobs lose formal definition in terms of methods, duties, powers--continually redefined through interaction; more creative,
-increase in institutionalized values, beliefs, and conduct, in the form of commitments, ideology, and manners; commitment to company.

B. From Kanter (1983):

Segmented
-hierarchical pyramid
-simple structure, more task-oriented; dictatorial
-management style adversarial
-give orders
-long chain of command
-objectives top-down
-routine operation-- low uncertainty
-fixed job assignments
-limited opportunities
-domination
-anti-change
-segmented structures w/ many compartments
-hierarchy, seniority
-specialists
-problems/tasks broken down, seen as distinct from the whole
-precise definition of technical methods, duties, powers in each functional role
-vertical interaction
-communication controlled
-compensation: pay and benefits
-victim of change

Integrated
-parallel structure-- temporary work groups, project teams
-management based on cooperation
-persuade
-high uncertainty
-expandable opportunities
-flexible, rotational assignments
-short chain of command
-objectives can be bottom-up
-innovative
-multi-unit team, task force
-encouragement
-egalitarian, meritocratic ideal
-entrepreneurs
-problems not broken down; individual has to perform tasks in light of the whole
-jobs lose formal definition in terms of methods, duties, powers continually redefined through interaction
-interaction lateral as much as vertical
-open communication encouraged, fluidity of boundaries
-greater worker satisfaction; participation; expected to buy into the culture, the community
-masters of change
-more meetings, negotiation, dialogue, interpersonal relationships
-common goals
-emotional and value commitment.

C. From Heydebrand (1989):

Bureaucratic
-Formalism
-Particularism
-Strong classifications
-Tight coupling and structural rigidity
-Organizational independence
-Structural control

New-Form/Technocratic
-Informalism-- rules and regulations are replaced with problem solving, bargaining, negotiation, informal communication.
-Universalism-- the enforcement of discipline and conformity through social hierarchies is replaced by guiding principles and common interests.
-Weak classifications-- categories and classifications are less important than knowledge and skill.
-Loose coupling-- the structure is flexible, encouraging innovation.
-Interdependence and linkages-- external linkages are important.
-Ethos of trust and loyalty-- corporate culture serves to counteract the centrifugal tendencies that come with the flattening and opening up of the hierarchical structure.

APPENDIX B:
INDUSTRIAL SECTORS OF NYU ON-CAMPUS RECRUITERS (1991-92)

A. SERVICE AND SERVICE-RELATED
1. SIC DIVISION H (60s)-- Finance, Insurance and Real Estate
FINANCE (60-62):
Banks
S&Ls
Bank Holding
Security Brokers

INSURANCE (63)

REAL ESTATE (65)

2. SIC DIVISION I (70s, 80s)-- Services
BUSINESS SERVICES (73)

ACCOUNTING (87)

3. SIC DIVISION E (40s)-- Communication, Transportation, Etc.
COMMUNICATIONS (48)

TRANSPORTATION (47)

B. MANUFACTURING

SIC DIVISION D (20s, 30s)-- Manufacturing,
DIVISION F (50s)--Wholesale Trade,
DIVISION B (10s)-- Mining
Industrial & Commercial Machinery & Computer Equipment (35)
Electronic & Other Electrical Equipment & Components Except Computer Equipment (36)

COMPUTER SOFTWARE

RECORDINGS (36)

AUTO (37)

PAPER (26)

PRINTING AND PUBLISHING (27)

PHARMACEUTICAL (28)

APPAREL (23)

FOOD AND DRINK (20)

OIL (13)

C. RETAIL

SIC DIVISION G (50s)-- Retail Trade
GENERAL MERCHANDISE (53)

EATING PLACES (58)

EQUIPMENT (57)

APPENDIX C: PEARSON CORRELATION COEFFICIENTS
/ Prob > |R| under Ho: Rho=0 / N = 2600

	MAJOR	GRADES	PACE	FORDHAM	STJOHNS	CUNY	NYU	CLUBS	OFFICER
MAJOR	1.00000 0.0	-0.00432 0.8259	-0.00155 0.9372	-0.03454 0.0783	0.10284 0.0001	-0.14116 0.0001	0.08295 0.0001	0.12806 0.0001	0.12038 0.0001
GRADES	-0.00432 0.8259	1.00000 0.0	0.03409 0.0823	0.02573 0.1898	-0.01119 0.5686	-0.11253 0.0001	0.06481 0.0009	-0.03569 0.0689	0.08689 0.0001
PACE	-0.00155 0.9372	0.03409 0.0823	1.00000 0.0	-0.26053 0.0001	-0.23139 0.0001	-0.25963 0.0001	-0.25181 0.0001	0.11682 0.0001	0.00463 0.8134
FORDHAM	-0.03454 0.0783	0.02573 0.1898	-0.26053 0.0001	1.00000 0.0	-0.23883 0.0001	-0.26798 0.0001	-0.25991 0.0001	0.02251 0.2512	0.02663 0.1746
STJOHNS	0.10284 0.0001	-0.01119 0.5686	-0.23139 0.0001	-0.23883 0.0001	1.00000 0.0	-0.23801 0.0001	-0.23084 0.0001	0.02689 0.1704	0.00677 0.7299
CUNY	-0.14116 0.0001	-0.11253 0.0001	-0.25963 0.0001	-0.26798 0.0001	-0.23801 0.0001	1.00000 0.0	-0.25901 0.0001	-0.03756 0.0555	0.04270 0.0295
NYU	0.08295 0.0001	0.06481 0.0009	-0.25181 0.0001	-0.25991 0.0001	-0.23084 0.0001	-0.25901 0.0001	1.00000 0.0	-0.12722 0.0001	-0.08171 0.0001
CLUBS	0.12806 0.0001	-0.03569 0.0689	0.11682 0.0001	0.02251 0.2512	0.02689 0.1704	-0.03756 0.0555	-0.12722 0.0001	1.00000 0.0	0.49511 0.0001
OFFICER	0.12038 0.0001	0.08689 0.0001	0.00463 0.8134	0.02663 0.1746	0.00677 0.7299	0.04270 0.0295	-0.08171 0.0001	0.49511 0.0001	1.00000 0.0
ORAL	0.07688 0.0001	0.00423 0.8292	0.02985 0.1280	0.00346 0.8600	0.02156 0.2717	-0.05025 0.0104	-0.00272 0.8897	0.07894 0.0001	0.02730 0.1640
WRITTEN	-0.05544 0.0047	0.12507 0.0001	-0.06220 0.0015	-0.01160 0.5543	-0.02703 0.1682	-0.00120 0.9512	0.10099 0.0001	0.02662 0.1749	0.08123 0.0001
FLEX	0.06138 0.0017	0.04479 0.0224	0.06552 0.0008	0.01861 0.3429	-0.04257 0.0300	0.00794 0.6857	-0.05230 0.0076	0.10406 0.0001	0.09322 0.0001
WHOLE	-0.01832 0.3504	0.09889 0.0001	-0.07853 0.0001	0.09111 0.0001	-0.07147 0.0003	0.01276 0.5156	0.04049 0.0390	0.02922 0.1363	0.05107 0.0092
INNOVATE	-0.01644 0.4020	0.02480 0.2061	0.03778 0.0541	-0.00360 0.8546	-0.05112 0.0091	-0.01000 0.6102	0.02450 0.2116	0.08266 0.0001	0.02871 0.1434
PERSUADE	-0.04156 0.0341	-0.03043 0.1208	0.03065 0.1181	-0.08775 0.0001	-0.02480 0.2062	0.00923 0.6381	0.07296 0.0002	-0.07961 0.0001	-0.04954 0.0115
ENTREP	0.04082 0.0374	0.08715 0.0001	-0.05325 0.0066	0.03191 0.1038	0.01858 0.3437	-0.05013 0.0106	0.05419 0.0057	-0.01136 0.5627	-0.00006 0.9975
AFRO	-0.15532 0.0001	-0.03546 0.0706	0.01221 0.5337	-0.01480 0.4506	-0.10808 0.0001	0.05723 0.0035	0.04712 0.0163	0.02631 0.1799	0.10865 0.0001
ASIAN	0.11978 0.0001	-0.06440 0.0010	-0.04195 0.0324	-0.03064 0.1183	-0.00145 0.9413	-0.05270 0.0072	0.12830 0.0001	-0.14828 0.0001	-0.08805 0.0001
EURO	0.12462 0.0001	0.03059 0.1189	0.08610 0.0001	0.04813 0.0141	0.01394 0.4775	-0.02217 0.2586	-0.12598 0.0001	0.04668 0.0173	-0.02302 0.2407
LATIN	-0.07178 0.0002	0.06656 0.0007	-0.05965 0.0023	-0.00392 0.8415	0.10114 0.0001	0.01074 0.5840	-0.04314 0.0278	0.06337 0.0012	-0.00971 0.6208
GENDER	-0.14462 0.0001	-0.02123 0.2792	0.06136 0.0017	-0.02918 0.1369	-0.04353 0.0265	0.01886 0.3364	-0.00960 0.6246	-0.10954 0.0001	-0.04739 0.0157
NATIVITY	0.04776 0.0149	-0.04377 0.0256	-0.02639 0.1785	0.05085 0.0095	0.03250 0.0976	0.04807 0.0142	-0.10522 0.0001	0.07751 0.0001	0.02226 0.2565
INTEREST	0.01892 0.3349	-0.04287 0.0288	-0.12537 0.0001	0.07579 0.0001	-0.06783 0.0005	0.12212 0.0001	-0.01177 0.5487	0.03186 0.1043	-0.05468 0.0053
PERSON	-0.05393 0.0059	0.01763 0.3690	-0.06530 0.0009	-0.00915 0.6411	-0.03797 0.0529	0.00316 0.8719	0.10752 0.0001	-0.00503 0.7976	-0.04241 0.0306
LIFE	0.04483 0.0223	-0.00090 0.9635	-0.08981 0.0001	-0.05665 0.0039	0.11260 0.0001	0.02389 0.2233	0.01661 0.3971	0.08574 0.0001	-0.07718 0.0001

	ORAL	WRITTEN	FLEX	WHOLE	INNOVATE	PERSUADE	ENTREP	AFRO	ASIAN
MAJOR	0.07688 0.0001	-0.05544 0.0047	0.06138 0.0017	-0.01832 0.3504	-0.01644 0.4020	-0.04156 0.0341	0.04082 0.0374	-0.15532 0.0001	0.11978 0.0001
GRADES	0.00423 0.8292	0.12507 0.0001	0.04479 0.0224	0.09889 0.0001	0.02480 0.2061	-0.03043 0.1208	0.08715 0.0001	-0.03546 0.0706	-0.06440 0.0010
PACE	0.02985 0.1280	-0.06220 0.0015	0.06552 0.0008	-0.07853 0.0001	0.03778 0.0541	0.03065 0.1181	-0.05325 0.0066	0.01221 0.5337	-0.04195 0.0324
FORDHAM	0.00346 0.8600	-0.01160 0.5543	0.01861 0.3429	0.09111 0.0001	-0.00360 0.8546	-0.08775 0.0001	0.03191 0.1038	-0.01480 0.4506	-0.03064 0.1183
STJOHNS	0.02156 0.2717	-0.02703 0.1682	-0.04257 0.0300	-0.07147 0.0003	-0.05112 0.0091	-0.02480 0.2062	0.01858 0.3437	-0.10808 0.0001	-0.00145 0.9413
CUNY	-0.05025 0.0104	-0.00120 0.9512	0.00794 0.6857	0.01276 0.5156	-0.01000 0.6102	0.00923 0.6381	-0.05013 0.0106	0.05723 0.0035	-0.05270 0.0072
NYU	-0.00272 0.8897	0.10099 0.0001	-0.05230 0.0076	0.04049 0.0390	0.02450 0.2116	0.07296 0.0002	0.05419 0.0057	0.04712 0.0163	0.12830 0.0001
CLUBS	0.07894 0.0001	0.02662 0.1749	0.10406 0.0001	0.02922 0.1363	0.08266 0.0001	-0.07961 0.0001	-0.01136 0.5627	0.02631 0.1799	-0.14828 0.0001
OFFICER	0.02730 0.1640	0.08123 0.0001	0.09322 0.0001	0.05107 0.0092	0.02871 0.1434	-0.04954 0.0115	-0.00006 0.9975	0.10865 0.0001	-0.08805 0.0001
ORAL	1.00000 0.0	0.06127 0.0018	-0.02383 0.2246	-0.04531 0.0209	-0.09778 0.0001	-0.10784 0.0001	0.06568 0.0008	0.04631 0.0182	-0.11653 0.0001
WRITTEN	0.06127 0.0018	1.00000 0.0	0.00555 0.7771	-0.06843 0.0005	0.02260 0.2493	-0.02783 0.1560	-0.01435 0.4647	-0.01772 0.3664	0.06693 0.0006
FLEX	-0.02383 0.2246	0.00555 0.7771	1.00000 0.0	0.08210 0.0001	0.02638 0.1787	0.07112 0.0003	0.00457 0.8157	-0.01659 0.3979	0.01103 0.5738
WHOLE	-0.04531 0.0209	-0.06843 0.0005	0.08210 0.0001	1.00000 0.0	-0.07693 0.0001	0.06050 0.0020	0.00606 0.7573	-0.13544 0.0001	0.07796 0.0001
INNOVATE	-0.09778 0.0001	0.02260 0.2493	0.02638 0.1787	-0.07693 0.0001	1.00000 0.0	0.05264 0.0073	-0.05739 0.0034	0.08972 0.0001	-0.03268 0.0957
PERSUADE	-0.10784 0.0001	-0.02783 0.1560	0.07112 0.0003	0.06050 0.0020	0.05264 0.0073	1.00000 0.0	-0.06527 0.0009	-0.03195 0.1034	0.09452 0.0001
ENTREP	0.06568 0.0008	-0.01435 0.4647	0.00457 0.8157	0.00606 0.7573	-0.05739 0.0034	-0.06527 0.0009	1.00000 0.0	0.03070 0.1176	-0.01572 0.4229
AFRO	0.04631 0.0182	-0.01772 0.3664	-0.01659 0.3979	-0.13544 0.0001	0.08972 0.0001	-0.03195 0.1034	0.03070 0.1176	1.00000 0.0	-0.32784 0.0001
ASIAN	-0.11653 0.0001	0.06693 0.0006	0.01103 0.5738	0.07796 0.0001	-0.03268 0.0957	0.09452 0.0001	-0.01572 0.4229	-0.32784 0.0001	1.00000 0.0
EURO	0.00273 0.8893	-0.10231 0.0001	-0.00885 0.6519	0.05596 0.0043	-0.07338 0.0002	-0.03113 0.1126	0.04668 0.0173	-0.37297 0.0001	-0.29060 0.0001
LATIN	0.05664 0.0039	0.05841 0.0029	0.01602 0.4141	0.01444 0.4619	0.00899 0.6470	-0.02307 0.2396	-0.06417 0.0011	-0.37643 0.0001	-0.29329 0.0001
GENDER	0.01846 0.3466	0.13233 0.0001	0.03015 0.1243	0.05084 0.0095	0.00540 0.7831	0.04923 0.0121	0.07770 0.0001	0.03875 0.0482	-0.02006 0.3065
NATIVITY	0.06498 0.0009	-0.15972 0.0001	0.00960 0.6245	-0.09816 0.0001	-0.00693 0.7239	-0.00908 0.6436	0.07432 0.0001	-0.03084 0.1159	-0.07111 0.0003
INTEREST	0.09013 0.0001	0.02201 0.2618	0.03322 0.0903	-0.01376 0.4831	-0.00451 0.8181	-0.12763 0.0001	0.05935 0.0025	-0.16335 0.0001	-0.04845 0.0135
PERSON	-0.01732 0.3773	0.04270 0.0294	-0.01548 0.4300	-0.06965 0.0004	0.12554 0.0001	0.01675 0.3932	-0.04041 0.0394	0.01199 0.5411	0.11735 0.0001
LIFE	0.10300 0.0001	0.00182 0.9262	-0.06221 0.0015	-0.07451 0.0001	-0.03801 0.0526	-0.00271 0.8901	0.02866 0.1441	-0.06248 0.0014	-0.08780 0.0001

	EURO	LATIN	GENDER	NATIVITY	INTEREST	PERSON	LIFE
MAJOR	0.12462 0.0001	-0.07178 0.0002	-0.14462 0.0001	0.04776 0.0149	0.01892 0.3349	-0.05393 0.0059	0.04483 0.0223
GRADES	0.03059 0.1189	0.06656 0.0007	-0.02123 0.2792	-0.04377 0.0256	-0.04287 0.0288	0.01763 0.3690	-0.00090 0.9635
PACE	0.08610 0.0001	-0.05965 0.0023	0.06136 0.0017	-0.02639 0.1785	-0.12537 0.0001	-0.06530 0.0009	-0.08981 0.0001
FORDHAM	0.04813 0.0141	-0.00392 0.8415	-0.02918 0.1369	0.05085 0.0095	0.07579 0.0001	-0.00915 0.6411	-0.05665 0.0039
STJOHNS	0.01394 0.4775	0.10114 0.0001	-0.04353 0.0265	0.03250 0.0976	-0.06783 0.0005	-0.03797 0.0529	0.11260 0.0001
CUNY	-0.02217 0.2586	0.01074 0.5840	0.01886 0.3364	0.04807 0.0142	0.12212 0.0001	0.00316 0.8719	0.02389 0.2233
NYU	-0.12598 0.0001	-0.04314 0.0278	-0.00960 0.6246	-0.10522 0.0001	-0.01177 0.5487	0.10752 0.0001	0.01661 0.3971
CLUBS	0.04668 0.0173	0.06337 0.0012	-0.10954 0.0001	0.07751 0.0001	0.03186 0.1043	-0.00503 0.7976	0.08574 0.0001
OFFICER	-0.02302 0.2407	-0.00971 0.6208	-0.04739 0.0157	0.02226 0.2565	-0.05468 0.0053	-0.04241 0.0306	-0.07718 0.0001
ORAL	0.00273 0.8893	0.05664 0.0039	0.01846 0.3466	0.06498 0.0009	0.09013 0.0001	-0.01732 0.3773	0.10300 0.0001
WRITTEN	-0.10231 0.0001	0.05841 0.0029	0.13233 0.0001	-0.15972 0.0001	0.02201 0.2618	0.04270 0.0294	0.00182 0.9262
FLEX	-0.00885 0.6519	0.01602 0.4141	0.03015 0.1243	0.00960 0.6245	0.03322 0.0903	-0.01548 0.4300	-0.06221 0.0015
WHOLE	0.05596 0.0043	0.01444 0.4619	0.05084 0.0095	-0.09816 0.0001	-0.01376 0.4831	-0.06965 0.0004	-0.07451 0.0001
INNOVATE	-0.07338 0.0002	0.00899 0.6470	0.00540 0.7831	-0.00693 0.7239	-0.00451 0.8181	0.12554 0.0001	-0.03801 0.0526
PERSUADE	-0.03113 0.1126	-0.02307 0.2396	0.04923 0.0121	-0.00908 0.6436	-0.12763 0.0001	0.01675 0.3932	-0.00271 0.8901
ENTREP	0.04668 0.0173	-0.06417 0.0011	0.07770 0.0001	0.07432 0.0001	0.05935 0.0025	-0.04041 0.0394	0.02866 0.1441
AFRO	-0.37297 0.0001	-0.37643 0.0001	0.03875 0.0482	-0.03084 0.1159	-0.16335 0.0001	0.01199 0.5411	-0.06248 0.0014
ASIAN	-0.29060 0.0001	-0.29329 0.0001	-0.02006 0.3065	-0.07111 0.0003	-0.04845 0.0135	0.11735 0.0001	-0.08780 0.0001
EURO	1.00000 0.0	-0.33367 0.0001	0.00356 0.8560	0.02575 0.1894	0.03543 0.0709	-0.09874 0.0001	0.07554 0.0001
LATIN	-0.33367 0.0001	1.00000 0.0	-0.02569 0.1903	0.07275 0.0002	0.18146 0.0001	-0.02314 0.2381	0.07194 0.0002
GENDER	0.00356 0.8560	-0.02569 0.1903	1.00000 0.0	-0.06771 0.0006	0.02477 0.2068	0.00154 0.9375	-0.03658 0.0622
NATIVITY	0.02575 0.1894	0.07275 0.0002	-0.06771 0.0006	1.00000 0.0	0.04112 0.0360	-0.08265 0.0001	0.08333 0.0001
INTEREST	0.03543 0.0709	0.18146 0.0001	0.02477 0.2068	0.04112 0.0360	1.00000 0.0	-0.05007 0.0107	0.01189 0.5447
PERSON	-0.09874 0.0001	-0.02314 0.2381	0.00154 0.9375	-0.08265 0.0001	-0.05007 0.0107	1.00000 0.0	0.01366 0.4863
LIFE	0.07554 0.0001	0.07194 0.0002	-0.03658 0.0622	0.08333 0.0001	0.01189 0.5447	0.01366 0.4863	1.00000 0.0

APPENDIX D

SAMPLE PACKET MATERIALS

-Introductory Letter
-Instructions to Respondents
-Sample Sketches
-Respondent Questionnaire

Letterhead Stationery

Date

Inside Address

Dear (Name of Addressee):

As part of ongoing research into organizational decision-making processes, the Department of Sociology at New York University is sponsoring a study of corporate priorities in the selection of new employees for the 1990s and beyond. The aim of this research is to see how organizational forms and cultures affect the hiring and recruiting process.

Specifically, we want to know how employers rate prospective employees and the relative importance they place on different worker characteristics. Because prospective employees with similar training can differ in many work-related ways, we have put together sketches of fictitious people combining a variety of skills and attributes.

We are requesting that you or the person from your company or division who conducts recruiting at NYU take 20 minutes to rate one set of sketches. If there is more than one person who recruits at NYU, please select the person who has recruited at NYU for your company for the longest period of time. Enclosed is a packet containing [1] explanation and instructions to the person rating the sketches (the respondent), [2] 40 sketches to be rated, and [3] a background information questionnaire. The respondent should complete all materials in the packet and return them in the self-addressed stamped envelope. All respondents will remain anonymous.

The sketches, which allow people to react to combinations of attributes at the same time, will be broken down and the ratings will be studied statistically. Conclusions will be reported in the aggregate, and by organizational type only. No names of individual persons or companies will be used.

Copies of a final summary report will be made available upon request to all companies participating in the study. Past studies of organizational decision-making processes have been used successfully for planning and program development, and the current study is expected to produce valuable information that can be used for evaluating or planning future recruitment strategies.

We hope you will participate in this study and thank you in advance for your cooperation. For further details, call Prof. Guillermina Jasso at (212) 998-8368.

Sincerely,

THE PROJECT STAFF:
Guillermina Jasso
Felinda Mottino
Jo Dixon
Wolf Heydebrand

SURVEY OF EMPLOYEE SELECTION PROCESS

The Department of Sociology at NYU is sponsoring a study to examine corporate priorities in the selection of new employees. You and many others who recruit at NYU are being asked to participate by responding to the enclosed materials. Those who have completed the survey find that it takes about 20 minutes, and have commented that it was "interesting," "challenging" and "self-revealing."

What the study is about: Recruiters are faced with the important job of selecting appropriate employees for their companies. This is a difficult and complex task that we consider a worthy focus of attention and study within organization decision-making processes. In sum, we want to know what you are looking for.

Because prospective employees can differ in many work-related ways, we are studying selection priorities using sketches of fictitious people who have various combinations of skills and attributes. We want to know how you (based on your company's priorities, culture, etc.) would **rate** the overall person based on this first impression from written information.

As you read the sketches try to picture the person as if he/she were an actual job candidate. **All the "candidates":**

- **are in their early 20s,**
- **are recent college graduates with a Bachelor's degree,**
- **have some work experience in either part-time positions or internships in organizations similar to your own,**
- **have basic technical skills and some computer experience,**
- **are applying for permanent, full-time, entry-level management/management-training positions in your organization.**

The emphasis is organizational fit rather than details of a specific job. The applicants differ in many ways, not only in terms of their accomplishments, but also in terms of their general work styles, or "job spirit"-- that is the way they approach work tasks and interact with others.

Information presented here is comparable to that culled from transcripts, evaluations, letters of recommendation and interview notes. Although only certain information has been included, it is comparable for each fictitious applicant so that individuals can be compared, contrasted, sorted and rated accordingly.

The Results: The sketches will be broken down and analyzed statistically, and the results will indicate trends and patterns across organizations. Copies of the final summary report will be made available upon request to anyone participating in the study.

Participation and Confidentiality: Participation in the project is voluntary and the duration of participation is only the time required to complete the enclosed survey materials (about 20 minutes).

We guarantee that all information you provide will be kept confidential. No individual or company names will be used (materials are numerically coded by organization for internal record-keeping purposes only). Conclusions will be reported in the aggregate, by type of organization.

This project has been reviewed by the NYU Human Subjects Committee and approved/exempted on December 16, 1992.

Comments, questions or requests for reports may be directed to: (Names, telephone and FAX numbers)

COMPLETING THE SURVEY

1--**ENCLOSED ARE 40 SKETCHES:**

What should I do with them??? At the bottom of each sketch is a space for you to write in a numerical rating which best represents your assessment of the desirability or undesirability of each applicant.

- The rating can be any positive or negative number.
  - The number zero represents a neutral point.
  - Positive numbers represent positive assessments.
  - Negative numbers represent negative assessments.
- For very highly desirable applicants, you should choose large positive numbers; for very highly undesirable applicants, you should choose negative numbers of large absolute value.
- The smaller the absolute value of the number, the milder the relative desirability or undesirability of that applicant.

-Relative undesirability.....0.....+Relative desirability

Please write in the number that indicates your assessment of the relative desirability or undesirability of each fictitious job applicant.

- You may use any number scale you wish.
  - For example, some respondents like to use a scale ranging
    from -100 (Extremely Undesirable),
    through 0 (Neither Desirable Nor Undesirable),
    to +100 (Extremely Desirable).
- Others prefer to use smaller scales; still others, larger scales. Of course, you may use any number between the extremes for applicants who fall between the highest desirability and the highest undesirability.
- You may change any of your ratings at any time.

How should I approach the task??? You will get into the swing of it quickly and may use any system you like. Feel free to reorder and write on the sketches if you need to mark or note things as you go along. Some people like to sort, prioritize, assign points, or use selected characteristics. Any scheme or rating system you devise is fine-- nothing is considered "wrong" or "right." Whatever you do to rate the sketches is perfectly acceptable.

2-- **ALSO ENCLOSED IS A SHORT RESPONDENT QUESTIONNAIRE,** which asks you to provide some background information.

Do not sign your name anywhere. When you have finished, please **return the sketches and the questionnaire** in the enclosed self-addressed, stamped envelope. We hope you will return these materials as soon as possible before June 30, 1993.

We appreciate your cooperation and thank you very much for your participation.

SKETCHES

SKETCH 8

DEGREE: ·**BACHELORS**

MAJOR: ·Business
GRADE AVERAGE: ·A-
INSTITUTION: ·NYU
SCHOOL CLUBS: ·Member university business club

WORK EXPERIENCE: ·**PART-TIME POSITION/INTERNSHIP IN BUSINESS; BASIC TECHNICAL SKILLS AND SOME COMPUTER EXPERIENCE.**

ENGLISH LANGUAGE COMMUNICATION SKILLS:
·Good oral skills
·Good written skills

GENERAL WORK STYLE:
·Deals well with uncertainty, flexible, change-oriented.

·Macro-oriented, sees big picture, generalist.

·Follows directions, accepts and obeys orders from supervisor.

·When in a leadership position, bargains, negotiates and persuades; communicates freely with people at all levels of the organization.

·Entrepreneurial, independent, autonomous, competitive.

PERSONAL INFORMATION:
·Latino-American male born in the U.S.

·**AGE-- EARLY 20S.**

·Outside interests: community sports league, community social club.

·Bright, lively, extrovert; people-oriented.

·Devoted to work; participates little in outside interests.

06/ **RATING**_____

SKETCH 15

DEGREE: ·**BACHELORS**

MAJOR: ·Liberal Arts
GRADE AVERAGE: ·B+
INSTITUTION: ·CUNY
SCHOOL CLUBS: ·None

WORK EXPERIENCE: ·**PART-TIME POSITION/INTERNSHIP IN BUSINESS; BASIC TECHNICAL SKILLS AND SOME COMPUTER EXPERIENCE.**

ENGLISH LANGUAGE COMMUNICATION SKILLS:
·Weak oral skills
·Good written skills

GENERAL WORK STYLE:
·Deals well with uncertainty, flexible, change-oriented.

·Macro-oriented, sees big picture, generalist.

·Innovative, problem solver, makes suggestions to supervisor.

·When in a leadership position, bargains, negotiates and persuades; communicates freely with people at all levels of the organization.

·Entrepreneurial, independent, autonomous, competitive.

PERSONAL INFORMATION:
·Asian-American female born outside the U.S.

·**AGE-- EARLY 20S.**

·Outside interests: travel group, ski club.

·Bright, lively, extrovert; people-oriented.

·Participates actively in outside interests and hobbies.

06/ **RATING**_____

SKETCH 19

DEGREE: ·**BACHELORS**

MAJOR: ·Business
GRADE AVERAGE: ·A
INSTITUTION: ·Pace
SCHOOL CLUBS: ·None

WORK EXPERIENCE: ·**PART-TIME POSITION/INTERNSHIP IN BUSINESS; BASIC TECHNICAL SKILLS AND SOME COMPUTER EXPERIENCE.**

ENGLISH LANGUAGE COMMUNICATION SKILLS:
·Good oral skills
·Good written skills

GENERAL WORK STYLE:
·Comfortable working within structure, adjusts to routine, deals well with predictable situations, stability-oriented.

·Detail-oriented, attention to specific task, specialist.

·Innovative, problem solver, makes suggestions to supervisor.

·When in a leadership position, bargains, negotiates and persuades; communicates freely with people at all levels of the organization.

·Cooperative, team player.

PERSONAL INFORMATION:
·African-American male born outside the U.S.

·**AGE-- EARLY 20S.**

·Outside interests: community sports league, community social club.

·Bright, lively, extrovert; people-oriented.

·Devoted to work; participates little in outside interests.

06/ **RATING**_____

RESPONDENT QUESTIONNAIRE

RESPONDENT QUESTIONNAIRE
Please circle or write-in the appropriate response.

1. How would you characterize your company's primary business? (Circle all that apply.)

A. Financial Services
B. Business Services
C. Accounting
D. Insurance
E. Data Processing
F. Telecommunications
G. Manufacturing
H. Equipment/Computers
I. Pharmaceutical
J. Apparel
K. Food Processing
L. Publishing
M. Retail
N. Food/Lodging
O. Retail Equipment
P. Computer Systems/Software
Q. Transportation
R. Utilities

-Other: please specify _____.

2. How would you characterize the culture/climate of your company? (Circle all that apply.)

A. Traditional
B. Hierarchical
C. Rigid structure
D. Clear boundaries
E. Job descriptions
F. Segmented
G. Task-oriented
H. Rules
I. Formal
J. Changing
K. Entrepreneurial
L. Fast-paced
M. Strong culture
N. Open systems
O. Innovative
P. Integral systems
Q. Informal
R. Teamwork
S. Participate
T. Like a family

-Other: please specify _____.

3. What positions has your company or division recruited for at NYU? Please list them:_____
_____
_____.

4. At which other New York City area schools has your company or division recruited for the same or similar positions? (Circle all that apply.)
A. Pace B. Fordham C. St. John's D. CUNY
-Other: please specify _____.

5. How many other people from your company or division conduct college/university recruiting for the same positions? _____
_____.

6. What is your own educational background?
A. Bachelor's Degree B. Master's Degree
-Other: please specify _____.

RESPONDENT QUESTIONNAIRE continued

7. What is your position within your company?
A. Staff position in corporate Human Resources Department.
B. Staff position in division/line of business Human Resources.
C. Line position outside of Human Resources.
-Other: please specify _____.

8. How long have you been recruiting for your company? _____.

9. What is your gender?
A. Female B.Male

10. What is your ancestry/ethnicity?
A. African-American B. Asian-American C.European-American D. Latino-American
E. Other

11. What is your age category?
A. Under 30 B. 30-39 C. 40-49 D. 50-59 E. 60 or over

12. Comments: _____
_____
_____
_____ .

APPENDIX E:
CODING AND CLASSIFYING

Respondent Questionnaire Industries and Sectors

To classify companies into industries, and industries into sectors, I used the criterion of primary business, especially as I thought it would affect selection of employees for management/management training positions. I used information from individual company reports, recruitment materials obtained directly from companies or from career services open files, as well as information provided by survey participants on the Respondent Questionnaire. I also referred to a numerical index of SIC codes, and business publications such as Business Week and the Million Dollar Directory.

Respondent Questionnaire Corporate Cultures

Using the Traditional and New-Form characterizations listed on the Respondent Questionnaire, I created a classification of company culture.

First I separated the descriptions checked or added by respondents into two groups as follows:

Group 1. Traditional, hierarchical:
- -Traditional
- -Hierarchical
- -Rigid structure
- -Clear boundaries
- -Job descriptions
- -Segmented
- -Task-oriented
- -Rules
- -Formal

Group 2. New-Form:
- -Entrepreneurial
- -Fast-paced
- -Strong Culture
- -Open systems
- -Innovative
- -Integral systems
- -Informal
- -Teamwork
- -Participate
- -Like a family
- -Flat structure
- -Decentralized
- -Meritocracy

I tallied the choices for each. Traditional ranged from 0 to 5, and New-Form from 0 to 8.

Second I subtracted Traditional from New-Form. Scores ranged from -4 to 7. I created a dichotomous variable where 0 and negative numbers are classified as Traditional, and 1 to 7 is classified as New-Form.

The description "change" became a separate dichotomous variable where no change=0 and change=1.

APPENDIX F: RESPONDENT-SPECIFIC MODELS OF THE DESIRABILITY OF JOB CANDIDATES:
Regression Coefficients (65 respondents-- all variables, intercept and R-squared)

ID	INTERCEP	MAJOR	GRADES	NYU	PACE	FORDHAM	STJOHNS	CUNY	CLUBS	OFFICER	ORAL	WRITTEN	FLEX	WHOLE
1	9.006	-0.188	0.3898	0	0.0793	-0.6771	-0.4869	-0.2986	0.6412	1.4563	0.6319	-0.8107	1.4361	0.2998
2	-170.153	2.765	35.1625	0	8.9578	4.5805	10.3831	0.1126	-7.3839	9.4327	36.8623	34.1725	3.1662	-3.1909
3	-3.509	2.431	-0.5985	0	0.5213	-0.4365	2.4948	2.3118	0.8832	-0.4091	2.1752	1.9573	-0.3055	2.6507
4	4.350	1.005	0.6627	0	0.1365	-0.3434	0.8932	0.3702	-0.3490	0.5398	1.9634	1.7994	-0.7524	0.9083
5	1.816	0.230	0.0232	0	0.2668	-0.1525	0.0770	-0.1675	0.5470	-0.0767	0.8181	0.8766	0.0657	-0.2141
6	-7.861	-0.161	1.6823	0	1.0582	2.4330	2.3958	2.6408	0.4267	0.0721	3.7785	2.8654	0.5289	-0.9863
7	40.039	-2.307	-10.0329	0	-19.6268	3.1638	-0.8243	-32.7379	-13.8154	19.7571	47.0589	14.9895	20.4787	11.8340
8	161.585	5.907	-59.8677	0	-19.7872	-11.3773	-31.6265	-59.9888	-17.6369	-2.3165	66.1144	72.3954	-1.6221	45.8609
9	-130.227	104.977	5.7631	0	-12.2546	-19.2695	-1.8527	-16.5792	-5.6133	2.5094	37.5138	35.3230	-3.3104	8.3157
10	7.468	0.729	-3.3782	0	-1.8566	-1.7177	0.5565	-6.0040	0.8314	-1.2266	5.9719	1.1724	0.3328	-0.1986
11	-6.957	0.073	1.0443	0	2.6178	1.9798	5.1126	3.8270	-0.1186	-0.9858	6.6351	2.0220	0.2521	1.1035
12	-3.301	0.271	-0.0081	0	-2.1834	-1.2169	-2.5251	-2.6210	0.1466	1.2205	7.4823	2.4175	-0.6653	-0.0457
13	-21.054	7.438	1.6208	0	8.5227	9.2582	4.4600	3.0381	-5.2920	-0.2298	13.2809	6.5781	4.2126	-9.1798
14	-55.221	9.981	6.3657	0	-1.8226	3.9663	-12.5631	-6.6141	1.6090	-7.6320	12.4466	18.6220	7.3450	4.4734
15	7.812	20.421	1.1433	0	2.6961	1.2658	2.2406	-9.4661	1.4263	4.4634	25.1263	28.4306	-0.1653	1.3533
16	28.029	-10.011	4.3637	0	8.9939	-0.1293	-6.4249	-7.5894	-1.6097	12.6909	10.7759	19.3084	-14.6576	-4.0680
17	3.901	0.394	0.7158	0	0.4998	0.2674	-0.4987	-0.1301	0.6976	-0.2024	0.8269	0.4890	-0.1569	-0.0131
18	-4.982	-0.224	0.8635	0	1.1299	0.5393	0.3255	0.0398	-0.1966	-0.5328	3.8614	2.9405	-0.4554	-0.8990
19	-32.890	0.462	3.8579	0	-8.1322	-9.1512	9.1272	-10.1088	19.6085	-16.6394	43.5623	29.5507	15.4296	-6.0395
20	-21.092	0.441	1.5935	0	0.8003	0.2211	-0.1651	-1.9567	-3.8622	1.9483	19.0736	9.5367	-2.0908	5.2640
21	0.361	-0.172	-0.0232	0	-0.0020	-0.4359	-0.2471	-0.3546	-0.0428	0.2152	0.2359	0.7066	0.0969	-0.0262
22	2.381	2.027	2.9326	0	-1.3172	-1.0557	-1.1040	-1.1050	0.1774	-0.0452	1.8643	2.0604	8.1661	-4.2104
23	-2.753	1.170	0.6454	0	-1.0557	-0.0832	-2.4707	-0.0832	-0.3810	0.0262	1.7515	1.4937	-0.3772	-1.0822
24	-69.923	5.026	11.1533	0	-1.6602	6.2612	3.9706	4.8431	-2.1988	4.0105	23.7238	31.9180	12.5275	-9.4071
25	-8.469	-1.206	2.5835	0	-0.6680	0.5970	0.1093	-0.4678	-0.2331	1.0264	1.9516	-0.5011	-0.3356	0.9192
26	21.170	2.760	-2.5995	0	-5.2620	-2.1238	-16.0083	-12.7749	-3.4723	18.3138	16.8226	16.5926	1.0659	10.8951
27	-16.267	-1.0525	0.4563	0	1.3360	2.4640	-1.0102	0.4886	-1.7615	2.6599	3.1244	4.7845	2.3034	0.5404
28	-136.869	6.9368	26.7386	0	3.0401	10.4788	-5.0272	-13.8031	-0.9307	1.4941	14.0384	19.5061	19.1066	12.6172
29	1.781	0.0951	-0.2890	0	0.5898	0.3829	0.1231	0.1269	-0.2827	0.1134	1.9150	1.2114	0.3832	-0.2488
30	-45.612	11.4558	1.3228	0	5.0731	6.1070	-0.4592	2.8469	-5.5140	7.4426	15.6519	12.1055	5.8444	3.8028
31	-5.586	-0.3674	0.6557	0	1.2843	0.9593	-2.2041	-0.9404	-1.7642	0.1613	1.5164	5.9220	1.1963	0.4878

ID	INTERCEP	MAJOR	GRADES	WID	PACE	FORDHAM	STUDIOS	CUNY	CUBS	OFFICER	ORAL	WRITTEN	PLEX	WHOLE
32	-25.627	0.8548	-5.9210	0	-10.1508	-5.1087	-14.4330	-7.8553	-0.2900	13.6701	23.6330	8.7299	-3.4146	11.2718
33	106.758	-12.3618	-1.6637	0	-38.2814	-42.5735	-21.3522	-9.4082	-31.4667	4.9089	33.6840	-16.0102	-8.0468	-3.4618
34	-127.556	9.0063	6.6809	0	-11.3979	-13.4091	-2.6706	-10.7063	-0.1760	-2.9242	12.4290	9.3331	16.9667	4.0801
35	-41.093	0.0945	3.4760	0	-8.9692	2.1983	2.9869	-1.0486	-4.3354	0.0473	59.9650	-4.0314	3.4048	1.9384
36	-316.885	15.6548	39.4711	0	14.2830	22.9362	-67.0735	-36.9080	8.4330	-6.0233	94.5341	98.4765	-29.5145	14.7783
37	-11.897	1.9282	2.3502	0	-2.1025	1.2282	-1.7337	0.4059	1.7184	-1.0181	5.8416	4.5587	-0.4780	-0.4463
38	-5.800	0.4361	1.0912	0	-0.1017	0.1493	1.4645	-0.0154	0.3211	0.2830	2.2099	2.0544	1.6347	-0.7359
39	-30.375	2.1123	6.3222	0	1.4794	-1.1499	-3.0384	-2.9080	-1.6096	-0.1853	8.7529	4.3916	-1.5360	1.4585
40	1.825	-0.2870	0.2460	0	-0.2735	-0.5637	-1.1356	-0.9776	0.8419	-0.5938	11.0876	0.5555	-0.2617	-0.0028
41	-77.216	-0.7981	11.9377	0	3.7529	2.1949	5.9683	-12.7592	3.2102	5.5466	26.6105	11.2080	3.7469	6.6388
42	-54.414	12.8539	14.9096	0	-2.2092	-4.7549	-9.0173	0.3298	-5.4917	9.3338	26.1062	11.3038	18.9941	9.0907
43	3.214	-1.1604	-1.0984	0	-0.3296	-0.8813	0.4077	-1.4984	0.4397	1.5109	4.4874	0.2068	3.0154	-1.3108
44	-10.163	-0.4520	0.1923	0	1.4907	-0.1009	0.5880	-1.1841	-1.1858	0.3807	12.6704	4.2881	-0.1567	0.4068
45	62.795	41.4720	-6.0060	0	-70.1898	-17.9444	-61.4196	37.5084	53.1921	-26.5942	40.6716	10.9651	10.8613	18.4635
46	-17.706	3.8459	7.2172	0	6.1353	1.0104	7.1654	-5.8276	-3.4608	4.3973	12.0888	15.3952	-0.9193	-7.9861
47	-3.990	1.5736	3.2361	0	-2.8211	-1.0935	-1.2080	-2.7587	1.3055	1.0831	1.7599	2.5673	3.7475	-0.8133
48	-6.641	-0.1226	-1.3530	0	1.8959	2.4847	11.5181	2.7108	0.7750	-1.7504	6.0469	1.0067	1.2404	0.0947
49	-62.647	9.8094	-11.5675	0	-10.9029	37.5109	10.0975	5.9795	-16.8728	-28.3924	55.0765	7.2506	14.0988	25.4595
50	-14.988	1.5983	1.7096	0	-0.6001	-1.9650	-1.7019	-1.5717	0.0926	-0.1969	7.1179	6.2563	0.0052	-0.3421
51	-1.598	0.4121	0.2116	0	0.2602	-0.2820	0.4309	0.3529	0.0595	0.1563	2.3039	0.8741	0.0356	0.4709
52	-3.716	3.4365	-3.8688	0	-0.0494	3.5655	3.9182	4.5049	-0.8111	-1.5335	-0.0924	0.9650	1.7047	1.2531
53	-17.119	11.6312	7.3925	0	-9.3705	-3.9379	-0.0294	-1.2604	-3.6726	3.0284	28.5443	16.8527	10.1886	-8.5475
54	-16.703	12.3695	2.9102	0	-6.6411	-18.2397	-18.7417	-4.9796	-5.9772	10.9305	5.5986	17.5023	-10.4735	-9.3922
55	-1.966	-0.1014	-0.1656	0	-0.0425	-0.3774	-0.1794	-0.3401	0.6548	0.9151	1.1304	1.0399	1.7682	2.0289
56	-67.268	2.4751	9.1350	0	-15.5238	-9.6024	-17.4041	0.4601	0.9456	-0.6288	25.6359	-2.3979	6.1332	6.5387
57	-3.730	-0.5182	0.3835	0	-0.6628	0.4296	-0.4962	0.2454	0.0227	-0.2590	2.7159	1.1329	0.0985	0.3838
58	2.223	-0.7615	-1.5187	0	0.0800	-2.7220	-2.0522	-0.4547	-0.6387	1.2227	2.9979	2.2146	0.4523	-1.2333
59	-69.937	-0.7457	12.9704	0	-0.5668	5.3084	5.5168	-0.2175	-4.6130	5.6807	39.2423	20.7438	-5.3097	2.1479
60	-4.019	-0.7417	0.5357	0	-3.9935	-0.8924	-4.1878	-2.8613	1.4013	-2.2540	-1.1913	0.5202	-0.5474	-1.2648
61	7.025	-0.3142	-4.5113	0	3.1427	-2.4381	-3.2265	-1.3963	0.4194	-1.7781	6.1996	8.1855	1.7704	0.4821
62	22.302	0.6270	2.5669	0	-12.7033	-5.5074	-6.3651	-11.0364	3.0695	-6.3199	21.0808	19.1165	2.4683	-0.1276
63	-12.282	2.1142	1.4574	0	1.3281	-0.0246	0.7056	0.7725	1.6525	-1.1099	6.2581	1.9954	1.2714	-0.9642
64	-5.426	1.6658	-2.2413	0	0.9043	-0.2516	-2.1259	1.9312	-1.1712	2.7533	4.3623	5.0899	-0.8206	3.5364
65	-12.414	-1.2375	6.1297	0	4.9764	9.2752	-6.3505	-1.3051	-10.8025	-0.0991	42.8642	31.4735	8.9685	-3.0604

ID	INNOVATE	PERSUADE	ENTREP	AFRO	ASIAN	EURO	LATIN	GENDER	NATIVITY	INTERESTS	PERSON	LIFE	ESTEEM
1	2.3758	1.1679	-0.1527	0.3840	-0.2578	0	1.2432	0.2611	-0.1325	-1.3499	0.497	0.3007	0.92172
2	7.0970	-3.7236	0.6860	-14.2611	-12.3561	0	-9.9468	8.1291	-4.2235	8.6756	32.379	8.6896	0.79601
3	-1.2325	-1.2072	0.3184	-0.6661	-1.5774	0	-1.2694	0.6073	-2.0453	0.7548	2.854	2.5435	0.77461
4	-0.5815	-0.3758	-0.1805	-0.5828	-1.2262	0	-0.7703	-0.0289	-1.2491	0.2680	0.115	0.1604	0.84430
5	0.1372	-0.2651	0.1564	-0.0181	-0.3216	0	-0.5197	0.2892	-0.0494	0.0176	0.130	-0.1372	0.90696
6	-0.3595	0.3617	0.3001	1.9217	0.8676	0	0.1566	-0.9204	-0.2698	0.4455	1.477	0.1677	0.81942
7	12.5310	-9.0799	-12.1639	1.3939	-19.2306	0	-24.8664	9.7681	9.5376	-2.7493	-2.331	-14.0462	0.77401
8	52.3572	-17.4650	-2.5077	-34.3711	-36.9757	0	-44.4459	11.3028	-12.1795	-14.6032	12.002	39.5319	0.85710
9	-4.1415	1.5380	-25.0806	-15.6863	-17.3583	0	-17.5981	6.0260	12.9228	10.3506	10.636	-2.6168	0.97703
10	1.3953	-1.1138	-2.2462	-7.5137	0.5366	0	-3.4040	4.0633	-0.3240	-2.6931	5.865	1.9437	0.78861
11	-1.4111	0.4491	-1.3159	1.1797	0.1942	0	0.4511	-0.1800	-1.0721	-0.0337	0.854	-1.0099	0.93255
12	1.0888	0.2393	-0.3025	-0.5847	-0.9855	0	-1.4737	-0.1413	0.8289	0.2171	-0.612	0.5154	0.95384
13	5.6777	5.0889	-4.3504	-13.4467	2.0655	0	2.8456	-1.0222	-1.2602	-8.4202	7.822	1.9296	0.65839
14	2.5089	-7.2335	9.3736	-1.5345	-4.6496	0	0.1977	2.9843	5.8571	-3.8224	18.932	-3.0940	0.93995
15	-2.2494	11.9378	6.7632	13.5954	-3.2309	0	-2.0345	6.2668	-6.2333	4.2705	-7.956	10.2730	0.93907
16	-4.5941	-2.7907	8.2745	9.3699	9.6376	0	2.4906	0.0165	-2.5063	1.2940	5.819	9.0154	0.86513
17	-0.0860	0.1616	0.0690	0.1283	0.3974	0	0.1794	0.0232	-0.1295	-0.1233	-0.206	0.1632	0.78297
18	0.8464	-0.7775	-0.0046	-0.0212	0.1558	0	0.0124	0.3687	0.5802	-0.1177	-0.425	-0.2230	0.94048
19	7.7333	-6.3039	11.6231	-1.6431	-6.9022	0	13.9454	7.6904	-7.7977	-6.1459	2.169	-20.3108	0.92259
20	0.0292	2.2575	1.2716	-0.4482	-0.8725	0	0.2245	-1.0769	-0.1724	2.7002	0.961	1.8135	0.98294
21	0.1161	0.0218	-0.1190	-0.0184	-0.2875	0	0.1412	-0.0847	0.0857	0.0095	-0.009	-0.0980	0.85879
22	2.9723	-2.0482	-0.9376	-0.0587	-0.1094	0	0.0410	0.0286	-0.0041	-0.0627	-0.983	-4.0413	0.99944
23	-0.2297	-0.0570	-0.1285	0.7680	0.3960	0	-0.1773	0.4782	-0.6502	1.2095	-0.166	-0.5250	0.86576
24	0.7370	3.3082	-6.5748	0.2958	-1.8344	0	-4.6923	0.9466	-5.2701	-1.0187	-0.106	3.5271	0.98008
25	-0.0103	1.7059	1.0191	-0.0034	2.0678	0	0.7026	-1.3253	-1.7930	2.2524	1.239	0.5550	0.66400
26	-0.1721	-3.7716	-0.4469	-6.0741	-2.6302	0	-0.3912	-3.2956	0.2216	3.1721	2.863	12.9171	0.69737
27	1.4661	-0.2822	0.1613	-2.2119	-1.8197	0	-2.0292	-3.4520	2.9563	-0.3063	1.034	3.6040	0.81579
28	5.3418	-10.2737	6.1682	-13.2310	0.8659	0	4.6583	-12.9457	-1.8953	0.0604	7.498	0.6791	0.73377
29	0.3544	0.0907	-0.2888	0.1466	0.0747	0	-0.0911	0.1874	-0.2167	-0.0517	0.461	0.0634	0.93332
30	2.1228	-1.1398	4.0539	-2.4999	-4.9107	0	-3.3980	-7.2449	8.6501	0.4204	1.170	3.4221	0.91973
31	0.8354	0.3833	0.2287	0.2327	0.1881	0	1.6745	-0.1396	0.4260	-0.6861	0.080	1.3850	0.84830
32	7.4227	10.8462	6.3287	19.8365	1.9729	0	9.1282	-8.1109	-1.2884	4.3243	24.324	3.7476	0.86779
33	-12.3504	9.1802	-14.2798	29.0273	-19.6859	0	28.5518	-14.5398	1.3159	6.8457	7.536	20.5622	0.81856
34	2.1736	-0.7340	-5.5402	1.6434	-6.1926	0	-4.5726	-5.5191	-3.2203	-1.2413	152.043	-7.7068	0.96595

ID	INNOVATE	PERSUADE	ENTREP	APRO	ASIAN	EURO	LATIN	GENDER	NATIVITY	INTERESTS	PERSON	LIFE	ESTRSQ
35	0.7956	1.4398	-0.2718	-2.5606	6.5328	0	2.0900	-1.9528	1.3336	-2.7612	5.743	-1.7593	0.98771
36	-10.2499	13.4671	17.3341	14.0527	-37.2936	0	-7.3090	-32.1433	-2.3285	29.6444	48.037	5.3507	0.69281
37	0.2117	0.7371	-0.4661	0.4371	-0.0585	0	-0.3497	-0.2282	-0.4791	0.6452	-0.144	1.9093	0.95090
38	1.6294	1.7213	-0.5987	0.9908	0.6869	0	0.0801	-0.1306	0.8270	0.6925	1.802	-0.4415	0.92819
39	-0.5883	-0.7236	0.4731	1.3667	-2.7699	0	-0.0485	-1.2955	-0.9914	0.1926	0.968	1.3201	0.90960
40	0.2527	0.0465	0.3269	0.2493	0.6992	0	0.2972	-0.1533	-0.0174	0.1680	-0.208	0.3087	0.57134
41	1.2453	1.8026	-5.3803	5.3380	9.8615	0	6.7801	4.4440	7.8396	6.1927	0.266	5.8232	0.89201
42	4.6399	5.7968	2.0153	5.5094	5.7095	0	1.9938	-1.6293	-2.5355	1.2274	-7.597	5.4954	0.93127
43	-0.5972	-1.8127	-0.9651	0.5083	0.8659	0	1.4114	1.1319	-0.0978	-0.0159	2.203	0.7734	0.90977
44	0.3731	0.1041	-0.6846	-0.9904	0.0155	0	-0.2356	-0.6492	0.4247	0.3675	0.637	0.3691	0.98908
45	-30.2993	-17.7113	-2.8021	18.9271	-26.7184	0	-8.1636	9.5431	-27.0447	-8.0636	-48.355	-34.3083	0.77607
46	5.5347	4.0243	-4.4489	-5.1692	-3.9912	0	-6.3647	0.4898	4.0767	2.1794	4.268	-3.1112	0.82590
47	0.5122	-2.5968	-0.7060	2.4383	-1.0332	0	3.9623	0.4435	-0.0010	-2.2478	0.574	-3.0606	0.87277
48	0.6763	0.6573	2.4571	-2.4042	-0.9742	0	1.8680	1.6455	1.8545	-0.2200	6.463	-0.0295	0.66940
49	3.3518	33.3125	33.0489	-20.8426	-23.9919	0	-10.6587	5.4770	-6.0728	14.6720	73.324	-6.4020	0.92537
50	-0.5697	0.1630	-0.9362	1.5910	1.1640	0	0.4724	-1.3528	0.1073	-0.4916	-0.703	-0.5643	0.95618
51	0.3549	0.2557	0.1944	0.3663	0.3890	0	0.2289	0.2824	-0.2474	0.2167	1.058	0.1610	0.95707
52	1.8589	3.0491	1.8668	1.0297	0.6878	0	1.6239	0.5590	-0.5955	0.0302	7.317	7.3511	0.84861
53	0.2070	4.3675	9.2194	10.7724	2.0709	0	2.3101	10.1265	-6.7871	5.8516	1.167	3.5205	0.89360
54	-16.7453	2.3437	15.5407	-1.4129	11.0159	0	30.0634	-2.9724	-6.2903	-2.5656	3.581	-11.9361	0.62454
55	0.0701	1.0929	-2.1103	0.7704	1.2288	0	0.9621	0.1124	0.0727	0.0627	1.991	-0.0736	0.98723
56	0.9178	0.2191	-5.6212	6.0783	5.6173	0	-1.2849	8.3336	-0.6076	7.2072	11.282	23.1914	0.84193
57	0.4589	0.8956	0.8628	-0.2498	0.1419	0	0.1135	-0.0050	-0.1782	-0.0792	0.914	-0.2612	0.89306
58	-0.3406	0.5728	-0.3394	0.2389	2.8470	0	2.0726	1.7028	-0.2423	0.6098	0.171	0.4623	0.85985
59	4.4987	2.7963	-1.3051	5.7276	3.2013	0	-3.4514	-1.4456	-1.9235	-2.0795	5.777	6.7222	0.97666
60	-0.6772	7.2493	2.1480	0.6686	-0.9007	0	2.7907	1.9843	-0.3353	-0.7555	3.540	-0.2167	0.76969
61	-1.2641	-1.5668	0.3231	0.1884	-0.0742	0	2.9670	-1.2223	2.7046	0.7086	1.321	-2.2261	0.69744
62	5.9278	1.2014	-0.4022	-1.3549	-3.1114	0	1.7479	1.0455	4.9075	-1.7739	6.079	-1.7442	0.92761
63	-0.6805	-0.0813	-0.3174	0.3491	0.4502	0	1.6516	0.2843	-0.3342	1.3822	2.245	-0.2725	0.96393
64	-0.4138	-0.0703	-0.6521	1.4489	1.5767	0	1.6337	2.8297	1.0116	-0.0802	4.075	3.9821	0.81008
65	7.4838	-1.8952	-4.1722	4.3274	2.2493	0	-2.0165	1.9014	4.5007	-5.2432	0.011	7.6204	0.95509

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