

RELATIONSHIPS BETWEEN INTERPERSONAL NEEDS
AND PREFERENCE FOR A FUNCTIONAL AREA
OF MANAGEMENT AMONG MBA STUDENTS

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ABSTRACT

This study examines a sample of first-semester MBA students to determine the relationship between their interpersonal needs and their preferences for a functional area of management. The students were categorized according to their preference for one of the following eight functional areas: accounting, systems analysis, finance, small business management, engineering, marketing, manufacturing management, and personnel management. Interpersonal needs were measured by the Fundamental Interpersonal Relations Orientation (FIRO-B) instrument developed by W. C. Schutz. Significant differences in interpersonal needs were found among students preferring different functional specialties.

Implications of the results are discussed in terms of occupational choice processes.

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INTRODUCTION

This study examines differences in interpersonal needs of first-semester MBA students who prefer different functional areas of management. Even though selection of a functional specialty is only one of many sequential preferences an individual is likely to express over time in gravitating toward a business career, the findings were considered relevant to occupational choice and career development processes.

Roe (1956) and Bordin, Nachmann, and Segal (1963) have theorized the central role that need gratification plays in occupational choice. They also suggest, in the Freudian tradition, that a need orientation is developed through childhood experiences and that this orientation reflects an element of constancy in the individual. Roe feels that parent-child relations result in a major orientation either toward persons or away from persons and that this basic predisposition influences a whole series of choices over time with regard to interest development, occupation, and career development. Bordin and his associates have developed a model which attempts to describe occupations in terms of their relation to ten types of need-gratifying activities. According to their theory, the individual seeks that occupational role which will be rewarding in terms of his particular needs.

There are several other conceptualizations of the occupational choice process; however, since the two cited above are most appropriate for the purposes of this study the others will not be pursued. Commenting on the work by Roe and Bordin, Super and Bohn (1970, p. 100) note:

It is one thing to hypothesize relationships between needs and occupations according to a logical schema and explanation. It is something else to obtain evidence in support of these basic hypotheses. While some formulations about needs and personality make good sense and have a certain amount of appeal, in general the data have not lived up to the expectations. No generalizations can be made; however, there is evidence for some relationships....

With regard to interpersonal needs and occupational preferences, several authors have documented associations in students between certain personality characteristics and choice of specialty within an academic or professional curriculum. Wasserman, Yufit, and Pollack (1969) found choice of specialty among medical students to be related to an intimacy-isolation personality dimension. Ivey and Peterson (1965) found differences on four scales of the Kuder Preference Record (Vocational) among communications students electing radio-TV, journalism, or public relations as specializations. Grace (1970) studied the Guilford-Zimmerman Temperament profiles and the Strong Vocational Interest Blank profiles of freshman business students in a junior college program and found that students preferring accounting were apt to be less friendly than students selecting data processing, management, and office practice. Management majors were higher on ascendance (the need to dominate other people) than all other groups of students. Several other differences in predicted directions were found, but they did not reach significant levels. In his analysis of senior undergraduate business majors, Harris (1971) found that accounting students rated significantly higher in control-related variables than did marketing students. Minor differences were found between accounting students and students in finance, management, and insurance. Morea (1969) found that artistic and data handling

interests, as measured by the Connolly Occupational Interests Questionnaire, were significantly related to the success of freshmen students in a British baccalaureate business program.

Thus several studies have documented personality differences among students in various specialties of a given curriculum. Among undergraduate business students, accounting majors in particular have been noted as being less friendly but have rated higher on control-related dimensions than students in other selected majors. Management majors were found to be higher on ascendance than students in certain other functional specialties.

The personality variables studied in this paper are the needs which find expression in interpersonal settings. The manager's job has been characterized as overwhelmingly interpersonal. Sayles (1964, p. 38) suggests that administration involves virtually constant contact with people, and managers whose personalities do not dispose them toward a high amount of interpersonal activity are likely to be frustrated and dissatisfied. Thus it seems appropriate to examine the interpersonal needs of potential managers (MBA students).

METHODOLOGY

Sample

The Fundamental Interpersonal Relations Orientation (FIRO-B) instrument developed by W. C. Schutz (1966) for measuring interpersonal needs was administered to 146 first-semester MBA students under supervised group conditions during the fall of 1971. The sample consisted of 11 females and 135 males, but they were not separated out.

Instrument

The FIRO questionnaire attempts to qualify three basic interpersonal needs--inclusion, control, and affection--which were hypothesized by Schutz in his three-dimensional theory of interpersonal behavior. The three areas are considered descriptive, in a general sense, of the fundamental behaviors that occur interpersonally. Inclusion refers to the need to be included in other people's activities, or to include others in one's own activities, and is analogous to the introversion-extraversion dimension of other authors or to sociability. It entails moving toward or away from people psychologically (Schutz, 1966, p. 21). Control refers to the need to give and receive structure, directions, influence, power, and authority and corresponds roughly to authoritarianism or the need for power used in other studies (Schutz, 1966, chapter 5). Affection is concerned with emotional closeness to others, friendship, liking or disliking, and refers to the need to act in a personal way toward others or to receive friendly behavior from others. It is analogous to the need for affiliation (Schutz, 1966, p. 58).

Each of the three need areas is scaled from a low of 0 to a high of 18. In addition, all three scales can be summed to obtain an estimate of the need for total interpersonal activity. This composite scale ranges from a low of 0 to a high of 54.

Schutz's framework is based on Freud; he suggests that individuals develop a rather stable or fundamental profile of interpersonal needs from early childhood experiences. In Schutz's opinion this fundamental orientation results in a certain relational continuity or constancy over time with the result that an adult repeats the interpersonal behavior patterns he learned as a child.

Procedure

The students were asked to select the one area in which they would most prefer to work upon graduation from among a list of ten functional areas of management. The ten areas included finance, systems analysis, accounting, marketing, small business management, personnel management, manufacturing supervision, engineering, sales, and labor relations. If the list did not include the student's first preference, write-ins were allowed. The choice of functional area was written on the FIRO instrument and no student was required to disclose his name. Thus the preferences and test scores were completely anonymous. The FIRO instruments were scored and the scores were then categorized into particular areas of management.

Hypotheses

Although the literature does not indicate precisely what the nature of the differences in interpersonal needs might be for the different functional specialties, it was expected that those preferring accounting and systems analysis would rate lower on total activity needed than those opting for other areas because the two specialties are primarily concerned with data analysis and are thus oriented toward infrequent contact with people. Thus Hypothesis 1 reads:

H₁: Students preferring accounting and systems analysis will rate lower on total interpersonal activity needed than students preferring the other specialties.

The three individual need areas were expected to show differences similar to total activity, with the exception of the control dimension. It was expected that the accounting and systems analysis categories would be higher on the control scale since much of the work in these fields is oriented toward control activity even though it is not explicitly interpersonal. Hypotheses 2, 3, and 4 follow:

H₂: Students preferring accounting and systems analysis will rate lower on inclusion than students preferring other specialties.

H₃: Students preferring accounting and systems analysis will rate lower on affection than students preferring other specialties.

H₄: Students preferring accounting and systems analysis will rate higher on control than students preferring other specialties.

DATA ANALYSIS AND RESULTS

One-factor analyses of variance were performed on the FIRO scores where the levels of the factor represented different functional areas. Functional areas which had less than ten subjects assigned to them were dropped from the analysis. The final calculations were performed on eight functional areas and 138 subjects. Two areas--sales and labor relations--were dropped since each was chosen by only four respondents. Four analyses of variance are explained below. The FIRO subscales were aggregated in four ways: (1) total activity levels--the sum of all subscales; (2) activity level in the inclusion area; (3) activity level in the control area; and (4) activity level in the affection area.

Total interpersonal activity versus functional area

Figure 1 shows means and standard deviations of total activity by functional area. Sample sizes (N) are also shown for each area. Table 1 presents the analysis of variance results for the data illustrated in Figure 1.

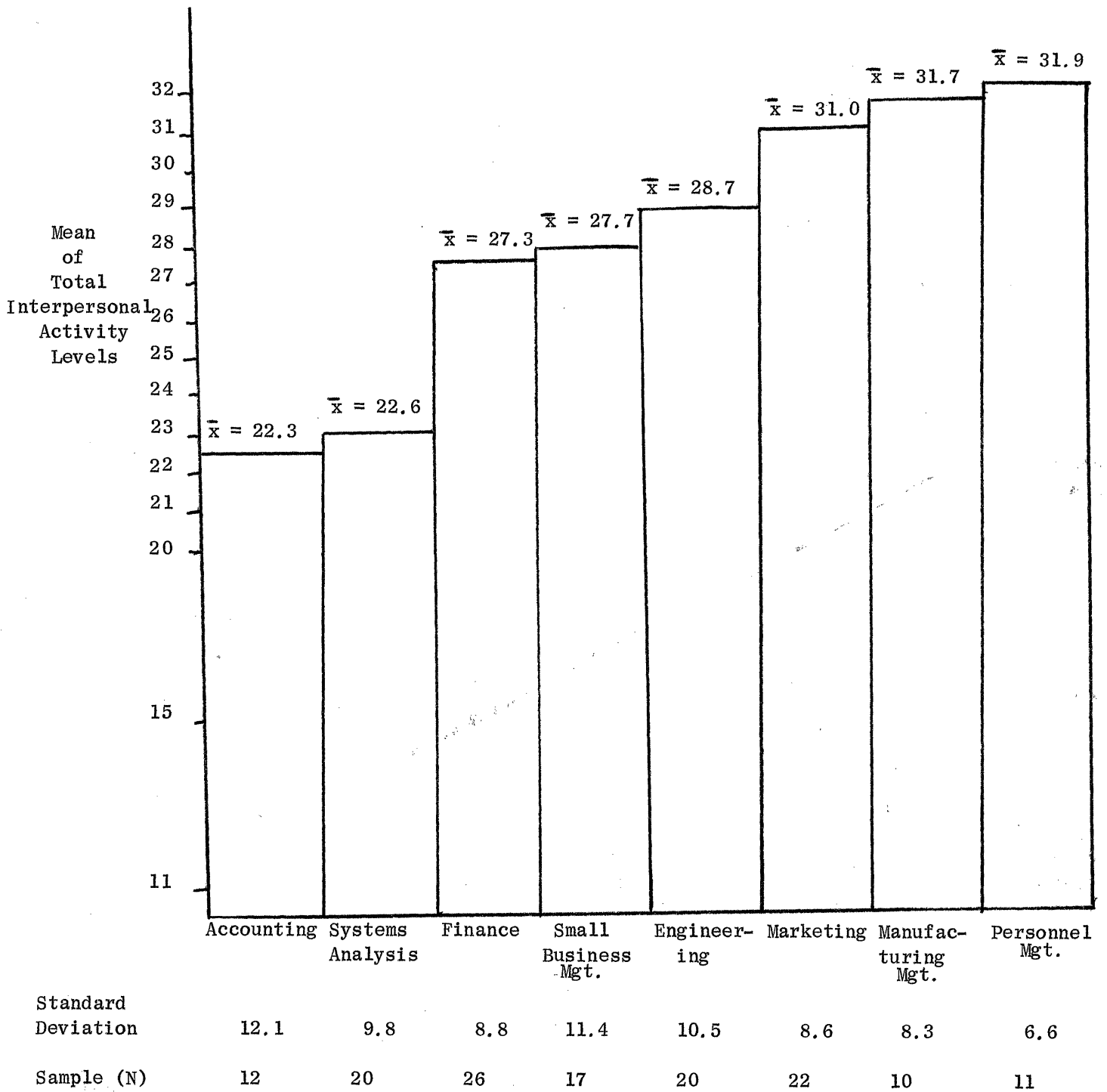


Figure 1. Means and standard deviations for total interpersonal activity level by functional area.

TABLE 1
Analysis of Variance for Total Interpersonal
Activity Level by Functional Area^a

Source	Sum of Squares	Degrees of Freedom	Mean Square
Between strata (areas)	1,490.0	7	212.86
Within strata (areas)	12,113.0	130	93.17
	<hr/> 13,603.0	<hr/> 137	

^aF statistic = 2.28, $p \leq .03$.

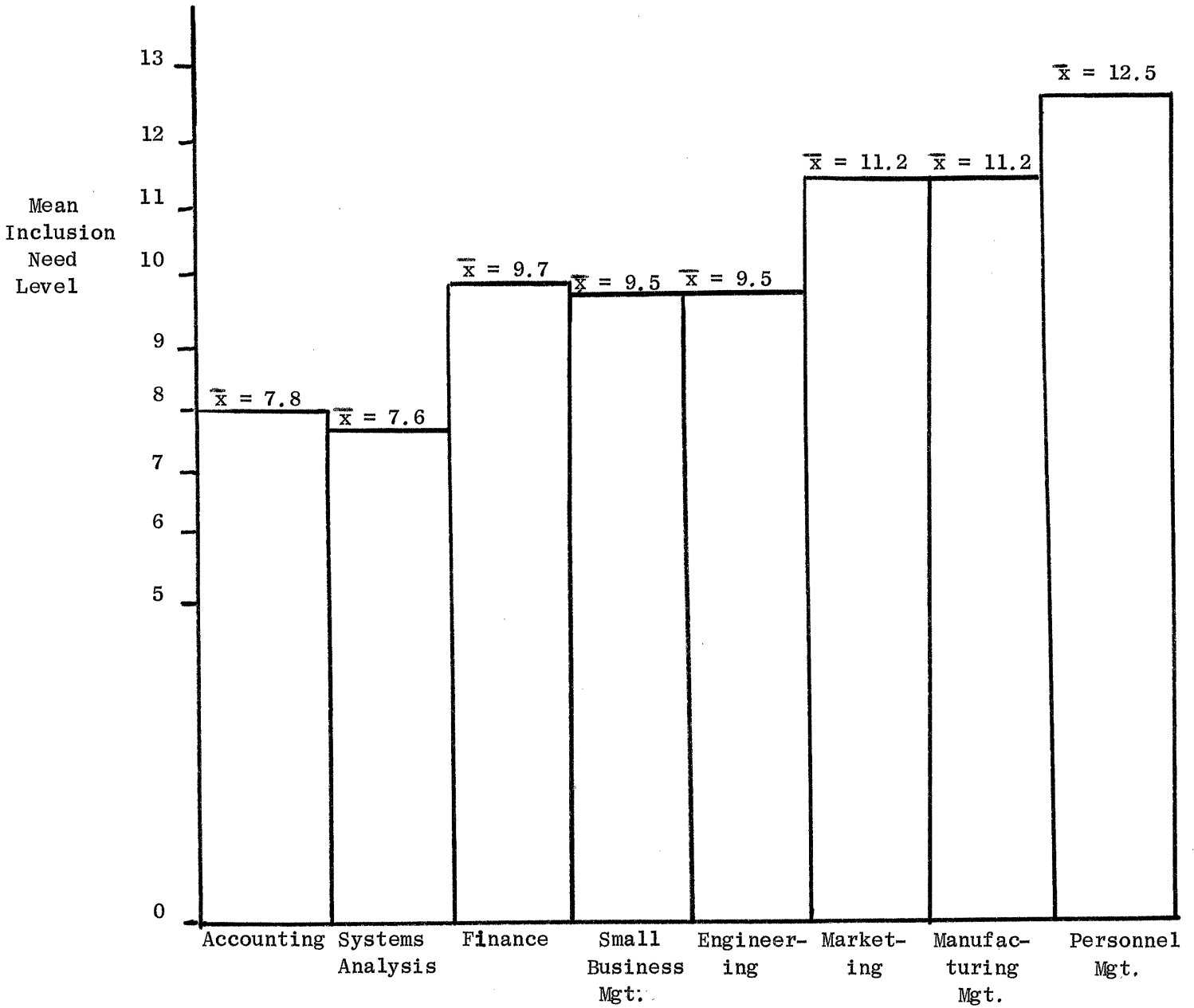
The analysis of variance indicated that the observed differences in the mean total interpersonal activity levels across functional areas were statistically significant at the .03 level. Bartlett's chi square test indicated homogeneity of variances across the different functional areas (all other analyses of variance presented here also meet the assumption of homogeneous variances by Bartlett's test).

It is interesting to note that the accounting and systems analysis areas rate lowest in interpersonal activity levels. The eight areas cluster into three groups of approximately equal means: Group 1 is composed of accounting and systems analysis; Group 2 of finance, small business management, and engineering; and Group 3 of marketing, manufacturing supervision, and personnel management. The use of pairwise t-statistics for comparing two individual functional areas indicated that each of the areas of Group 1 was significantly different from each area of Group 3 beyond the .05 level. No Group 2 area was significantly different from any area of Group 3. The systems mean (Group 1) was significantly different from the engineering mean (Group 2), however.

It appears in general that persons preferring accounting and systems analysis have a significantly lower need as a group for interpersonal activity than persons preferring marketing, manufacturing, or personnel.

Inclusion need level versus functional area

Figure 2 illustrates the differences in mean inclusion needs across functional area. Standard deviations and sample sizes (N) are also shown. An analysis of variance on the data indicated that the differences were significant beyond the .07 level.



Standard Deviation	5.2	4.5	4.7	5.2	5.1	3.7	5.2	2.7
Sample (N)	12	20	20	17	20	22	10	11

Figure 2. Means and standard deviations for inclusion need levels by functional area.

Although the significance does not reach the conventional .05 level, it nevertheless suggests that there are fundamental differences in inclusion need levels which are associated with different preferences for functional areas. Some individual areas differ from each other beyond the .05 level. Systems analysis is significantly different from marketing and personnel. The differences in Figure 2 followed the same general trend established in Figure 1 for relative differences in total activity among functional areas.

Control need level versus functional area

Interestingly, differences in the mean control need levels among the various areas were rather minimal and not statistically significant. The means for the eight functional areas ranged mainly from 8.3 to 9.6. There was about a two-thirds probability that the observed differences would have occurred by chance ($F_{7,130} = .69$, $p \leq .68$). In addition, pairwise t tests indicated that individual areas were not significantly different from each other.

Affection need level versus functional area

In contrast to control need levels, differences among affection need levels were highly significant, as illustrated in Figure 3. Table 2 shows the analysis of variance results.

The observed differences in means are significant at the .02 level and suggest that in addition to inclusion, affection is an interpersonal dimension which has an important association with functional area.

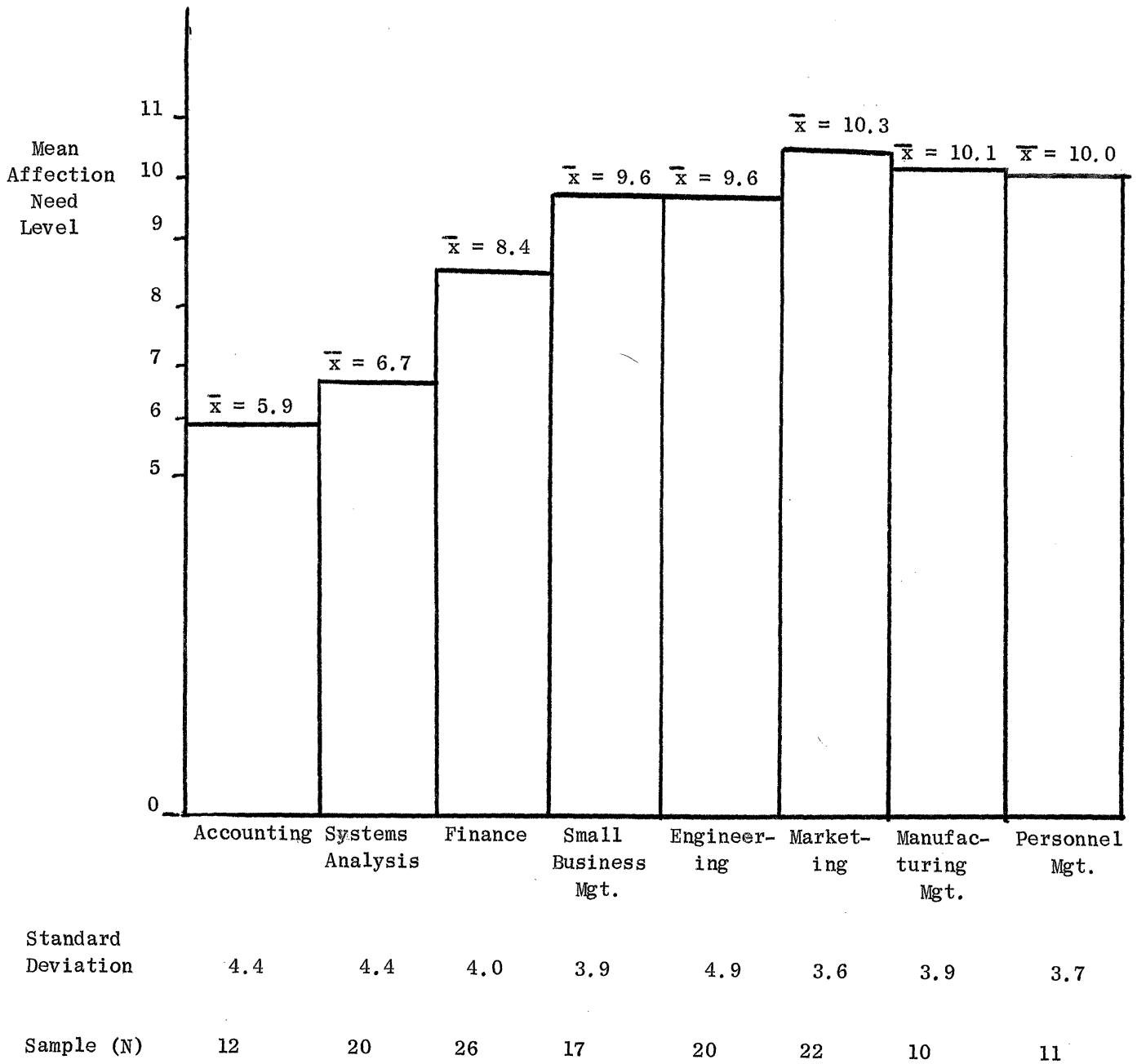


Figure 3. Means and standard deviations for affection need levels by functional area.

TABLE 2

Analysis of Variance for Affection Need Levels by Functional Area^a

Source	Sum of Squares	Degrees of Freedom	Mean Square
Between strata (areas)	290.5	7	41.5
Within strata	2,227.3	130	17.1
Total	2,517.8	137	

^a F statistic = 2.4, $p \leq .02$.

On an individual comparison basis, accounting and systems analysis were each different from small business, engineering, marketing, manufacturing, and personnel at the .05 level.

DISCUSSION AND CONCLUSIONS

The first general pattern which emerges from the data is that preference for functional areas is related to the need for total interpersonal activity. In general, the functional areas divide into three groups at different levels on the total activity scale: accounting and systems analysis are the lowest; finance, small business, and engineering are in the middle; and marketing, manufacturing, and personnel are highest.

However, we also find that there are particular dimensions of interpersonal life which primarily account for this pattern of differences of total activity. The most influential dimensions are the needs related to affection and inclusion. The need for control was not significantly related to preference for functional areas. Subjects preferring systems analysis and accounting do not exhibit the needs for inclusion and affection that the other groups do. They prefer less active interpersonal relations than do subjects preferring marketing, manufacturing, or personnel. The latter appear in general to have a strong need for a more vigorous and friendly interpersonal life. Subjects who preferred finance, engineering, or small business management were generally in between the other two groups with respect to inclusion and affection needs. Thus Hypotheses 1, 2, and 3 were generally supported, whereas Hypothesis 4 was not.

The association between interpersonal needs and preference for a functional area of management appears to offer empirical support to the occupational choice theories of Roe and Bordin mentioned earlier. Furthermore, the fact that the sample was composed of first-semester MBA students indicates that the relationship between needs and functional area preference is present before the student has had much direct, extended experience with a particular functional area. The empirical confirmation of the Roe-Bordin theories would seem all the more compelling since the FIRO instrument attempts to measure a need orientation developed from early childhood experience, an element which is central to both theories.

The present data establish an association between specific needs and a particular preference in the occupational choice process. Admittedly, use of need data to predict future occupational roles does not necessarily follow, since there are many intervening variables which obscure the connection between needs and ultimate choice of occupation. Furthermore, an individual makes many choices over time, and it is difficult to determine which job represents his ultimate occupational role. Walsh (1959) has also found that people actively restructure their jobs to meet their own needs, again decreasing the effectiveness of need data in predicting categorical occupational choices. In any event, the present data establish a differential association between needs and occupational preference, and as such support the Roe-Bordin framework.

References

- Bordin, E.S. ; Nachmann, B. ; and Segal, S.J. An articulated framework for vocational development. Journal of Counseling Psychology, 1963, 10, 107-117.
- Grace, E. The relationship between personality traits and vocational interests in the choice of field of study of selected junior college students in business administration. Dissertation Abstracts International, May 1970, 30, 4827.
- Harrell, T. Managers' performance and personality. Cincinnati: South-Western, 1961.
- Harris, S.B. A comparison of the personality traits of accounting students, students in selected majors, and successful accountants. Dissertation Abstracts International, Mar. 1971, 31, 4324-25.
- Huttner, L. ; Levy, S. ; Rosen, E. ; and Stopol, M. Further light on the executive personality. Personnel, 1959, 36, 42-50.
- Ivey, A., and Peterson, M. Vocational preference patterns of communications students. Educational and Psychological Measurement, 1965, 25, 849-56.
- Morea, P. Interests in relation to student success. Occupational Psychology, 1969, 43, 145-50.
- Roe, A. The psychology of occupations. New York: Wiley, 1956.
- Sayles, L. Managerial behavior. New York: McGraw-Hill, 1964.
- Schutz, W. The interpersonal underworld. Palo Alto: Science and Behavior Books, Inc., 1966.
- Super, D. and Bohn, M., Jr. Occupational psychology. Belmont, Calif.: Wadsworth Publishing Co., 1970.
- Walsh, R. The effects of needs on responses to job duties. Journal of Counseling Psychology, 1959, 6, 194-98.
- Wasserman, E. ; Yufit, R. ; and Pollack, G. Medical specialty choice and personality: II. Outcome and postgraduate follow-up results. Archives of General Psychiatry, 1969, 21, 529-35.