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INFLUENCE AND INTERRELATIONSHIPS AMONG THE
OCCUPATIONAL GOALS OF BUSINESS STUDENTS

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Richard Alan Steinberg

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INFLUENCE AND INTERRELATIONSHIPS AMONG THE
OCCUPATIONAL GOALS OF BUSINESS STUDENTS

By

Richard Alan Steinberg

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ABSTRACT

INFLUENCE AND INTERRELATIONSHIPS AMONG THE OCCUPATIONAL GOALS OF BUSINESS STUDENTS

By

Richard Alan Steinberg

This study was designed primarily as an exploratory investigation of the interrelationships and dynamics among occupational goals. In addition, two hypotheses regarding importance ratings of occupational goals were tested: first, that "receiving a feeling of achievement from the job" and "getting challenging tasks on the job" would be considered most important by business majors, and second, that significant sex differences would be found in certain importance ratings.

One hundred undergraduate business majors were asked to rate the importance of ten occupational goals, as well as the perceived influence that each goal had on each of the others. Analysis of variance techniques and cross-support analysis were utilized.

The first and second hypotheses were only partially supported. In addition, it was shown that business majors perceive occupational goals to influence each other.

Richard Alan Steinberg

The possibility of using the cross-support methodology for individual analysis, as well as implications for employers were discussed.

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Though it is undeniably an overused cliché, the truth is that "I really couldn't have done this without the help of a lot of people." Special thanks are in order for Angela Gandolfo and Jeannette Seibly, who not only did most of the very monotonous "data processing," but also found time to actually show interest in what I was doing. I am indebted to Len Bianchi, who proved without fail that there is always one more way to analyze the data. Grateful appreciation is due the members of my committee for displaying incredible patience with me: Drs. Ralph Levine (chairperson), Eileen Thompson, and Frederic Wickert.

Finally, let it be known to all that the members of my family have indeed been my main source of inspiration, and pride, not only through my years of graduate study, but rather throughout all of my years. The attitude of "do whatever you want to do with your life as long as you're happy doing it" has always been present in my house. Well, I'm doing it, and I am.

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INTRODUCTION

Life goals and values have been studied by numerous researchers both within (Rokeach, 1973; Maslow, 1964; Smith, 1969) and outside of (Williams, 1968; Kluckhohn, 1951; Morris, 1967) the field of psychology. In the field of psychology alone, values research has been conducted in at least four areas: developmental, social, counseling, and industrial/organizational psychology.

Although there has been little applied values research in the area, values and goals probably play a role in work life, and it is a typical assumption that they have a very strong influence on one's choice of a career. Since most adults in our culture spend a substantial proportion of their lives at work, it was considered of interest by this researcher to find out what the occupational goals of this population are--what do people value in a work setting?¹ Further, how do these goals or values affect one another, if at all?

This research is concerned with the occupational goals of college students--specifically, business students. The college years are often a time when one's occupational goals (i.e., what one wants from his or her job) become more

focussed. It was felt that the occupational goals of business students, in particular, would be somewhat crystallized, due to a partial commitment that they seemingly have made in their careers: i.e., the decision to major in business typically means that one plans eventually to work in an organization in some business-related capacity. Thus, the occupational goals of business majors should be relatively stable, and easier to tap than many other segments of the college and general population. They have a general idea of what they want in their careers (i.e., their goals and values), and their next step after college will typically be a job in an organization in the "real world" where they may or may not get a start toward fulfilling their goals.

Two considerations must be kept in mind throughout this research: First, the occupational goals of the general population may differ from those of college students; and second, that occupational goals of the college population as a whole might differ from those of students who major in business.

Overview of the Literature

Considering the vast amount of research that has been conducted on life goals and values, the amount of occupational goal research has paled in comparison. Wickert (1940a) developed a scale of "personal goal-values" in a work setting which was used to measure an individual's

"general preferences" of a vocational nature among 100 male university students. Later, using a sample of 304 upper-level male students from the schools of Business, Law, Medicine and Arts and Sciences, he measured the interrelationships among the goal-values, which included freedom, helpfulness, new experience, power, recognition, response (enjoying friendship and fellowship and intimate personal contacts), security, submission (following along with the crowd), and workmanship (Wickert, 1940b). He found them to be relatively independent of each other, except for the relationship between "freedom" and "new experience," two values which Wickert suggested were not very different from each other.

Other than Wickert's studies, there has been a paucity of research concerned with the interrelationships among occupational goals, and there has been but a handful of studies concerned with the importance of occupational goals (generally referred to as "occupational values" or "work values" in the literature).

Two studies in particular were concerned with the idea of group differences in work values. First, Saleh and Singh (1973) investigated work values as a function of sociological background. Their work values were divided into intrinsic (achievement and accomplishment, chances for promotion, chances for experience and growth in skill, nature of work, recognition, and responsibility) and

extrinsic (working conditions, security, relationships among employees, status, salary, and supervision).

The authors hypothesized that for their subjects (more than 3,000 white collar employees) that (1) there would be a positive relationship between the skill level of the subjects' fathers' occupation and intrinsic work values, and (2) assuming that job complexity was positively related to intrinsic orientation, employees in larger communities (where the more complex jobs tended to be) would be more intrinsically oriented than those in smaller communities.

Results showed that in the low-salaried group (under \$10,000) employees whose fathers held primarily unskilled jobs were less intrinsically oriented than employees whose fathers held primarily technical jobs, who, in turn, were less intrinsically oriented than employees with professional fathers. Further, the authors found a positive relationship between intrinsic job orientation and community size in the low-salaried group. In the high-salaried group, the authors found no differences in job orientation as a function of either father's occupation or community size.

Saleh and Singh offered two possible explanations for the results. The first contended that intrinsic orientation increased along the unskilled-technical-professional job dimension. The present results were to be expected, then, if the work values were transmitted from

the father to the children and remained relatively intact. The second explanation pertained to the influence of social class. The authors contended that since middle class work values were assumed to be influenced by the Protestant ethic (i.e., the intrinsic value of hard work), and lower-class work values by their relative economic deprivation, the emphasis of the middle class would be on the intrinsic aspects of the job, while the lower class would emphasize external aspects.

For the high salaried group, the authors suggested that their high paying jobs--which are assumed to reward intrinsic values--may have overridden any early socialization effects. The significant community size effect was explained in terms of the higher education level in the larger communities influencing the work values of subjects in these communities toward being more intrinsic.

In another study concerning work values and background variables, Saleh, Toye, and Sievert (1975) compared upper-middle and lower-middle managers in Canadian industrial organizations, and majors and captains in the Canadian military. They hypothesized that there would be no significant differences in general intrinsic orientation found between the majors and the upper-middle managers, or between the captains and the lower-middle managers (majors and upper-middle managers were matched, i.e., thought to be at the same managerial level, as were captains and lower-middle

managers). They further postulated that high level groups would show more intrinsic job orientation than low level groups, regardless of the environment (civilian or military). The intrinsic values were achievement, responsibility, recognition, advancement, nature of work, and growth in skill. Extrinsic factors were working conditions, salary, status, security, organizational policy, supervision, and interpersonal interactions.

Both hypotheses were supported. The authors reasoned that if a job is rich and complex enough to provide opportunity for challenge, achievement, and the other intrinsic values, (i.e., the jobs of majors and upper-middle managers), those who held such jobs would tend to be more intrinsically oriented than those holding a less complex job (i.e., a lower level job like captain or lower-middle manager).

In addition to the above findings, it was found that the military samples were significantly more concerned with advancement, security, status, and family needs (salarywise) than the civilian samples, while the civilian groups were more concerned with achievement, supervision and relationships. These differences were explained in terms of the different emphasis placed on certain values (both intrinsic and extrinsic) in the military as opposed to a civilian organization. For example, the authors state,

The emphasis on status and advancement by the military group may reflect the clear distinction of formal rank

and the power associated with the higher rank in their environment. Moreover, the defined and clear authority associated with each rank would be expected to reduce the problems in the relationships between subordinates and supervisors, in the military environment.

The concept of work values has also been studied in the context of vocational maturity.² Walls and Gulkus (1974) examined this in a sample consisting of vocational rehabilitation clients and graduate students. They hypothesized, first, that the graduate students would show greater vocational maturity than the vocational rehabilitation clients. Second, it was felt that individuals who considered such values as: (a) making use of your own abilities, (b) getting a feeling of accomplishment, (c) trying out your own ideas, (d) doing work without feeling it is morally wrong, (e) having steady employment, (f) independence, (g) security, (h) opportunity to use special talents, (i) challenge, and (j) self-satisfaction--important should be more vocationally mature. Further, those who considered such values as (a) telling other workers what to do, (b) having the position of "somebody" in the community, and (c) prestige--to be important might be lower in vocational maturity. The results generally supported the hypotheses, suggesting that occupational values may be used to represent or estimate one's rate or degree of vocational development.

The authors reasoned that if one's work attitudes and behaviors develop over time through growth and learning



processes, then their behaviors should become more and more oriented towards reality. It was to be expected, then, that individuals who had limited learning opportunities would have basic concerns such as high salary, prestige, and telling others what to do. Those who had learned to meet the characteristic demands of vocational development tasks, and thus had developed an extensive behavioral repertoire, were able to seek personal rather than public accomplishment, and to use their special talents so that they might gain the feelings associated with successfully meeting a challenge.

There have been relatively few studies concerned with behavioral, and more specifically, occupational values of college students. This is surprising in light of the fact that college students make up a substantial part of our population when compared to only a few years ago, and the apparent premium placed on finding a "good" job by many of these students. McKinney (1973) was interested in uncovering the behavioral values of college students and describing the subjective organization of the values. Using factor analysis, he found that the three factors which accounted for the largest percentage of the total variance were an academic achievement factor (emphasizing the products of achievement), an interpersonal factor, and a general competence or accomplishment factor (emphasizing the experience of achievement rather than the goal) respectively.

The author noted that these three factors appeared to be the same as those arrived at by Friedlander (1963), who examined factors contributing to job satisfaction: "recognition through advancement, social environment, and intrinsic self-actualizing work."

In a study based on the responses of some 1800 graduating college seniors, Gottlieb (1975) found that the students saw themselves as being extensively different from their parents in terms of occupational values. Students saw themselves as being much less concerned with earnings and security than their fathers, as well as much more concerned with the nature and purpose of the work. The students stressed the more altruistic and intrinsic aspects of the job. Indeed, they sought interesting work that was useful to society and of benefit to others, that would allow them to express individuality, and that would enhance individual growth.

The author stressed that a critical finding of the research was that the majority of college seniors (class of 1972) did hold positive attitudes toward work, having high career expectations. However, they saw work as a great deal more than a means to earn money and attain prestige, i.e., they strongly believed that work must be individually satisfying as well as of value to society.

Fretz (1972) conducted a study to determine whether occupational values differed among male students in the

following preprofessional groups: education, law, medicine, engineering, and business. He did find that the five groups differed significantly on their rankings of the values. Of the eleven occupational values used, five were identified as significant discriminants: pay received, advancement, working conditions, fringe benefits, and prestige. Examination of the group means revealed that on three of the five significantly discriminating variables (pay, advancement, and fringe benefits), business had the lowest means of all the groups and medicine had the highest of all the groups, with lower means indicating higher ratings. For business students specifically, "pay," "advancement," "self-satisfaction," "challenge," and "security" were the highest rated values.

The primary conclusion of the author was that the five groups of specialized preprofessional students did vary significantly on occupational values. He makes an additional important point, however, concerning a major semantic-conceptual problem with which occupational values (occupational goals) research must deal. The author correctly states that what are often called occupational values (or work values, occupational goals, career goals, etc.) in career values research are referred to as "job satisfiers" in career satisfaction research. There seems to be a rather obvious lack of unanimity concerning the proper terminology. Wanous and Lawler (1972) proceed even



further by distinguishing between job satisfaction and job facet satisfaction, with "job facets" being notably similar to "occupational values." They state that "The reader should keep in mind the distinction between overall job satisfaction (JS) and satisfaction with a particular facet of one's job, job facet satisfaction (JFS) . . . Overall job satisfaction is the sum of job facet satisfaction across all facets of a job." The six facets used predominantly in their study were self-esteem, opportunity for growth, feeling of security, social aspects, autonomy and pay.

One major difference, of course, between occupational values research and job facet satisfaction research is that studies of occupational values have often dealt with people prior to their entering an occupation (e.g., college students), whereas job or job facet satisfaction studies have been concerned almost exclusively with people employed at the time of the study. The similarity in concept, however, should be noted.

The last three studies to be discussed used either business students (De Salvia & Gemmill, 1971; Ondrack, 1973), or recent college graduates just entering a business career (Manhardt, 1972). De Salvia and Gemmill (1971) compared differences in the values of 225 business students and 1,072 businessmen. The data from the businessmen sample was obtained from a previous study (England, 1967). The authors found that the two groups shared certain values



and differed considerably on others. Of greater operative significance for students than managers were important concepts like individuality, dignity, achievement, success, money, prestige, power, influence, and security. Values concerning groups of people--co-workers, customers, subordinates--were more operative for the businessmen. In general, then, it seemed that students appeared to be more oriented toward personal goals, while the businessmen appeared to be more oriented to group and organizational goals.

When discussing the implications of the study, the authors note that an organization's recruiting program might do well to emphasize opportunities for personal achievement and early influence rather than the need for teamwork and corporate identity. This type of recruiting effort, the study indicates, would be more likely to be favored by students.

One possible problem with this study dealt with the comparison of data from students and managers. Not only were the data collected by different researchers, but the data collection for the two groups was separated by approximately four years (i.e., the late 1960s and early 1970s--a time of great social change). The results, therefore, must be considered in this context.

The results of this study appear to be at odds with other studies (e.g., Gottlieb, 1975) in which students

placed less emphasis on values such as prestige, money, influence, power, etc., and more emphasis on values like social welfare. One might think that, given the time periods that the two studies were conducted, the values of the students should be reversed, i.e., the DeSalvia and Gemmill (1971) study was conducted when there was still quite a bit of anti-business and pro-social welfare feeling on college campuses, while the Gottlieb (1975) study was conducted when the anti-business, anti-establishment feeling on the campuses had diminished somewhat.

Sex differences, as well as importance of job characteristics (occupational goals), were of primary importance in a study conducted by Manhardt (1972) using 365 male and 301 female recent college graduates newly appointed by a business organization. The study was addressed to the question of whether women and men who had accepted employment on similar jobs in business also had similar orientations to their jobs (i.e., similar occupational goals). In order to minimize sex differences in job orientation which might have been related to differing occupational choices, the sample included men and women appointed to similar jobs, at the same level, and which lead to careers in the same occupational area.

The subjects completed a questionnaire in which they were asked to rate 25 job characteristics on the basis of importance. Although the men and women in the sample had accepted employment on similar jobs, significant sex



differences in job orientation at the .01 level of probability were found in 11 of these characteristics. By using a principal components factor analysis of the job characteristics, the researcher ascertained that the differences were closely related to a three factor structure. Men gave the highest rating to characteristics contained in a factor related to long-range career objectives which were generally descriptive of a successful career in business, i.e., advancement, supervising others, important problems, income, and risks. These ratings were significantly higher than those of the women, who gave higher ratings to job characteristics contained in a comfortable work environment factor: work conditions, routine (i.e., job variety) leisure time, rules, and associates. The third factor contained characteristics which were related to autonomy and self-actualization and were classified as intrinsic: own methods, intellectually stimulating, creativeness, and independence. Small and mixed sex differences were found in the characteristics of this factor. Manhardt accounted for the sex differences by suggesting the existence of a subgroup of women who did not "expect a career to be a significant factor in their lives and for whom aspects of a job related to long-range career success are essentially irrelevant since they may not expect to be working for more than a few years." The author speculates that these women may have as strong a desire as men to achieve and be successful, but not necessarily in the business world. He



speculates that given equal perceived importance of a career and probability of continued employment, women would probably value success in business and show as much "desire to get ahead" as men. Thus, it is reasonable to believe that if the female sample were restricted to only those who had rated a career in business as a major life goal, the sex differences would, in all likelihood, diminish.

Though Manhardt raised some important issues in his study regarding sex differences in job orientation, he did not sufficiently emphasize one interesting finding in his data. Both the male and female groups, despite the significant differences in mean importance ratings on 11 of the characteristics, still identically ranked some of the job characteristics. Both groups ranked "provides a feeling of accomplishment," "encourages continued development of knowledge and skills," and "is intellectually stimulating," first, second, and third, respectively. Furthermore, of the 25 characteristics, both groups ranked "permits a regular routine in time and place of work," and "has clear cut rules and procedures to follow" next to last and last, respectively. Thus, from the results of this study one perceives not only sex differences in ratings of certain important job characteristics, but agreement across sexes on what characteristics are most important and which are least important. These ratings may have changed in the

five years since the study was conducted, and certainly deserve a further look.

In a study conducted by Ondrack (1973), occupational values of subjects from previous research studies (Kilpatrick et al., 1964; Manhardt, 1972) were compared to those from a sample of 125 business administration students. Subjects were asked to imagine an ideal occupation and then to list factors which would make the occupation ideal for them. The results showed that the six highest ranked goals were challenge in work, good salary, quality of peers, opportunities for achievement, independence, and individual responsibility. These occupational goals differed from the previous samples by an increased concern with quality of co-worker peers, as well as an increased desire for independence. In terms of concern for individual responsibility, challenge in work, and opportunities for achievement, the occupational goals seemed to have remained relatively stable. Goals such as status and opportunity for advancement experienced a decline. Ondrack summarizes his findings about the nature of the shift in occupational goals by stating,

contemporary students are no longer interested in conventional careers working their way through the administrative hierarchy of an organization, especially a bureaucratic organization. They reject authoritarian supervision and instead have a strong preference for a consultive-participative relationship with their supervisor. They reject narrow, closely defined jobs and prefer work situations which allow a strong sense of independence, individual responsibility, achievement, and recognition. Finally, they prefer to work with

co-workers with skill and competence equal to theirs in a cooperative team relationship or as a group of colleagues rather than in an interpersonal competitive relationship.

It is apparent from this review of research that there are questions about what people value in work that still need to be answered. Some of these points are discussed below.

First, what are the important occupational goals, particularly of students enrolled in business courses? The reviewed studies present some overlapping and some conflicting results. For example, the DeSalvia and Gemmill (1971) study showed that students placed great emphasis on power, influence, and prestige whereas other studies (Gottlieb, 1975; Manhardt, 1972; Ondrack, 1973) showed less student emphasis on these, and more emphasis on interpersonal and social welfare goals. Are the goals of business students today closer to the former or the latter, or are they vastly different from either?

Second, what is the extent of sex differences in importance ratings of occupational goals? A follow-up on the Manhardt (1972) study would seem to be in order, since sex differences in occupational goals have been virtually ignored in occupational values literature. Most likely, the prevailing assumption was that "the world of business is dominated by males, thus only studies dealing with males are relevant." For a case in point, it is noted that Ondrack (1973), when referring to the Manhardt (1972) study,

completely ignored the fact that almost 50 percent of Manhardt's subjects were female. Ondrack stated, "(Manhardt's) study surveyed 365 college graduates . . ." Manhardt did sample 365 male college graduates, but he also sampled over 300 female graduates. Throughout his discussion of Manhardt's study, Ondrack referred to the rankings of the "occupational values of college students," but neglected to mention first, that the rankings were those of only the males in the Manhardt study, and second, that there were some substantial sex differences in the rankings in that study. In point of fact, finding sex differences, if they existed, was the main purpose of the Manhardt study. Needless to say, greater concentration of effort is needed in this area.

Relationships Among Goals

Though the idea of interrelationships among occupational goals is one that has been virtually non-existent in past literature (with perhaps the exception of the Wickert (1940b) study), some writing has been done and research conducted dealing with the interrelationships among values, as well as goals.

An important tenet upon which this research is based is that occupational goals are not totally independent entities (i.e., that they can influence each other). Indeed, it is believed that a hierarchy of occupational goals may be present for each individual, with some goals seen as



means for reaching other goals, while other goals may act as ends in themselves. Fallding (1965), in discussing values, was in a sense discussing how subgoals and goals may relate to each other when he wrote,

This ordering of ends into a hierarchy means that a person will desire not only one thing, but everything he believes its attainment depends upon . . . There is a world of divergence between two persons who desire the same things, if an end which is instrumental for one is self-sufficient to another.

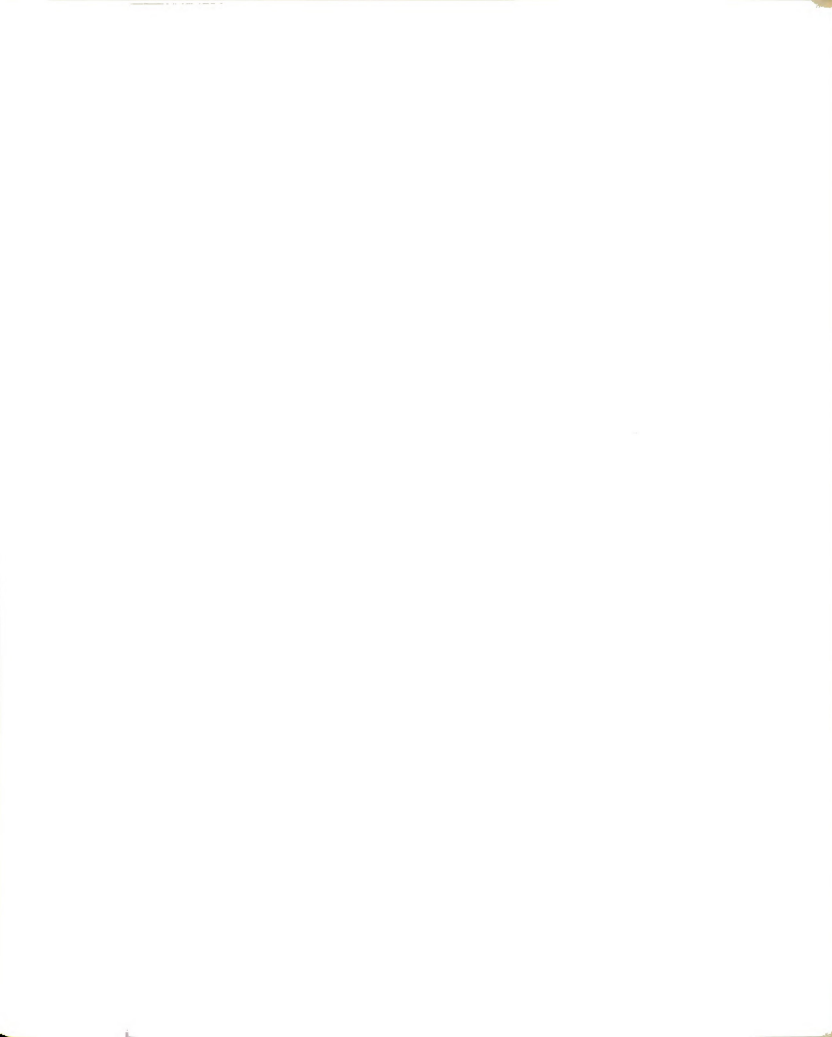
Along the same line, Rokeach (1973), having defined an "instrumental value" as an idealized mode of behavior and a "terminal value" as an idealized end-state of existence, points out that, "It may well be that one terminal value, so defined, is instrumental to another terminal value or that one instrumental value is instrumental to another instrumental value" (even though he did believe that it was safest to assume that "all values concerning modes of behavior are instrumental to the attainment of all the values concerning end-states.") The major point that both of these authors make, however, is that values and/or goals can indeed affect other values or goals.

Interrelationships among goals in a different context have been studied and utilized with some degree of success by Cetron and Connor (1972), among others. They discuss a method called cross-support analysis, which has been used in the past as a management tool for planning and assessing national policies and goals in order to improve the quality of life (see Figure 1 and Appendix B). The



cross-support analysis technique provides a framework for investigating the impact that one goal may have on another. It utilizes rating techniques which can be applied at both the individual and aggregate level of analysis. One great advantage of this type of matrix methodology, according to Cetron and Connor, "is in its facility to organize information in a formal and consistent manner, (and) structuring thinking for reproducible results . . ." Thus a cross-support matrix can facilitate the determination of the interrelationships among goals. It also leaves open the possibility of determining mutual influence and feedback effects in a system, i.e., where a correlational analysis can describe the degree of association between two variables, A and B, a cross-support analysis can separately determine the effects of A on B and B on A, which can facilitate the identification of feedback processes.

The exclusion of the relationships among occupational goals from the literature is surprising. Intuitively, it would seem to make sense that all occupational goals are not uncorrelated, though they might be conceptually different. For example, "receiving a feeling of achievement from the job" and "getting challenging tasks on the job" would seem to be correlated to some degree, if it is believed that one will receive a feeling of achievement from a job if he or she receives (and completes) challenging tasks. Nevertheless, one would be hard-pressed to show that the two goals were conceptually the same.



	g_1	g_2	g_3	g_4	--	--	--	g_n
g_1		a_{12}	a_{13}	a_{14}				g_{1n}
g_2	a_{21}		a_{23}	a_{24}				g_{2n}
g_3	a_{31}	a_{32}						g_{3n}
g_4								:
:								:
:								:
:								:
g_n	g_{n1}							

g_1 = goal 1

a_{12} = magnitude of contribution of goal 1 to
goal 2

Figure 1. Goals Cross-Support Matrix

The importance of the interrelationships (i.e., correlations, influence patterns) among occupational goals should not be underestimated. If relationships among these goals were shown to be present, certain questions might be raised. For example, if certain goals are highly correlated, does this mean they are tapping the same concept, or does it mean that the goals are sequentially related in some

way (i.e., having obtained one goal is a prerequisite for attaining another)? The previous research (mentioned above) using cross-support analyses has demonstrated, and common sense dictates, that national goals can affect each other. Can the methodology be extended to show that occupational goals also can influence each other?

Hypotheses and Objectives

The proposed research will, first and foremost, be exploratory in nature. It will attempt to examine the interrelationships and dynamics among occupational goals, both at an aggregate and individual level of analysis, looking for perceived compatibilities and incompatibilities among these goals.

Based on the questions that have evolved from the reviewed research, the following hypotheses are to be tested in the present study:

1. "Receiving a feeling of achievement from the job" and "getting challenging tasks on the job" will be considered most important by the sample as a whole.
2. Significant sex differences will be found in the ratings of "receiving good pay" (males higher), "attaining good relations with others on the job" (females higher), "performing a variety of duties" (females higher), and "obtaining the opportunity for advancement" (males higher).

METHOD

Subjects

Subjects were one hundred students enrolled in upper-level business courses at a large, midwestern university. Access to these classes was gained through permission of the instructors. As previously mentioned, it was believed that the occupational goals of students enrolled in upper-level (junior-senior year) business courses would be somewhat more stable than those of the general university student population, particularly underclassmen.

Materials

Materials consisted solely of a seven page questionnaire (See Appendix A). The questionnaire was divided into two main parts. The first part, entitled "Importance of Goals," consisted of a 10-point rating scale to determine the importance rating for each of ten occupational goals. The goals were: receiving a feeling of achievement from the job; getting challenging tasks on the job; receiving good pay; attaining good relations with others on the job; getting a feeling of independence on the job; attaining job



security; performing a variety of duties; obtaining the opportunity for advancement; obtaining the opportunity to benefit society through your work; and, getting prestige on the job.³

The second part was entitled "Influence of Goals." The first page of the section included instructions for determining the influence ratings for each of the goals, as well as examples. The instructions involved asking the subjects to estimate the degree to which each goal influenced each of the other goals, by placing a representative number above an arrow linking the two goals. The next four pages included the ninety possible goal-influencing-goal combinations.

Procedure

The experimenter paraphrased the instructions, and discussed the examples. Subjects were then asked to complete the questionnaire, making sure that they read the instructions fully. After the questionnaires were completed, the subjects were debriefed, i.e., the research hypotheses were delineated.

Design

There were two factors in the present study: a sex factor (two levels) and an occupational goal factor (10 levels--one for each goal) producing a 2 (sex) x 10 (goals) design with repeated measures on the occupational goal factor.

RESULTS

Importance Ratings

Subjects were asked to rate each of the occupational goals independently. Means and standard deviations for the importance ratings are shown in Table 1, while the importance ratings broken down into sex differences are included in Table 2. A repeated measures analysis of variance (ANOVA) showed significant differences between occupational goals, $F(9,882) = 32.92$, $p < .001$ (See Table 3).

Hypothesis 1. It was predicted that "receiving a feeling of achievement from the job" and "getting challenging tasks on the job" would be considered most important by the sample as a whole. Results show that "achievement" ranked first but "challenge" ranked fourth out of the ten occupational goals. A Tukey post-hoc analysis ($p < .05$) showed that "achievement" is rated significantly greater than all of the other occupational goals with the exception of "obtaining the opportunity for advancement," which is ranked second in importance for the overall sample. "Challenge" is ranked significantly below "achievement" and "opportunity for advancement," and not significantly different from "attaining good relations with others on the

Table 1.--Occupational Goals Cross-Support Matrix.

Achievement	Opportun. for Advancement	Good Rela. with others	Challenge	Good pay	Job security	Independence	Prestige	Variety of duties	Opport. to benefit society		
\bar{x}	8.22	7.48	7.40	7.18	6.78	6.59	6.49	6.24	5.65	\bar{x}	
SD	1.04	1.26	1.21	1.40	1.75	1.79	1.98	2.00	2.06	SD	
Achievement	4.74 3.34	3.01 3.03	4.47 3.37	3.24 3.03	2.91 2.89	4.23 3.14	3.69 3.04	2.20 3.26	2.06 3.39	3.39	1.75
Opport. for Advancement	6.86 2.37	2.38 3.14	6.16 2.57	6.13 2.72	5.17 2.91	4.08 3.25	6.09 2.63	3.78 3.35	1.70 2.87	4.71	1.77
Good rela. w/others	4.17 2.93		1.40 2.49	1.45 2.22	2.26 2.82	-.14 2.78	3.06 3.10	1.38 2.37	-.88 2.41	2.03	1.55
Challenge	6.79 2.39	1.02 2.96		3.76 2.86	1.65 3.20	3.27 3.80	4.29 2.85	3.33 3.84	1.39 2.42	3.43	1.62
Good pay	4.88 3.14	.18 2.58	2.99 3.12		3.81 3.26	2.47 3.42	4.53 3.04	.89 2.56	.41 2.03	2.54	1.80
Job security	3.66 2.94	3.25 2.99	1.22 2.99	3.51 3.00		3.17 3.32	2.87 2.91	.98 2.66	.68 2.26	2.56	1.96
Independence	4.36 3.74	-.08 3.19	3.04 3.36	1.44 2.84	1.19 3.71		2.38 3.06	1.98 3.22	.63 2.37	1.92	2.00
Prestige	5.97 2.82	3.20 3.39	4.73 3.16	5.41 2.89	4.79 2.85	3.90 3.26		2.39 3.07	1.55 2.72	4.24	1.90
Variety of Duties	4.55 2.91	2.48 2.82	4.45 3.51	2.86 3.06	1.41 3.24	3.00 3.87	2.34 3.14		.70 2.20	2.84	2.06
Opport. to Benefit society	5.85 2.90	3.16 2.75	2.72 3.18	.41 2.52	.12 2.41	1.54 3.32	2.62 3.32	1.35 2.34		2.11	1.61
\bar{x}	5.23	2.07	3.46	3.13	2.59	2.84	3.54	2.09	1.11		
SD	1.55	1.60	1.58	1.51	1.70	1.94	1.73	1.66	1.53		

INFLUENCEABILITY RATINGS

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Table 2.--Means of Male and Female Subjects for Aggregate Importance, Influence, and Influenceability Ratings.

	IMPORTANCE		INFLUENCE		INFLUENCEABILITY	
	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>
Achievement	8.00	8.44	3.05	3.74	4.73	5.74
Opportunity for Advancement	8.16	8.00	4.28	5.14	3.46	3.94
Good relations with others	7.26	7.70	1.74	2.31	1.87	2.26
Challenge	7.12	7.68	3.26	3.61	3.04	3.89
Good pay	7.32	7.04	2.35	2.74	2.89	3.38
Job security	6.88	6.68	2.17	2.94	2.51	2.67
Independence	6.32	6.86	1.65	2.19	2.34	3.33
Prestige	6.66	6.32	3.89	4.58	3.46	3.62
Variety of duties	5.70	6.78	2.72	2.96	1.86	2.31
Opportunity to benefit society	5.86	5.44	2.12	2.09	1.05	1.18

Table 3.--Analysis of Variance on Importance Ratings.

Source	<u>ss</u>	<u>df</u>	<u>ms</u>	<u>F</u>
Groups (sex)	6.89	1	6.89	.95
Subject within Groups	712.69	98	7.27	
Goals	595.31	9	66.15	32.92**
Goals x Groups	57.98	9	6.44	3.29*
Goals x Subject within Groups	1772.01	882	2.01	
TOTAL	3144.88	999		

* $p < .005$ ** $p < .001$



job," "receiving good pay," or "attaining job security." Thus, Hypothesis 1 has been only partially supported.

Hypothesis 2. It was predicted that significant sex differences would be found in the ratings of "receiving good pay" (males higher), "attaining good relations with others on the job" (females higher), "performing a variety of duties" (females higher) and "obtaining the opportunity for advancement" (males higher). As can be seen in Table 3, overall sex differences were not significant. Regarding the predicted differences, A PRIORI TESTS showed that although all of the differences between means were in the predicted direction, only the importance rating for "performing a variety of duties" was significantly different for females and males ($t = 2.00$, $df = 98$, $p < .05$). Thus, Hypothesis 2 was only partially supported.

Intercorrelations Among Importance Ratings

Appendix C displays the correlations among the importance ratings. The largest intercorrelation was between "receiving a feeling of achievement from the job" and "getting challenging tasks on the job."

Influence Ratings⁴

Across Goals. Table 1 includes the influence ratings of the occupational goals. The row totals summarize the overall influence of each of the goals. With respect to these totals, a repeated measures analysis of variance showed significant differences between the influence ratings

of the goals, $F(9,882) = 44.60$, $p < .001$ (See Table 4). On a scale ranging from -9 (strongly interferes with) through 0 (has no effect) through +9 (strongly facilitates), "obtaining the opportunity for advancement" had the greatest overall influence rating (and for both males and females).

Table 4.--Analysis of Variance on Influence Ratings.

Source	<u>ss</u>	<u>df</u>	<u>ms</u>	<u>F</u>
Groups (sex)	64.52	1	64.52	4.41*
Subject within Groups	1433.93	98	14.63	
Goals	811.06	9	90.12	44.60**
Goals x Groups	16.51	9	1.84	.91
Goals x Subject within Groups	1782.06	882	2.02	
TOTAL	4108.08	999		

* $p < .05$

** $p < .001$

This was not significantly above "getting prestige on the job," which had the second highest overall (and male and female) influence rating. Substantially below that were "getting challenging tasks on the job" and "receiving a feeling of achievement on the job." Last (having the least influence on the other goals) was "getting a feeling of independence on the job."

Sex Differences. Table 2 displays the influence ratings broken down into sex differences. Results showed significant sex differences among the influence ratings of

the occupational goals, $F(9,882) = 4.41, p < .05$ (See Table 4). Females rated every goal except one ("obtaining the opportunity to benefit society through your work") as having a stronger influence than did males.

Table 4 also indicates that there was not a significant sex by goal interaction, $F(9,882) = .91, p > .05$.

Influenceability Ratings⁵

Across Goals. Table 1 includes the influenceability ratings of the occupational goals. The column totals summarize the overall influenceability of each of the goals. With respect to these totals, a repeated measures analysis of variance showed significant differences among the influenceability ratings of the goals, $F(9,882) = 93.28, p < .001$ (See Table 5). On a scale ranging from -9 (strongly interferes with) through 0 (has no effect) through +9 (strongly facilitates), "receiving a feeling of achievement from the job" had the greatest overall influenceability rating (and for both males and females). This was significantly above all of the other goals. "Obtaining the opportunity for advancement" had the second highest overall influenceability rating, but was not significantly different from "getting prestige on the job" or "getting challenging tasks on the job." Last (having the least susceptibility to influence from the other goals) was "obtaining the opportunity to benefit society through your work."



Table 5.--Analysis of Variance on Influenceability Ratings.

Source	<u>ss</u>	<u>df</u>	<u>ms</u>	<u>F</u>
Groups (sex)	64.51	1	64.51	4.41*
Subject within Groups	1433.96	98	14.63	
Goals	1146.52	9	127.39	93.28**
Goals x Groups	25.00	9	2.78	2.03*
Goals x Subject within Groups	1204.53	882	1.37	
TOTAL	3874.51	999		

*p < .05**p < .001

Sex Differences. Table 2 displays the influenceability ratings broken down into sex differences. Results showed significant sex differences among the influenceability ratings of the occupational goals, $F(9,882) = 4.41$, $p < .05$. (See Table 5.) Females rated every goal as having a greater degree of influenceability than did males.

There was also a significant sex by goal interaction, $F(9,882) = 2.03$, $p < .05$.

Cross-Support Matrix (See Table 1)

Table 1 is a modification of the original cross-support matrix (Ralph, 1971). (See Appendix B.) Because the correlations between the unweighted and weighted influence and influenceability ratings were extremely high (generally above .95), only the unweighted ratings are reported here. Thus, the traditional method of utilization



of the cross-support matrix was not totally employed in the present analysis.

The matrix in Table 1 includes the ninety possible goal-influencing-goal combinations. The matrix presents what the respondents see as the perceived causal relationships between the occupational goals. Each of the ninety cells can be examined in terms of either an "influence" or "influenceability" process.

Through examining the cells in the matrix rows, it appears that obtaining the opportunity for advancement, as previously noted, seems to have the greatest influence on obtaining the other goals. "Opportunity for advancement" has four of the five highest influence ratings in the matrix. The respondents seem to feel that if they have "obtained the opportunity for advancement," this will help them "receive a feeling of achievement from the job," help them to "get challenging tasks on the job," aid them in "receiving good pay," and help them in "getting prestige on the job."

To a lesser degree, the respondents feel that having the opportunity to advance in an organization will assist them in "attaining job security," and also "getting a feeling of independence on the job."

Having attained prestige on the job also seems to aid the subjects in reaching other occupational goals, particularly "attaining job security," "receiving challenging tasks on the job," "obtaining the opportunity for



advancement," "receiving a feeling of achievement" from work, and "receiving good pay."

Overall, it seems that "opportunity for advancement" and "prestige" have the greatest amount of influence on reaching the other occupational goals, while "attaining job security," "attaining good relations with others on the job," "getting a feeling of independence on the job," and "obtaining the opportunity to benefit society through your work" have the least influence.

An inspection of the cells in the matrix columns reveals that "receiving a feeling of achievement from the job" seems to have the greatest degree of influenceability of all the goals, being particularly susceptible to influence from "obtaining the opportunity for advancement," "getting challenging tasks," "getting prestige on the job," and "obtaining the opportunity to benefit society through your work."

"Getting challenging tasks on the job" tends to be seen as being influenced to a lesser but still large extent, while "obtaining the opportunity to benefit society through your work" appears to be barely susceptible to influence from any of the other occupational goals.



DISCUSSION

This section is written with two main purposes in mind. First, it includes a comparison of findings of this study regarding importance ratings with those of previous research. Hypotheses 1 and 2 address this issue. Second, it attempts to put the results of this research into an occupational goal-structure framework by examining the perceived influence relationships among goals--something that appears to be totally lacking in the literature to date.

Importance Ratings

Hypothesis 1. Hypothesis 1, which predicted that "feeling of achievement" and "challenging tasks" would be considered most important by the sample as a whole, was only partially supported: "feeling of achievement" was rated highest, but not significantly different from "opportunity for advancement." Furthermore, though "challenging tasks" was highly ranked, it was still significantly below "feeling of achievement" and "opportunity for advancement." The fact that "feeling of achievement" was regarded most important by the sample as a whole is not really much of a surprise. Receiving a feeling of

achievement was consistently seen as being important in the previously reviewed literature and has been emphasized in the psychological literature for years (e.g., Maslow's (1943) esteem and self-actualization needs, Alderfer's (1969) growth needs, McGregor's (1960) Theory Y assumptions).

The high rating of "feeling of achievement" is also not surprising when considering its intrinsic nature. Saleh and Singh (1973) contended that intrinsic orientation increases with job level. It might be expected, then, that college students who are desiring and/or expecting jobs of a reasonably high level, want a feeling of achievement, and an opportunity to advance (possibly to contribute to, or give them, that feeling of achievement). They are looking for intrinsic rewards.

"Challenging tasks," another intrinsic goal, though significantly different from "feeling of achievement" and "opportunity for advancement," was still seen as important. The students don't want to be stagnant on the job, which is in line with McGregor's Theory Y assumption that people will extend themselves to assume genuinely demanding responsibilities (i.e., challenging tasks on the job).

Three of the top six rated goals were of an extrinsic nature, showing that intrinsic rewards are not all that counts. For example, "good relations with others" is increasingly being recognized as extremely important on the job.

The rating of "good pay" is difficult to interpret in light of previous conflicting results. In the Gottlieb (1975) study, which sampled a wide range of college students, respondents were less concerned with earnings, and concerned with more altruistic and intrinsic aspects of the job: they sought interesting work which was useful to society, and which would enhance individual growth. In those studies that dealt with business students or graduates who had just entered a job in an organization, good pay was generally seen as extremely important, on a par with "achievement" (or similarly, "self-satisfaction" in Fretz, 1972), "challenge," and others, depending on the study (Ondrack, 1973; Fretz, 1972).

Interpretation of "good pay" is also difficult because though it was rated significantly lower than "feeling of achievement" and "opportunity for advancement," it is not significantly different from "good relations," "challenging tasks," "job security," and "feeling of independence." But a mean rating of 7.19 on a scale from -9 to +9 is hard to classify as a low rating, or a rating of low importance.

A similar situation exists for the importance rating of "opportunity to benefit society." Though it has the lowest rating (5.65) of the ten occupational goals, it would be wrong to say that business students don't rate the opportunity to benefit society through their work as

important: first, its rating of 5.65 is not remarkably low, and furthermore, "opportunity to benefit society" was chosen by this researcher as one of only ten goals which had been mentioned frequently in the past literature. If more than ten occupational goals had been included, "opportunity to benefit society" may have fallen in the middle of the pack, instead of at the end. Furthermore, the possibility always exists that college students other than those majoring in business may have rated "opportunity to benefit society through your work" higher in importance than those in this sample (e.g., students with social science majors).

Hypothesis 2. Manhardt (1972), in his study, found significant sex differences regarding the perceived importance of opportunity for advancement. The present study found no such differences. This is surprising when it is considered that of the twenty-five job characteristics in his study, "advancement" displayed the largest sex difference (males higher). The "good pay" characteristic in his study ("provides the opportunity to earn a high income") only showed significant differences (males higher) in one of his subsamples, so the non-significant sex difference in the present study wasn't quite as surprising. It's apparent that women in college, particularly those with business orientations, have reached the point where a well-paying job, and one that provides an opportunity to



advance, means as much to them as it does to men--they want to be mobile, and not stagnate at one occupational level.

Also surprising, in light of the significant differences found in the Manhardt study and others (Centers & Bugental, 1966), is the lack of significant differences found in this study in "attaining good relations with others" (similar to Manhardt's "involves working with congenial associates"). Previously, it has been believed that women business majors, more than men of the same major, are concerned with a comfortable work environment and pleasant interpersonal relationships (Bartol, 1976).

The fact that men and women both rated it so highly might indicate that this goal hasn't lost importance in the work place for women business majors, but instead has gained importance for men--perhaps due to the influx of literature (and college-level courses) stressing the importance of good interpersonal skills in the workplace.

The fact that "performing a variety of duties" is significantly higher in importance for females than males does not lend itself to easy explanation.

A possible line of reasoning may revolve around Manhardt's principle components factor analysis performed on the correlation matrix of his twenty-five job characteristics. He found three distinct, interpretable factors, as mentioned previously. Women tended to give higher ratings to those characteristics in Factor II, which was

concerned with a comfortable work environment: work conditions, routine (i.e., job variety), leisure time, rules, and associates. Women's higher ratings of "variety" in the present study would then be accounted for, but the apparent contradiction regarding a non-significant difference in "attaining good relations with others" (discussed above) would not. The results regarding these two goals, if Manhardt's factors were to be used as an explanation, would be at odds with each other. Further, this study's results also are at odds with Manhardt's Factor I which supposedly related to long-range career objectives which were generally descriptive of a career in business, e.g., advancement, income, etc., and which were generally rated higher by the males in his study. In this study, significant sex differences weren't found in the importance of "advancement" and "pay." Because of these limitations, using Manhardt's three factor structure, particularly Factor II's comfortable work environment and pleasant interpersonal relationships, to explain the significant sex differences in "performing a variety of duties," is not feasible.⁶

Another possible explanation deals with the job levels that males and females have traditionally assumed. Previous research has shown that job variety is strongly related to satisfaction with work at lower occupational levels, but that it is generally unrelated to satisfaction with work at higher (administrative) levels (Sims &

Szilagyi, 1976). Traditionally in our society, males have been placed in most high level jobs, while females have been relegated to lower level jobs, and have had a difficult time breaking into higher level jobs. "Variety" may be seen as highly related to satisfaction for lower occupational levels, where most working women still find themselves, because workers at this level generally perceive lesser environmental complexity (i.e., job variety) and seem to seek greater stimulation from the work environment. Males, on the other hand, have traditionally occupied higher level jobs, which probably contain a good deal more environmental complexity already, and are not generally seen as needing much more of it. The women in the present study, who, by the nature of their college major (predominantly business) may be very much interested in higher job levels than society has previously allowed, may indeed be reacting to women's traditionally low-complexity jobs by now seeking a good deal of variety in their work, found in the high-level jobs. The males in this sample, on the other hand, having been socialized into believing that men occupy all high level positions (which contain variety), and having no reason to believe that they won't eventually be one of these men, seem to take job variety for granted and don't consider it particularly important, when compared to the other occupational goals. (In fact, males rated "job variety" lowest in importance of the ten goals.)

A possible argument could be raised, however, which would concern itself with why significant sex differences weren't found in some of the other goals also traditionally denied females because of lack of placement in higher-level jobs (e.g., opportunity for advancement, prestige, good pay, etc.). A rebuttal might be that these other goals are not really taken for granted as much as "variety" and thus, were ranked highly by both males and females.

Influence Ratings

One purpose of this study, in addition to measuring the perceived importance of the occupational goals to the subjects, was to obtain information pertaining to the relationships that the subjects perceived between occupational goals. There may be a number of factors which determine importance which may reflect very little about the relationships between the goals, i.e., how goals influence each other in a dynamic sense. It appears that "obtaining the opportunity for advancement" and "getting prestige on the job" are the keys which open the door for the other occupational goals. It is interesting that while both "opportunity for advancement" and "getting prestige" are seen as having a great deal of influence on attaining other occupational goals, they were not seen as that close to each other in terms of importance, with "advancement" ranking second and "prestige" eighth. Though the two concepts are

related in the sense that advancing in an organization would seem to bring more prestige with it, the respondents may have felt that it wasn't as socially desirable to say that prestige is all that important to them, while there are really no socially undesirable aspects of wanting to advance in an organization.

The respondents feel that advancing to higher level jobs will, besides bringing more prestige, mean that these jobs will be more challenging and better paying--not unrealistic expectations. Further, the idea of having obtained the opportunity to advance elicits a great feeling of achievement or accomplishment--"a job well done," if you will. To a lesser extent, the higher level jobs advanced to are seen as having more security--i.e., "once I've advanced this far in the organization, I'm not quite as expendable." Also, the advancement to higher levels is seen as leading to an increased feeling of independence. The respondents feel that this increased autonomy will mean that they will be making more of the decisions affecting them, i.e., will have more control over their situation at work.

"Prestige" tends to influence the same goals as "advancement" (with the exception of "independence"). This is probably because of its obvious relationship to higher level jobs (i.e., the higher level jobs tend to be accorded prestige). The smaller amount of influence of "prestige" when compared to "advancement" may occur because

people see the opportunity to advance to higher level jobs as having a direct influence on these goals, but "prestige," because it is in a sense only "attached" to or a byproduct of higher level jobs, may only exert an indirect influence.

"Receiving good pay" does not have a great deal of overall influence relative to the other goals, though it does have an influence on the attainment of the two goals that it might be expected to affect: getting prestige and receiving a feeling of achievement. Pay is still obviously regarded as a major criterion of success, whether success is measured by extrinsic (prestige) or intrinsic (feeling of achievement) means.

Although there is a relatively high correlation in importance between "opportunity for advancement" and "good pay" ($r = .58$) (See Appendix C), Table 1 indicates that there is basically only a one-way influence--having obtained the opportunity for advancement influences receiving good pay, not the other way around to any great extent.

Figure 2 shows a representation of some possible linkages between occupational goals, based upon the most prominent relationships found in the cross-support matrix (Table 1). Only influence ratings greater than a certain level, with 4.00 being the arbitrary choice, are included in this model.

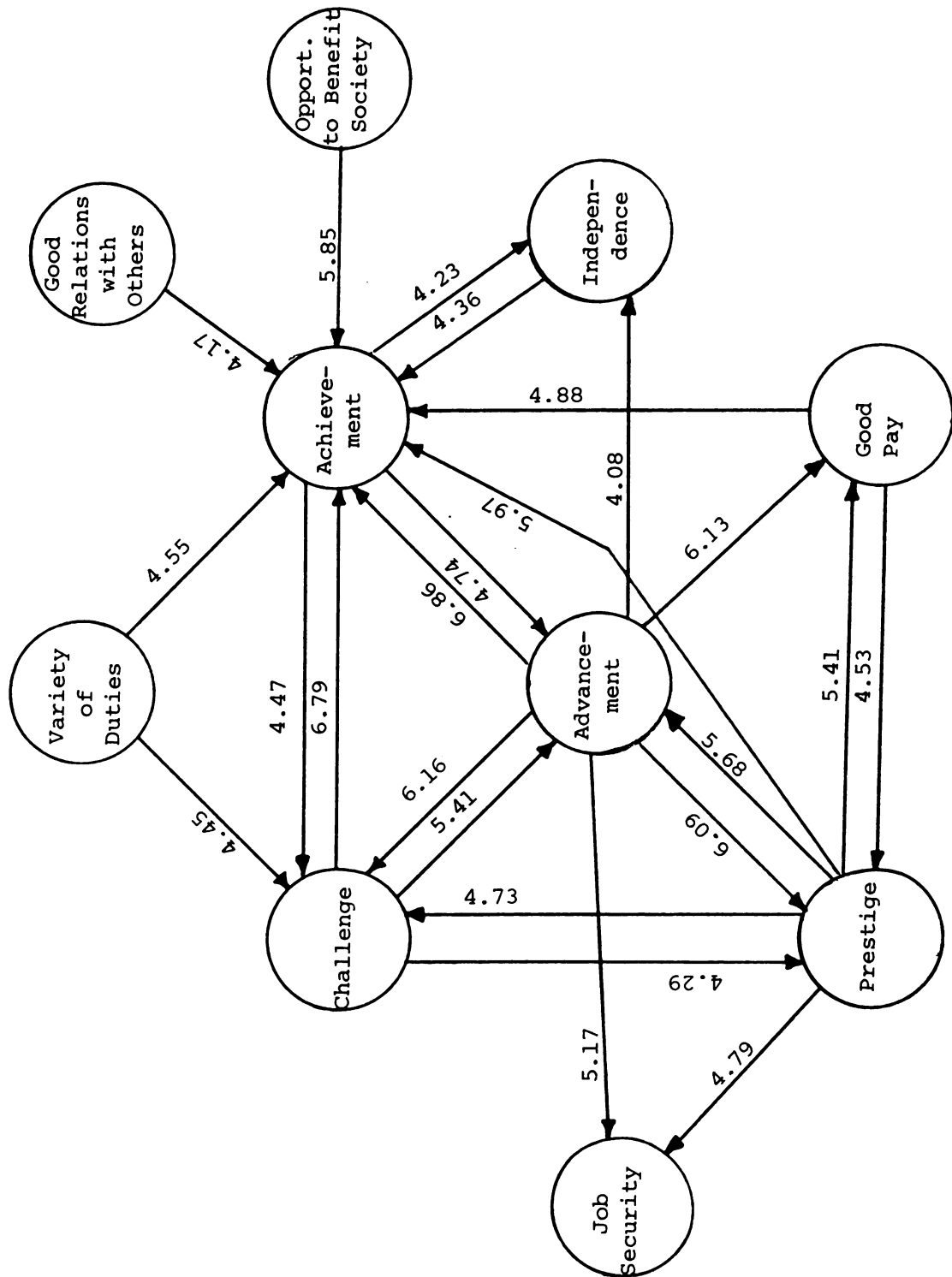


Figure 2. Goal Influence Chart

This type of display may facilitate the analysis of the causal structure of occupational goals and could conceivably lead to a path analysis among the goals. This may, in addition, help to generate numerous influence possibilities from the data. For example, one such potentiality would be the following: though having the "opportunity for advancement" can have a direct effect on reaching many of the other goals as indicated in Figure 2, it also may serve as the first in a causal chain of occupational goals, i.e., have an indirect effect on reaching goals. Using the example of "receiving good pay," having the opportunity for advancement may directly cause a feeling of achievement in a person, or directly increase their prestige--but it may also directly lead to an increase in a person's pay, and the increased pay may then directly (at a moderate level) cause a person's prestige to increase and directly (again at a moderate level) give that person a feeling of achievement. The opportunity for advancement, then, in this case, indirectly influenced prestige and a feeling of achievement through "good pay," which served as a moderator.

Figure 2 also permits the examination of other influence possibilities. For example, though the above mentioned advancement-good pay-prestige chain is a possibility, so too is an advancement-prestige-good pay chain. Advancement, instead of influencing prestige through good pay, might instead influence good pay through prestige. In

other words, when someone advances through an organization, they may gain prestige, and the acquired prestige would have an influence on receiving good pay. Thus, there is an obvious mutual influence pattern, not only between good pay and prestige, but, as can be shown in Figure 2, between other goals as well.⁷

More (and less) complex possibilities are also ascertainable from Figure 2. For example, having the opportunity to advance may have a strong, direct influence on receiving a feeling of achievement, or, it may have a strong direct effect on a person getting more challenging tasks on the job, which would have a moderate effect on increasing the person's prestige. This increased prestige for the person might then have a moderate influence on getting higher pay (to complement the higher prestige that this person is being accorded). And, of course, the good pay that the person is now receiving would have an influence (albeit, only a moderate one) on receiving a feeling of achievement. True, the effect that one goal may have on another through moderators, a diluted effect if you will, will probably never be as strong as its direct effect (as in this example), but the point that Figure 2 makes is that these indirect influences, as well as the strong direct influences, can, and do, exist.

"Importance" vs. "Influence"

The results in this study suggest that the subjects are distinguishing between importance and influence ratings. "Getting prestige on the job" provides an example of this. Overall, "getting prestige" rated eighth out of ten goals in importance. Perhaps this is because it may not be particularly socially desirable, as mentioned previously, to display the desire for prestige or status, even though they may indeed feel the desire. It is particularly noteworthy that the correlation between the importance ratings of "getting prestige" and "receiving a feeling of achievement" was lower than any other correlation in the entire matrix: $r = -.02$ (See Appendix C).

On the other hand, as can be shown in Table 1, "getting prestige" had the second highest overall influence rating (4.24) of all the occupational goals. Though it didn't exert any extraordinarily high degrees of influence on individual goals, it still exerted a fairly strong influence on "receiving a feeling of achievement" (5.97), which it was not correlated with in terms of importance.

It is apparent here that the respondents are separating the concepts of "importance" and "influence." Though the respondents may have rated the importance of "getting prestige" as relatively low based on social desirability factors, they were still able to say, apparently without contradiction, that "getting prestige,"

which is something that is bestowed by others (extrinsic in nature), has a great deal of influence on their other goals. Thus the students might rationalize that though prestige isn't as important to them as most of the other goals, if it was "handed" to them, it would still have a large influence on their attaining other goals, i.e., good pay, a feeling of achievement, etc. Even if the relatively low importance rating of "getting prestige" was not based on social desirability factors, i.e., if the respondents really don't feel that getting prestige is as important to them as the other goals, it is still feasible for them to believe that, if they were provided with prestige, it might have an influence on their attainment of other occupational goals.

Influenceability Ratings

"Receiving a feeling of achievement from the job" showed the greatest degree of influenceability of all the occupational goals. This makes sense considering that if one reaches a goal they may have set in just about any endeavor, then a feeling of having achieved something would be present. Though the students felt that virtually all of the goals led to a feeling of achievement, they felt particularly strongly that the opportunity for advancement and doing challenging work would produce that sense of accomplishment. Further, along the lines of reasoning used with the influence ratings, it appears by looking at Figure 2

that besides being directly influenced to a great extent by the opportunity for advancement, "a feeling of achievement" may also be indirectly influenced by "opportunity for advancement" through a moderator, "challenging tasks," i.e., "advancement" has a strong influence on "getting challenging tasks" which in turn has a great influence on "receiving a feeling of achievement."

Though "opportunity for advancement," "getting prestige," and "getting challenging tasks" all have significantly less influenceability than "receiving a feeling of achievement," they are not significantly different from each other. Figure 2, which looks at specific rather than general relationships, might be more appropriate to consider at this point. It shows that "getting challenging tasks" is influenced (above a 4.00 level) by four other occupational goals, more than each of the others, with the exception of "achievement." "Having the opportunity to advance" has the highest degree of influence on "getting challenging tasks" which lends support to the previously-mentioned assumption that the students feel that higher level jobs in organizations will contain more challenging tasks.

While "obtaining good relations with others," "opportunity to benefit society" and "performing a variety of duties" each has some influence, particularly on a "feeling of achievement," they don't appear to be susceptible to influence. Good relations and the opportunity to

benefit society are goals that even "having the opportunity to advance" can't provide access to. In other words, advancing to higher levels in an organization won't assure good relations or the chance to make a societal contribution. Getting along with others and contributing to society, being two "human relations" goals, were perhaps the only two occupational goals of the ten that one doesn't necessarily have more of as he/she advances to higher level jobs. In other words, human relations aspects are important in all levels of jobs, thus "good relations" and the "opportunity to benefit society" were not particularly influenced by the other occupational goals, in which high levels of the concept (e.g., good pay, prestige, independence, etc.) typically are associated with higher level jobs.

The lack of influenceability of a "variety of duties," especially by the "opportunity for advancement," is surprising in light of the widely held belief of an association of advancement to higher level jobs with more variety in those jobs. This confusing result is consistent, however, with the previously mentioned lack of correlation between "opportunity for advancement" and "variety of duties" in this study ($r = .095$). Perhaps the students feel that it is not necessarily a variety of tasks that they seek in their jobs, but rather that whatever tasks they do have be challenging ones. This would also be consistent with the importance ratings of these two goals (See Table 1).

Sex Differences in Influence and
Influenceability Ratings

There does not seem to exist a solid, empirically based explanation for females giving higher influence and influenceability ratings than males. Some avenues for speculation do exist, however.

First, there is a possibility that the females in the study felt that, compared to men, women have been denied many of the occupational goals (e.g. obtaining the opportunity for advancement, good pay, job security, etc.). So they may have been, consciously or unconsciously, trying to counteract this relative deprivation of occupational goals by rating their influence and influenceability higher than males.

A major drawback with this line of reasoning, however, is that if this "counteracting" was present for the influence and influenceability ratings, there's no reason why it shouldn't have been present for the importance ratings as well. It wasn't, as shown by the lack of significant overall sex differences.

A second, and perhaps more applicable, explanation considers possible differences in cognitive structure that may have caused the sex differences in influence and influenceability ratings. People tend to order their cognitions in a variety of cognitive structures, each with its separate domain and subdomains (Phillips & Thompson, 1977). If two or more elements are in the same cognitive structure

(i.e., the same domain), there is a greater tendency to attribute causal connections between them than if they were in different cognitive structures.

Traditionally, males have been socialized into thinking in terms of making choices between jobs (e.g., from "What are you going to be when you grow up?" as a child to "So, what line of business are you going into?" for college males enrolled in business courses). Thus, under the domain "career," men have been trained to make choices among careers--Career A, Career B, Career C, etc. Society has tended to present fewer options for females, however. Females typically have not been offered a choice between Career A, Career B, and Career C, but instead have chosen between "a career" and "no career." So for women, the subdomains of "career" are typically "career-yes" and "career-no."

Men, when considering what occupation they want after college might have a variety of occupations to consider, and each occupation will probably offer different degrees of the occupational goals. For example, Occupation A might offer great opportunities for advancement, good pay, excellent opportunities for attaining good relations with others, and provide opportunities for getting a feeling of independence on the job, but not really provide much opportunity for reaching the other goals. Occupation B might offer great opportunities for attaining job security, prestige, and getting challenging tasks, yet not provide the



chance to attain the goals stressed in Occupation A. Occupation C might provide a great chance to benefit society, perform a variety of duties, and get a feeling of achievement, but provide little opportunity for the others.

Males will consider each of these occupational categories to be separate domains, each category containing some, but generally not all, of the occupational goals. They might then choose which occupational goals are most important to them, i.e., choose which domain they would place themselves into. (They would match themselves as closely as possible to one of the domains, seeing where they would fit the best.) Because relatively few occupations typically contain high degrees of all of the occupational goals, the opportunities for causal connections are more limited for males than for females.

Females, instead of having Occupations A, B, and C, etc. and their associated goals as subdomains of the "Occupation" domain, typically have been socialized into considering "full-time," "part-time," and "not working" as the subdomains of "Occupation." It is the "full-time" subdomain of "Occupation" that would contain all of the occupational goals for females. Thus, because they are all included in the same subdomain (unlike the males), the opportunities for causal connections (i.e., influence and influenceability ratings) are greater.

Even though the women in this study were predominantly business majors who would probably be closer than



most females to the stage where they would make choices between careers as opposed to a choice between having and not having a career, it appears that the prior socialization effects were still sufficiently strong to cause sex differences.

Research to test this hypothesis may be warranted.



USE OF THE CROSS-SUPPORT METHODOLOGY FOR INDIVIDUAL ANALYSIS

The possibility exists that the measuring instrument used in this research, besides being used for aggregate analysis, might also be utilized at individual levels of analysis, i.e., possibly serve as a goal clarification tool. Other instruments have attempted to measure importance ratings of occupational goals (e.g., Rosenberg, 1957), but none of them has attempted to examine career paths in organizations in terms of how the occupational goals might influence each other. With the importance ratings of the occupational goals considered along with influence and influenceability ratings, it is conceivable that tentative career plans might be charted for individuals.

The first step in such an endeavor would be to determine which occupational goals the individual sees as most important. A person's desire for reaching these particular goals (measured by the importance ratings of the goals) should be fitted as closely as possible to the perceived opportunities to reach these goals in various occupations. This is something that would be particularly important prior to entry into an organization--e.g., career



counseling at the high school and college levels. For example, if a person feels that getting prestige is extremely important to them, they would most likely want to avoid a career as a garbage collector (sanitation engineer), even though this job may offer challenge, good pay, etc. A college student who feels that performing a variety of duties and attaining good relations with others are most important might think twice before accepting a job which almost exclusively requires feeding data to a computer, despite the great opportunities for advancement that may exist.

Goal clarification can be aided by the determination of the influence patterns for an individual's occupational goals. There are at least two ways in which the influence ratings might be used. First, an entire matrix of goals for an individual, similar to the one in Table 1, including importance, influence, and influenceability ratings can be filled in based on the Occupational Goals Questionnaire (Appendix A). Secondly, a Goal Influence Chart (Figure 2) at an individual level can be derived from the Cross-Support Matrix. Either way, by knowing the perceived strength as well as the direction of influence, along with knowing the importance of these goals, this person might be helped to see where he/she stands now in relation to those occupational goals, where he/she wants to be in the future and, perhaps with some guidance, the best way to get there.



It is particularly important that organizational realities be made as explicit as possible to individuals, i.e., they should be given a realistic assessment of the possibilities of reaching their occupational goals and of their perceptions of "how to get there" (as shown by their goal-influence chart). This might be done by comparing their chart with a chart representing "organizational realities"--realities regarding possible and probable goal-influence paths in the organization. Information of this nature might be obtained from either perceptions of individuals within the organization about influence paths, and/or an influence path analysis of careers of people successful in the organization. This information might be provided in a formal setting (e.g., in a job interview at the pre-entry stage, or in a career-path planning program after organizational entry) or an informal setting (e.g., talking to "veterans" of the organization, etc.).

It is perhaps unrealistic to think that all of these students who, by way of questionnaire, indicated what they are looking for in their work careers, will find what they want at first. It's not probable that they will get this "perfect" job initially. Furthermore, it may be a misconception to believe that, once in an organization, the perceived importance of goals and perceptions of work life (i.e., how one goal affects others in an organization) won't change from what one perceived while still a business student in college. However, this researcher believes that



the use of this methodology can still be fruitful, not only for college students to, perhaps, aid them in choosing their first "real" job through clarification of their occupational goals, but also for persons already employed in the "real world," to determine whether their occupational goal "structure" meshes with the opportunities for goal realization on their present job.

IMPLICATIONS FOR EMPLOYERS

Potential employers of college graduates, particularly of those graduates with a business background, would do well to keep the results of this study in mind when considering the recruiting efforts, orientation and socialization processes, and reward and career-planning systems of their organizations. Recruitment efforts might stress opportunities for personal achievement and advancement rather than assuming that a well-paying job is first in the minds of college graduates.

Organizations might institute programs to make their managers aware of the values and occupational goals of students so that the transition from student to employee is an easier one to make. Training programs in this area might make the new employees' organizational orientation and socialization processes less costly and more beneficial for both the new employee and the organization. Instead of just "being aware" of the new employees' occupational values but still having them adjust to "the way things are around here," perhaps a mutual adjustment can take place--the organization can "adjust" to the new employees' goals as well--by providing jobs that allow them, from the start,

opportunities to achieve personal goals. This may even entail the altering of certain jobs and work settings in such a manner that these goals can be realized.

Finally, organizations might utilize both the overall Goal Influence Chart (Figure 2), which takes into account the perceptions of business-oriented students, and the individual influence charts for employees. Knowing how these goals influence each other for students concentrating in business might aid in the determination of improved reward, evaluation, and other systems for the organization. Furthermore, knowing the perceived importance ratings and influence patterns for individual employees would certainly facilitate mapping out a realistic, albeit tentative, career path plan for the employee.

Perhaps the most important benefit of all would be the employees' awareness that the organization cares enough to consider all of these factors. This awareness would help to foster their trust in the organization--something that is at a low level in quite a few organizations at this point in time.



APPENDICES



APPENDIX A

OCCUPATIONAL GOALS QUESTIONNAIRE

APPENDIX A
OCCUPATIONAL GOALS QUESTIONNAIRE

SECTION I

Importance of Goals

The ten values listed below could be considered to be occupational values or work goals. These are attributes or qualities that we consider to be desirable in our work careers, i.e., they are career goals. Indicate how important you feel each of these goals is for you personally. Use the 10-point rating scale listed next to each goal for recording your personal judgment. For example, if a particular goal is "very important" to you, circle the number "9" next to the goal. Conversely, if you feel a particular goal is "very unimportant" to you, circle the number "0."

	Very Unimportant to you personally	Very important to you personally
1. receiving a feeling of achievement from the job	0 1 2 3 4 5 6 7 8 9	
2. getting challenging tasks on the job	0 1 2 3 4 5 6 7 8 9	
3. receiving good pay	0 1 2 3 4 5 6 7 8 9	
4. attaining good relations with others on the job	0 1 2 3 4 5 6 7 8 9	
5. getting a feeling of independence on the job	0 1 2 3 4 5 6 7 8 9	
6. attaining job security	0 1 2 3 4 5 6 7 8 9	
7. performing a variety of duties	0 1 2 3 4 5 6 7 8 9	
8. obtaining the opportunity for advancement	0 1 2 3 4 5 6 7 8 9	
9. obtaining the opportunity to benefit society through your work	0 1 2 3 4 5 6 7 8 9	
10. getting prestige on the job	0 1 2 3 4 5 6 7 8 9	



Are there any other occupational values that you feel are particularly important to your career? If yes, describe.



Influence of Goals

Instructions

Listed on the next few pages are the career goals that you dealt with on the previous page. In this section of the booklet, I am interested in your perceptions of the degree to which these career goals influence each other. In other words, how does the achievement of one career goal contribute to the achievement of another career goal?

To aid you in determining this, I ask that you use the following scale:

strongly interferes with	has no effect	strongly facilitates
-9 -8 -7 -6 -5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5 +6 +7 +8 +9		

Examples:

- 1) Suppose you have attained job security, and you feel that it brings you a bit closer to attaining good relations with others on the job. Then you might put down the following:

having job security 3 → attaining good relations with others on the job

- 2) Suppose you have attained good relations with others on the job, but you feel that it has no effect on attaining job security. Then you might put down the following:

having good relations with others on the job 0 → attaining job security

- 3) Suppose you have a variety of duties on the job, and you feel that it strongly interferes with getting prestige on the job. Then you might put down the following:

having a variety of duties -9 → getting prestige on the job

having a feeling of achievement —→ getting challenging tasks

—→ receiving good pay

—→ attaining good relations with others on the job

—→ getting a feeling of independence

—→ attaining job security

—→ getting a variety of duties

—→ obtaining the opportunity for advancement

—→ obtaining the opportunity to benefit society through your work

—→ getting prestige on the job

having challenging tasks on the job

—→ receiving a feeling of achievement

—→ receiving good pay

—→ attaining good relations with others on the job

—→ getting a feeling of independence

—→ attaining job security

—→ getting a variety of duties

—→ obtaining the opportunity for advancement

—→ obtaining the opportunity to benefit society through your work

—→ getting prestige on the job

having good pay

- receiving a feeling of achievement
- getting challenging tasks
- attaining good relations with others on the job
- getting a feeling of independence
- attaining job security
- getting a variety of duties
- obtaining the opportunity for advancement
- obtaining the opportunity to benefit society through your work
- getting prestige on the job

having good relations with others on the job

- receiving a feeling of achievement
- getting challenging tasks
- receiving good pay
- getting a feeling of independence
- attaining job security
- getting a variety of duties
- obtaining the opportunity for advancement
- obtaining the opportunity to benefit society through your work
- getting prestige on the job

having a feeling of
independence

- receiving a feeling of achievement
- getting challenging tasks
- receiving good pay
- attaining good relations with others on the job
- attaining job security
- getting a variety of duties
- obtaining the opportunity for advancement
- obtaining the opportunity to benefit society through your work
- getting prestige on the job

having job security

- receiving a feeling of achievement
- getting challenging tasks
- receiving good pay
- attaining good relations with others on the job
- getting a feeling of independence
- getting a variety of duties
- obtaining the opportunity for advancement
- obtaining the opportunity to benefit society through your work
- getting prestige on the job



having a variety of duties

- receiving a feeling of achievement
- getting challenging tasks
- receiving good pay
- attaining good relations with others on the job
- getting a feeling of independence
- attaining job security
- obtaining the opportunity for advancement
- obtaining the opportunity to benefit society through your work
- getting prestige on the job

having the opportunity for advancement

- receiving a feeling of achievement
- getting challenging tasks
- receiving good pay
- attaining good relations with others on the job
- getting a feeling of independence
- attaining job security
- getting a variety of duties
- obtaining the opportunity to benefit society through your work
- getting prestige on the job



having the opportunity to
benefit society through
your work

- receiving a feeling of achievement
- getting challenging tasks
- receiving good pay
- attaining good relations with others on the job
- getting a feeling of independence
- attaining job security
- getting a variety of duties
- obtaining the opportunity for advancement
- getting prestige on the job

having prestige on the job

- receiving a feeling of achievement
- getting challenging tasks
- receiving good pay
- attaining good relations with others on the job
- getting a feeling of independence
- attaining job security
- getting a variety of duties
- obtaining the opportunity for advancement
- obtaining the opportunity to benefit society through your work

(OPTIONAL)

MAJOR _____

AGE _____

SEX _____

RACE:

_____ Caucasian

_____ Black

_____ Asian

_____ Mexican-American or American Indian

_____ Other

RELIGIOUS BACKGROUND:

_____ Protestant

_____ Catholic

_____ Jewish

_____ Other (specify: _____)

_____ None

RELIGIOUS PREFERENCE:

_____ Protestant

_____ Catholic

_____ Jewish

_____ Other (specify: _____)

_____ None

AVERAGE ATTENDANCE AT
RELIGIOUS SERVICES:

_____ Never

_____ Less than once/year

_____ About once/year

_____ About once/3 months

_____ About once/month

_____ About twice/month

_____ About once/week

_____ Twice/week or more

APPROXIMATE YEARLY FAMILY INCOME:

_____	Less than \$10,000
_____	\$10,000 - \$14,999
_____	\$15,000 - \$19,999
_____	\$20,000 - \$24,999
_____	Over \$25,000

PARENT'S EDUCATION:

FATHER	MOTHER	
_____	_____	Less than 4 years of high school
_____	_____	High school graduate
_____	_____	Some college
_____	_____	College graduate
_____	_____	Post-graduate

APPENDIX B

CROSS-SUPPORT ANALYSES

APPENDIX B

CROSS-SUPPORT ANALYSES

The following steps are incorporated in the cross-support analysis (Cetron and Connor, 1972, pp. 6-11). The specific applications to the present study are in parentheses.

Step 1. The major (occupational) goals are listed. The goals are then weighted (by the subjects on a 10-point scale) based on their importance.

Step 2. The goals are transcribed on the left-hand margin of the matrix (See Table 1).

Step 3. The goals and their associated weights are also transcribed across the top of the matrix. This completes the basic structure of the goal-to-goal cross-support matrix.

Step 4. Having developed the goal-to-goal cross-support matrix, the next step in the methodology is to determine the degree to which goals influence each other, that is, how does the achievement of one goal contribute to the achievement of all other goals. This is done by considering the effect one goal has on each of the others, separately, and then summing these separate contributions



to obtain a total. The "contribution" that one goal may have on another can be either beneficial (positive) or detrimental (negative) (See Figures 1 and 2). In looking at Figure 1, we have, mathematically, the value (G) for each of n goals (g), which can be given by:

$$G_i = \sum_{j=1}^n a_{ij} \quad i = j$$

where the a_{ij} are the assigned contributions of g_i to g_j (+9 through 0 through -9). This means that for each goal (g_i) there is an associated number (G_i) which indicates the degree to which that goal affects the others. The assigned contributions are then placed in the upper-half of the bisected matrix cells. The assigned contribution of g_i to g_j is then multiplied for the weighted ratings by the weight of g_j in order to obtain the weighted contribution which g_i has on g_j in that particular intersecting matrix cell. (This multiplicative procedure was not carried out on the unweighted ratings.) The resulting product (contributing weight) is then inserted in the lower half of the matrix cell. It is, of course, essential that the procedure be completed in precisely the same manner for obtaining each goal-to-goal contributing weight in the cross-support matrix.

Step 5. When the lower part of all cells is complete, sum horizontally (and/or vertically, depending on

whether the influence ratings of the goals or the influenceability ratings of the goals are desired) and place the total in the column (or row) headed Total Cross-Support.

Based on the above methodology, four primary objectives were to be obtained from the cross-support analysis in this study: first, the mean influence rating for each goal (obtained by horizontally summing influence ratings across goals for each subject, obtaining the mean of those ratings, then obtaining the mean of the means across all subjects); second, the same procedure except by vertically summing the influenceability ratings across goals for each subject; third, the weighted influence ratings (obtained by multiplying the influence ratings in each cell for each subject by the importance rating for that goal, summing horizontally across goals, and obtaining the mean of sums across subjects); and fourth, the same procedure except by vertically summing across goals in order to obtain weighted influenceability ratings. Thus, we were presented with an unweighted and weighted "influence" rating, as well as an unweighted and weighted "influenceability" rating for each occupational goal.



APPENDIX C

INTERCORRELATION MATRIX FOR IMPORTANCE RATINGS OF OCCUPATIONAL GOALS



APPENDIX C
INTERCORRELATION MATRIX FOR IMPORTANCE RATINGS OF OCCUPATIONAL GOALS

	Achieve- ment	Chal- lenge	Good Pay	Good re- -lations w/others	Indepen- dence	Job se- curity	Variety of Duties	Oppor. for Advance.	Oppor. to Ben. Society tidge
Achievement									
Challenge	.601								
Good Pay	.119	.213							
Good Relations w/Others	.165	.204	.215						
Independence	.158	.295	.196	.111					
Job Security	.116	.104	.430	.351	.413				
Variety of Duties	.232	.309	.097	.106	.208	.134			
Opportunity for Advancement	.046	.200	.588	.174	.270	.294	.095		
Opportunity to Benefit Society	.126	.239	.093	.315	.227	.318	.085	.184	
Prestige	-.023	.090	.548	.176	.049	.296	.171	.425	.154



FOOTNOTES

FOOTNOTES

¹The terms "occupational values" and "work values," among others, have been used interchangeably in the literature. The author prefers to use the term "occupational goals" to refer to the same concept. In the review of the literature, however, so as to not misrepresent previous research, the original terminology is retained.

²Vocational maturity is a person's point on a continuum of attained vocational development. Advanced stages are characterized by increased realism, stability and wisdom of preferences based on either chronological age or the behavior of others dealing with similar developmental tasks.

³This list of 10 occupational goals was compiled from several similar lists used in different studies. These ten goals reflected those most frequently mentioned in the other lists.

⁴An influence rating of a goal (say, Goal A) should be interpreted as: "The influence that the attainment of Goal A may have on the perceived chance of attaining another (say, Goal B)." In other words, "I've attained Goal A. How much will that influence my reaching Goal B?"

⁵An influenceability rating of a goal (say, Goal A) should be interpreted as: "The susceptibility to influence that Goal A has from another goal (say, Goal B)." In other words, "I've attained Goal B. How much will that influence my reaching Goal A (i.e., How influenceable is Goal A)?"

⁶It is interesting to note, however, that neither the three highest ranked job characteristics in Manhardt's study--accomplishment (similar to "achievement" in the present study), intellectually stimulating (similar to "challenge"), and "continued development of knowledge and skills" (an "achievement-challenge" combination)--nor their similar correlates in the present study showed significant sex differences in their importance ratings.

⁷There is at least one mutual influence for six of the ten occupational goals, using a 4.00 rating as the minimum. "Variety of duties," "good relations with others," and "opportunity to benefit society" aren't influenced by any goals to at least a 4.00 level, while "job security" doesn't exert any influence.



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