Employer Perceptions of Important Job-Related Characteristics

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For the soon-to-be or recent college graduate, the search for a job can be an arduous task. One of the first questions often asked is: "What are employers looking for?" In order for a student to undertake a successful job search, some idea of what factors an employer will weigh in the hiring decision would be helpful. Simply having good grades and the right academic major may not be enough. Employers often consider a wide range of factors, including job-related skills and personality traits, in their hiring decision.

This question is not a new one and several attempts have been made to answer it. Dickinson (1955) in an investigation of different occupational fields found several differences among employers in the relative importance of certain characteristics of college graduates. For all occupations, intelligence was a common element in the hiring decision. In a survey of its business members, the Western College Placement Association examined what factors industry looked for in bachelor-level college graduates. Personality traits (integrity, enthusiasm, dependability, for example) were rated the highest, followed by analytical thinking and ability to communicate (Johnson, 1959).

During the 1960's, labor shortages that arose as a result of military service requirements apparently did not lessen the importance of personality characteristics (Ma, 1969). Ma (1969) did confirm that certain employers sought different mixes of attributes: for example, sales and production employers emphasized the ability to work with and to persuade others while technical fields and accounting were concerned with grades. What emerged during this period was an increasing emphasis on grades as an important selection

device (Shell, 1967; Shell and Patrick, 1973; Tshirgi, 1973). More recently, academic major has become more important as the belief has grown that college graduates should be properly trained for specific entry positions (Benson and Chasin, 1976). Throughout the literature, communication skills continually appear near the top of the attributes list.

This literature provides descriptive information generally based on small sample sizes and often little empirical data. We still know very little about the "factors, characteristics, and attitudes which corporate recruiters consider in evaluating job applicants" (Posner, 1981). Unlike organizational entry theory (Wanous, 1980), which is concerned with how individuals choose among jobs, there are no strong theoretical underpinnings which suggest how employers choose among job applicants. As a result, attention has focused on employer perceptions, often descriptively, rather than analytically.

The purpose of this study was to explore employer perceptions on factors considered important in evaluating entry-level job applicants. Specifically, the congruence in ratings between different types of employers was examined. Based on previous studies, the hypothesis that differences exist between types of employers was adopted.

Data and Methods

Placement Services at Michigan State University annually conducts a survey of personnel representatives who are members of the College Placement Council or who represent organizations that recruit

regularly at Michigan State University. In 1986-87 survey, a special sample of organizations with under 500 employees, drawn from Dunn and Bradstreet, was also included. The organizations represent a broad spectrum of the American economy with the majority of firms engaged in some form of manufacturing, banking and finance, sales, education, governmental administration, and services. Responses from 1977, 1985-86, and 1986-87 survey will be utilized in this study.

Employers were presented a list of characteristics that may be considered in the selection of new employees with recently obtained college degrees. Each characteristic was rated on a five-point Likert scale from not important (1) to highly important (5) in the hiring evaluation process. These items were selected from previous studies of criteria commonly used by employers when interviewing and hiring candidates for entry-level positions (Posner, 1981; Tschirgi, 1973) and from comments of recruiters during visits to Michigan State University. Characteristics on the list included: communication abilities (oral and written), grade point average, academic major, self-esteem, dependability, appearance, acceptance of responsibility and knowledge of organization, as examples.

While each survey contained the same question, the characteristics that comprised the list varied each year. The biggest difference came in 1986-87 when the list was greatly expanded to account for new hiring qualifications (e.g. drug testing) and labor force composition (e.g. reduction of middle management). Twenty-two (22) items on the 1977-78 survey were repeated on the 1986-87 survey, which permits comparison over the past decade. Of the 22 items on the 1985-86 survey, 19 are repeated the following

year. In 1985-86, educational characteristics such as major, degree level, and grade point average were not included among the characteristics.

Employers were grouped according to their primary activity: manufacturing, banking and finance, service, government, and education. Aerospace, automotive, chemicals, electrical machinery and equipment (computers), electronics, packaging, petroleum, and tire and rubber product firms were included in the manufacturing group. The banking and finance group was composed of accounting, financial and banking organizations. Services encompassed a number of activities such as agribusiness, communication, hotel and restaurants, and hospitals and health services organizations. Employers from government agencies at the city, county, state and federal level and the military were categorized as government. Educational employers represented primary, secondary and postsecondary institutions, primarily K to 12. The firms were also classified by size: less than 500, 500 to 5,000 and over 5,000 employees.

Rather than differentiate by type of employer, several earlier research efforts have examined characteristics by occupations. An attempt was made to sort employers by the type of occupations they would be likely hiring. For example, a simple division would separate those hiring only engineers and other technical fields from non-technical employers. This procedure worked for banking and financial organizations who selected from a narrow range of academic majors. Manufacturing firms, on the other hand, were often seeking other majors besides engineers, making it difficult to sort by occupation. Unfortunately, the questionnaire was not designed to make this type of distinction.

Several statistical procedures were used during data analysis. Factor analysis was employed in order to identify a smaller set of hypothetical variables that represent the total set of characteristics considered in the hiring process for the 1985-86 and 1986-87 questions. Analysis of variance procedures (GLM) were used to test the null hypothesis that there was no statistical difference in item means (individual items and latent variables, produced by the factor analysis) among type of employers and by size of firm. The Tukey's standardized range test ($p < .05$) was performed on main-effects means to compare the differences among the means.

Results

Results will be presented for two years, 1985-86 and 1986-87 and for the comparison between 1977-78 and 1986-87.

Study 1: 1985-86

A total of 710 personnel representatives (20% response rate) returned the survey. Approximately 662 respondents completed the question concerning the characteristics considered when hiring new college graduates. The question as posed contained 22 items covering job skills and personality characteristics. Items pertaining to the educational dimension of a candidate, such as academic major, grade point average and degree level were not included among the listed characteristics.

Employers rated general communication skills (mean=4.42) and willingness to accept responsibility (4.38) as the two most important characteristics they look for in a prospective employee (Table 1). Several other factors were also rated highly important: motivation, self-esteem, maturity, perseverance, and speaking abilities. Characteristics least likely to be considered in the hiring decision were technical skills such as budgeting, family commitment, youthfulness and good looks, and adaptability to work in confined areas.

There was very little difference among employer groups in the five characteristics rated most important. Each group rated accepting responsibility, maturity, communication skills, motivation and perseverance as the most important. The exception was government, which placed commitment to the organization higher than motivation. Banking and finance, services, and education groups also rated speaking abilities at the same level. Equally important for educational employers were self-esteem and example for others.

The least important characteristics were generally family commitment, physical fitness, youthfulness, budgeting abilities, and adaptability to confined work areas. Educators were more likely to deviate from this pattern, rating family commitment and youthfulness higher and not placing as much emphasis on competitiveness and entrepreneurial spirit.

A four factor solution emerged from the factor analysis using oblique rotation. The characteristics that loaded on the factor IMAGE included interest in family, neatness, physical fitness, youthfulness, an example for others and support organization's

belief. The three communication characteristics loaded on one factor, labeled COMMUN. Six characteristics, budgeting, team management, strategic planning, entrepreneurial spirit, competitiveness, and dependence on others, comprised a factor labeled MANAGE. The final factor reflected certain aspects pertinent to an individual's SELF concept which included self-esteem, maturity, acceptance of responsibility, motivation, and perseverance. Commitment to the organization loaded equally several factors and was not included in any index. The loading pattern for adjustment to confined work areas was ambiguous; thus, the variable was omitted.

COMMUN and SELF were the highest rated factors with averages of 4.12 and 4.14 respectively (Table 2). Representatives from educational and banking and financial institutions rated these two factors significantly higher than the other groups. There was no difference in these ratings according to the size of the organization.

The remaining two factors, IMAGE and MANAGE, were considered to be only moderately important in hiring deliberations. IMAGE was more important to education employers, as their mean was statistically different from all other groups. Management skills, particularly budgeting, were of higher importance to banking and financial institutions than the other groups. For education with IMAGE and banking/finance with MANAGE, the type of people being hired for specific positions may need to possess unique traits. Teaching is a people-oriented occupation which requires less technical management skills but more interpersonal and leadership skills. Smaller firms rated IMAGE higher than other sized firms while the largest organizations rated MANAGE higher.

Study 2: 1986-87

An increasing number of requests from recruiters to base interview selection on grade point average and the announcement by some companies that drug testing would be a condition of employment prompted the questionnaire designers to compile a more detailed list of employment characteristics for 1986-87. The list was expanded to 71 items with sections on educational background, medical history, an expanded job skills section, personality and personal sections. Seven hundred and sixty (760) personnel representatives (an 18% response rate) returned the survey. Not all surveys contained complete information, only 709 could be utilized in the analysis.

Comparing the 19 common items between the two surveys, there appear to be only a few noticeable differences between years. The variables of highest importance in 1985-86 remain highly important in 1986-87. Changes such as the increased importance placed on budgeting abilities (2.45 to 3.35) may reflect the mix of respondents in each year. There does seem to be slightly more emphasis given to personal appearance as captured by the characteristics, neatness, and personal fitness. Two characteristics, team management skills and interest in the family, were rated lower in 1986-87 than the previous year. In both years, family interest/involvement was rated lowest among all the rated characteristics.

Factor analysis (oblique rotation) was used to represent the set of variables in terms of the smallest number of hypothetical (latent) variables within each major descriptor category: education, health,

personality, job skills, and personal. Fourteen factors emerged after completing the terminal solutions for each category. Several variables that loaded equally on several factors or appeared to be misspecified when less than three characteristics loaded on a factor have not been included in the index construction because of ambiguous interpretation. Leadership skills have been indexed with management skills for the purpose of analysis, but it was evident that leadership qualities have an important influence on other skills, especially communication abilities. The fourteen factors and their underlying variables are found in Table 3.

The four factors from 1985-86 are comparable to the factors INTERNAL, MANAGEMENT, COMMUNICATION, and SELF in Table 3. The ratings are actually very similar for self concepts and communication skills between the two years. The IMAGE/INTERNAL characteristics are perceived to be less important in 1986-87 than in the previous year. Even with a number of additional characteristics considered in 1986-87, the response patterns were very similar.

From the ranking of factors, highest to lowest means, in Table 3, it is evident that personality, work attitudes, and communication abilities were the characteristics that employers consider important when evaluating potential employees. Grades apparently play only a modest role in the evaluation of job candidates. This rating is somewhat inconsistent with employer requests for students with certain GPAs. Drug testing appears to be of very little importance, at this time, as most of the companies have yet to initiate drug testing procedures. Once the legality of testing is established, more companies may very well use testing as an applicant screening device.

The relative low ranking for grades and work experience does not minimize the importance of these factors. The rankings only suggest that a high grade point average and work experiences in and of themselves are probably not important. Rather, the personal traits and work habits acquired in striving to obtain good grades and through internships and summer work programs are much more important in preparing for a job. These skills have to be conveyed to the employer as well as the work experience.

Not all factors were rated the same by the different groups of employers. Comparison of the means for each factor by type of employer and size of firm can be found in Table 4. Size of firm did not influence the ratings to any great extent. Only six factors had statistically significant comparisons. Smaller firms, under 500 employees, rated COMMUNICATION, WORK, MEDICAL, and HEALTH factors lower than other firms while the largest firms rated DRIVE and INTERNAL lowest.

Comparisons by employer's category produced a number of significant contrasts. Educational institutions were involved in a number of these comparisons. Educators tend to consider a mix of personality and educational factors that emphasize a person's image (as an example for children), competency of subject matter, and communication skills as essential elements of a good teacher. Banking and financial institutions also place higher importance on these same characteristics except for grades. Financial institutions who seek people who have DRIVE (ambition) are likely to consider graduates from a wider range of majors. Manufacturers placed more importance on the type of academic major from which they would select future employees.

One important contrast involves manufacturing firms. Prior work experience was slightly more important to manufacturers than to the other groups. Technical graduates benefit when more emphasis is placed on work-related experiences, as they are more likely to have been involved in internships or cooperative educational experiences. Graduates from non-technical fields, such as business, marketing, and advertising, who have relevant work experience may want to devise a job campaign that includes manufacturers so that their work experience is given more consideration.

Ten-year Comparison

In 1977-78 survey, 424 employers responded to the survey of which approximately 390 were usable for analytical purposes. The list of characteristics contained 41 items of which 21 were repeated in 1986-87. Items not used in the recent survey covered recommendations from various sources, publications, high school activities, college activities, academic minor, and several personality traits that were redefined in later use. The means for the 21 common items are reported in Table 5.

What stands out when comparing these means in the similarity between the two studies. The importance ratings for grades and academic major have increased slightly while ratings for work experience have decreased slightly. Several job skill ratings, innovative and accept responsibility, also changed slightly. Even with the inclusion of new concerns, such as drug usage, communication skills, personality traits, and certain job skills consistently

appear as the most important factor considered in the hiring of new employees.

Implications

What emerged from the findings is a consistent preference pattern among employers regarding the attributes to be considered in the evaluation of prospective employees. These findings are not much different from early studies. Grades and academic major have become more important over time. New factors, such as drug testing, are slowly being introduced and may become more important within a couple of years.

Differences in rating of characteristics by employer group do exist; but the similarities may be more noteworthy. Employers from educational institutions and service organizations seek new employees with strong interpersonal skills, in addition to communication abilities, balanced personality, and relevant job skills.

Even though specific occupations could not separated, the results from employer ratings imply that certain occupations, particularly technical, may require a slightly different mix of attributes than non-technical positions (Benson and Chasin, 1976; Dickinson, 1955).

Academic characteristics, grades, degree level, and major, appear to be prerequisites for employment and generally serve as screening devices. Once the candidates have been sorted, non-educational characteristics are utilized in the final consideration of candidates. However, this premise does not readily dismiss the apparent overuse of academic qualifications in selecting candidates for interviews.

Posner (1981) poses the question of a "bias effect" that may be applicable here. Employers hold perception of the appropriate set of characteristics to consider during candidate evaluations. However, these characterisitcs may not be communicated clearly to recruiters who are influenced by their own perceptions and beliefs in assessing student characteristics. As a result, factors such as grades, youthfulness, and appearance may be weighed more than they should be. Further investigation into whether a "bias effect" does exist would aid in clarifying what attributes are being evaluated by various parties in the hiring process.

Many non-academic attributes can be enhanced by education. Faculty are often poor judges of the characteristics to be assessed in the hiring decision (Posner, 1981). Often faced with large classes, it is difficult to encourage communication skills, and critique each student separately. Faculty can still play a positive role by being sensitive to the need to nurture important work related characteristics.

Several future research issues emerge from this study. For example, in what ways do the importance of various characteristics change with work experience? What characteristics do recruiters, as distinguished from employers, use to screen and evaluate college students prior to and during interviews? Do students know what characterisics a recruiter or employer will emphasize in the evaluation of potential employees? Can career counseling and faculty input be better utilized to orient students in preparing for work? These and other questions merit further investigation.

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Table 1. Characteristics Evaluated by Employers in 1985-86 and 1986-87.

Characteristics	1985-86		1986-87	
	Mean	Std. Dev.	Mean	Std. Dev.
Commitment	3.90	0.85	4.06	0.84
Budgeting Abilities	2.45	0.99	3.35	0.85
Team Management Skills	3.49	0.98	2.94	0.92
Self-esteem	3.84	0.74	4.16	0.78
Interest in Family	2.45	1.11	1.79	1.02
Neatness	3.57	0.84	4.14	0.78
Physical Fitness	2.94	0.93	3.56	1.03
Youthfulness	2.27	1.00	--	--
Speaking Abilities	4.02	0.73	4.14	0.81
Organiz. Abilities/Speaking	3.92	0.79	--	--
Entrepreneurial Spirit	3.00	1.09	3.41	1.03
Support Organiz.'s Belief	3.29	0.87	3.47	0.93
Maturity	4.18	0.64	4.41	0.66
Accept Responsibility	4.38	0.64	4.40	0.68
Work in Confined Areas	2.60	1.09	2.97	1.07
Depend on Others	2.90	0.92	--	--
Competitiveness	3.42	0.86	3.41	0.89
Communication Skills	4.42	0.61	4.44	0.64
Motivation	4.22	0.74	3.99	0.84
Perseverance	4.07	0.75	4.11	0.79
Strategic Planning	3.16	0.96	3.12	0.91
Example for Others	3.51	0.95	3.64	0.83

Table 2. Factors From Terminal Solution (Oblique Rotation) for 1985-86 Characteristics of Employment.

Factor	Overall Mean	Type of Organization					Size of Firm		
		Manf	Banking Fin	Service	Gov	Ed	< 500	500-4999	> 5000
IMAGE	3.00 (0.64)	2.80	3.03	2.90	2.73	3.44	3.03	2.97	2.78
COMMUN	4.12 (0.61)	4.05	4.03	4.11	3.88	4.27	4.12	4.13	4.22
MANAGE	3.06 (0.62)	3.03	3.33	3.09	2.69	2.86	3.04	3.23	3.23
SELF	4.14 (0.49)	4.07	4.26	4.11	3.92	4.25	4.17	4.10	4.10

Comparisons significant at the 0:05 level for type of organization.

IMAGE: Education with all others; Manufacturing - Banking/Fin.

COMMUN: Banking/Fin with Manufacturing and Government; Education with Manufacturing and Government.

MANAGE: Banking and Fin with all others; Service - Government and Education; Manufacturing - Government.

SELF: Banking and Finance - Manufacturing and Government; Education - Manufacturing and Government.

Comparisons significant at the 0.05 level for size of firm.

IMAGE: < 500 and > 5000

MANAGE: 500-4999 and > 5000

Table 3. Means of Major Factors Resulting from Terminal Factor Solution (Oblique Rotation) With Underlying Variables.

Factor	n	Mean	STD	Underlying Variables
Mature	709	4.41	0.58	Dependability, maturity, flexibility
Approach	686	4.32	0.55	Acceptance of responsibility, ability to get things done, decision making abilities, common sense
Self	705	4.21	0.64	Neatness, self-esteem, self confidence, tactfulness
Communication	691	4.17	0.62	Speaking abilities, writing skills, communication abilities (general), interpersonal skills, motivational skills
Drive	700	4.11	0.66	Commitment to the organization, perseverance, ambition
Education	688	4.02	0.66	Academic major, degree level, years of education
Wellbeing	666	3.81	0.82	Mental stability, physical fitness, physical ability to perform tasks, health status
Management	670	3.36	0.62	Ability to delegate, budget abilities, team management skills, strategic planning, competitive abilities, leadership experiences, innovative ideas, example to others
Grades	661	3.34	0.70	Overall GPA, major GPA, minor GPA
External	688	2.91	0.68	Knowledge of organization, membership in organizations, Willing to relocate, suitable appearance, interest in current events
Work	675	2.91	0.79	Internship, co-operative ed., part-time employment
Medical History	672	2.55	1.12	Medical history, physical exam, smoking history, doctor interview
Health Tests	648	2.11	1.37	Urine analysis, drug screening, blood test
Internal	672	1.61	0.65	Marital status, compatible spouse, interest in family, attractivness, youthfulness

Table 4. Comparison of Mean Scores By Employer Category and Size for the Fourteen Characteristics (latent) for 1986-87 Survey.

	Mature		Approach		Self		Communication		Drive		Education		Well Being		Management	
Category	n	mean	n	mean	n	mean	n	mean	n	mean	n	mean	n	mean	n	mean
1. Manufacturing	229	4.35	220	4.27	227	4.14	219	4.09	229	4.12	228	4.08	220	3.77	216	3.31
2. Banking/Fin	118	4.49	117	4.40	117	4.43	117	4.26	115	4.24	110	3.85	106	3.57	113	3.54
3. Service	196	4.39	191	4.35	193	4.14	193	4.13	194	4.14	192	3.97	180	3.85	186	3.39
4. Government	31	4.18	29	4.10	30	3.76	29	4.03	28	3.69	28	3.79	27	3.66	29	3.01
5. Education	120	4.54	115	4.35	123	4.33	119	4.33	119	3.98	116	4.16	120	4.07	111	3.32
	F = 3.49 *				F = 8.65		F = 4.57		F = 4.72		F = 5.00		F = 5.28		F = 5.66	
	5: 1,4 **				4: 1,2,3,5 2: 1,3		5: 1,3		4: 1,2,3 2: 5		5: 2,4 1: 2		5: 1,2 3: 2		4: 2,3 2: 1	
Size																
1. < 500	276	4.41	285	4.30	267	4.23	260	4.05	265	4.17	257	3.97	254	3.81	248	3.33
2. 500-4999	288	4.44	280	4.35	285	4.25	283	4.27	287	4.10	277	4.06	277	3.82	274	3.40
3. > 5000	139	4.34	134	4.31	138	4.07	134	4.20	133	3.96	140	4.01	122	3.79	133	3.35
							F = 9.44		F = 4.51							
							1: 2,3		1: 3							

* F tests that are significant at the $p < .01$ level.

** Contrasts that are statistically significant, eg. 5: 1,4 is interpreted as category 5 is significantly different from 1 and 4.

Table 4 cont.

Category	Grades n	Grades mean	External n	External means	Work n	Work mean	Medical n	Medical mean	Health n	Health mean	Internal n	Internal mean
1. Manufacturing	226	3.37	227	2.94	234	3.13	225	2.99	212	2.58	217	1.54
2. Banking/Fin	102	3.29	115	3.08	109	2.80	111	1.83	109	1.27	112	1.76
3. Service	180	3.22	185	2.97	183	2.96	185	2.60	181	2.83	184	1.59
4. Government	29	3.09	29	2.45	31	2.37	31	2.45	26	2.45	31	1.29
5. Education	110	3.56	117	2.70	103	2.55	107	2.33	109	1.47	113	1.74
	F = 5.27		F = 9.06		F = 15.95		F = 23.11		F = 27.94		F = 4.53	
	5: 2,3,4		5: 1,2,3, 4: 1,2,3		1: 2,45 3: 5,4 2: 4		1: 2,3,5 2: 3,4,5		1: 2,5 4: 2,5 3:2,5		2: 1,4 5: 4	
Size												
1. < 500	238	3.31	258	2.84	244	2,77	253	2.38	248	1.75	254	1.75
2. 500-4999	268	3.37	284	2.95	279	2.98	272	2.60	268	2.18	271	1.55
3. > 5000	141	3.30	131	2.96	137	2.98	134	2.79	121	2.67	132	1.48

Table 5. Comparison of 22 Employment Characteristics 1978 and 1987.

	1978	1987
Education		
Academic Major	4.0	4.4
Degree level	3.8	3.9
GPA - overall	3.3	3.6
GPA - major	3.5	3.7
Part-time/Summer Emp.	3.1	3.0
Previous Career Work Exp.	3.6	2.9
Job Skills		
Ability to Get Things Done	4.6	4.5
Common Sense	4.6	4.4
Innovative	4.0	3.7
Accept Responsibility	3.8	4.4
Speaking Abilities	4.2	4.1
Writing Skills	4.0	4.0
Personality		
Adaptability/Flexibility	4.1	4.2
Dependability	4.4	4.6
Ambition	4.2	4.1
Personal		
Knowledge of Organization	2.7	2.7
Suitable Appearance	3.6	3.8
Willingness To Relocate	3.4	3.2
Marital Statis	1.5	1.3
Gender	1.6	1.3
Race	1.6	1.3