

DOCUMENT RESUME

ED J11 352

CG 021 967

AUTHOR Gattiker, Urs E.; Larwood, Laurie  
 TITLE Predictors for Career Achievement in the Corporate Hierarchy.  
 INSTITUTION Lethbridge Univ. (Alberta). Faculty of Management.  
 SPONS AGENCY Canada Employment and Immigration Commission, Ottawa (Ontario).  
 PUB DATE 89  
 CONTRACT 86-2298; 4853MP911  
 NOTE 38p.  
 PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.  
 DESCRIPTORS \*Administrators; \*Career Choice; \*Careers; Congruence (Psychology); Employee Attitudes; Foreign Countries; Models; \*Predictor Variables; \*Success  
 IDENTIFIERS Canada

ABSTRACT

Career achievement can be considered as a subset of career success, but it is not as concerned with the usual measures of success such as financial wealth and prestige as with reflecting the employee's movement through the corporate hierarchy. In this study objective career achievement was defined as referring to what society considers actual achievement, and perceived career achievement as referring to the individual's subjective, personal standards of career achievement. This study investigated the interrelationships between objective and perceived career achievement and career choices, success criteria, family variables, and demographics. It also examined vocational congruence between career and the individual. The congruence model was tested using both objective and subjective measures. Subjects (N=215) were managers from a variety of organizations. Analyses indicated that demographic and family variables relate to individual perceptions of career achievement as well as to objective indicators of career achievement within a corporate hierarchy. While the applicability of the general congruence model in career research seems limited based on this study's results, the functional congruence model is supported with the data obtained. (Author/ABL)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

ED311352

File: Position.dat  
Disk: Laupos and Editor 2  
Sub-Directory: \Position and n/a

PREDICTORS FOR CAREER ACHIEVEMENT  
IN THE CORPORATE HIERARCHY<sup>1</sup>

Urs E. Gattiker<sup>2</sup>  
The University of Lethbridge,  
Alberta, CANADA

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.  
 Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Laurie Larwood  
State University of New York at Albany

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Urs E. Gattiker

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)"

Short title: Achievement in the Corporate Hierarchy

<sup>1</sup>We would like to acknowledge the helpful comments made by the two anonymous reviewers. Special thanks to Valorie Hoyer, HelenJane Shawyer and Larry Steinbrenner for their insightful editorial help in the preparation of this manuscript. Partial support for this project was provided by a grant from Canada Employment SEED Program, Contract # 4853MP911, the University of Lethbridge Research Fund, Contract No. 86-2298 and The Faculty of Management. The views expressed in this paper are the authors' own and are not necessarily shared by these organizations.

<sup>2</sup>Correspondence and requests for reprints should be sent to Urs E. Gattiker, Department of Organization Sciences, Faculty of Management, The University of Lethbridge, Lethbridge, Alberta, T1K 3M4, CANADA. E-Mail: GATTIKER@UNCAEDU.BITNET; FAX: (403) 329-2022 or Telephone: (403) 320-699.

BEST COPY AVAILABLE

CG021967

PREDICTORS FOR CAREER ACHIEVEMENT  
IN THE CORPORATE HIERARCHY

Abstract

This study investigates the interrelationships between objective and perceived career achievement and career choices, success criteria, family variables and demographics, as well as examining vocational congruence between career and the individual. The congruence model is tested by using both objective and subjective measures. A sample composed of more than 200 managers from a variety of organizations revealed that demographic and family variables relate to individual perceptions of career achievement as well as to objective indicators of career achievement within a corporate hierarchy. While the applicability of the general congruence model in career research seems limited based on this study's result, the functional congruence model is supported with the data obtained. Implications of these results for research on careers and career counsellors are discussed.

PREDICTORS FOR CAREER ACHIEVEMENT  
IN THE CORPORATE HIERARCHY

"American society comes as close as any in history to arguing that going up in the world is an absolute value" (Merton, 1964, p. 218). This statement, as valid today as it was almost a quarter of a century ago, is perhaps as much explanation as we need to understand why career achievement is such an important subject in organizational research. Career achievement can be considered as a subset of career success, but is not concerned with the usual measures of success--financial wealth and prestige (Crites, 1969)--so much as it specifically reflects the employee's movement through the corporate hierarchy (e.g., Driver, 1979, 1985). Achievement is, of course, a relative concept; outsiders usually judge it according to theoretically objective and obvious criteria (Jaskola, Beyer & Trice, 1985), while individuals' perceptions of their own achievements tend to be based on less obvious, more subjective personal standards.

There are a variety of factors that affect both the individual's ability to achieve as it is judged objectively by society and as it is judged subjectively by him or herself. An understanding of the effects of these factors, which include career choices, demographics, family variables and success criteria, may lead to an explanation of why some individuals achieve more than others--why, for example, some individuals decide to start careers in fast-growing industries which will definitely help their corporate ascent, while others remain in relatively stagnant positions. In the interests of saving space in the course of this examination, objective career achievement will be understood as referring to what society considers actual achievement, and perceptions of career achievement will be understood as referring to the individual's subjective, personal standards of career achievement.

This paper first presents a study employing both objective and subjective predictors

to explain objective career achievement and perception of career achievement. Secondly, it tests the applicability of the congruence models to career research (Holland, 1973; Joyce, Slocum & Von Glinow, 1982); and thirdly, this paper responds to a call for research which tests the congruence model using both objective and subjective measures (e.g., Spokane, 1985) in order to examine their relationship with both objective career achievement or perception of career achievement in a corporate hierarchy. Findings that examine these issues have been presented before, but only in piecemeal fashion while their applicability for career research has not been assessed.

Why are answers to the above issues important? Recent demographical trends indicate that linear career achievement as represented by managers will become more difficult since the boom generation will saturate all management positions through the 1990's (Driver, 1985). Yet trends show a resurgence of the "going up" concept among those entering the work force, thus general congruence between career achievement values of younger managers and organizational possibilities may be reduced. A lack of general congruence will, however, increase employees' general dissatisfaction with their careers, and probably decrease their performance (e.g., Holland, 1973; Joyce, et al., 1982; Korman, 1980; Lang, 1985). Consequently, answers to the above issues will assist our attempt to provide career opportunities which fit both individual and organizational needs.

#### Literature Review

Research on career achievement has usually favoured the objective criteria of achievement, using fairly common standard measures such as organizational level or status (Jaskola et al., 1985), type of position (staff vs. line) (Larwood & Gattiker, 1986); and progress within the corporate hierarchy (Rosenbaum 1984, 1985). The examination of individual perceptions of achievement, which are important because they might reveal that individuals feel differently about their accomplishments than an outsider might expect,

has unfortunately not been a popular subject, so there is less research in this area.

The theory that the factors we examine here will predict actual and perceived achievement is based in large part upon congruence research. Holland has suggested that both vocational satisfaction and achievement depend on "the congruence between one's personality and the environment in which one works" (1973). An incongruent environment will encourage an individual to either leave or modify his or her attitude toward it (Spokane, 1985), while a congruent environment encourages achievements. Joyce, Slocum and Von Glinow (1982) have described three models of congruence. The first is functional congruence, which occurs when either the individual's personal characteristics or the situational characteristics of his or her job are congruent with factors which theory suggests should predict high performance. For instance, a person's education and age may relate positively with income and organizational level attained within the corporate hierarchy (Gattiker & Larwood, 1989). The second model is effect congruence, in which the cumulative effects of personal and non-work related environmental measures (e.g. family variables) predict both actual and perceived career achievement more accurately than functional congruence. Again, the actual match between the variables and the workplace determines the level of achievement.

The third model is general congruence, in which matching the individual and the environment improves prediction. Hence, a fit between an individual's career achievement goals, demographics, success criteria and the organization's career opportunities should increase objective career achievement, and perception of career achievement (cf. Crites, 1969) since congruence encourages and facilitates achievements (Holland, 1973; Spokane, 1985).

The measures that congruence research uses to predict variance can be either perceptual or objective. Past congruence research has been criticized for often using entirely perceptual measures (e.g., job attitudes) to explain other perceptual measures

(e.g., satisfaction) (Spokane, 1985), a problem this study seeks to correct by using both objective and perceptually-based measures to explain the variance in both perceptual and objective measures of career achievement.

#### What Predicts Individual Perceptions of Career Achievement?

Individual perceptions of career achievement are based upon interpretation of events or situations within their contexts (cf. Fishbein, 1967). In the case of an employee in a large organization, the context becomes the corporate structure.

Demographics. Demographics have been previously used to explain perceptions of career achievement; Lang (1985), for instance, found that well educated managers were less likely to perceive themselves as being high in the corporate hierarchy since their expectations were often very high. Another study found that demographics such as education and marital status affect perceptions of career achievement within a corporate hierarchy (Romney, Smith, Freeman, Kagan & Klein, 1979). Age may also affect perceptions, with older employees tending to be more satisfied with the progress of their careers than younger workers (Rhodes, 1983; Korman, Mahler & Omran, 1983).

Success criteria. Given that we think of career achievement (in the context of this study) as a subset of success, success criteria should correlate to the individual's perception of the former. Individuals develop success criteria for self-evaluation from comparisons with peers, siblings, friends, supervisors and the like (cf. Lang, 1985). The formulation of these criteria will also be influenced by the individual's own position in society, personal preferences and beliefs, and/or socialized values represented by society (Romney et al., 1979). Literature suggests that successful managers have success criteria which reflect the perquisites of management positions. Hence, a success criteria for high income and organizational power would fit a managerial position (Kotter, 1982) while the opposite would indicate a general lack of congruence (Joyce et al., 1982).

Family variables. Evans and Bartolomé (1980) reported that personnel managers felt

that family life did spillover into work, since family life considerations have a major influence at those critical career decisions and choice points. A managerial career may also take some time from family responsibilities, and trying to balance career demands with family ones may often be quite difficult (Pond & Green, 1983). At this point, the literature suggests that having a satisfactory family life should facilitate perceived career achievement while the opposite has been reported to increase role-conflict and stress (Frone & Rice, 1987).

Career choices. A career choice is based on the belief that it will lead to the maximum reward possible within a given situation (Locke, 1976). By evaluating a career choice cognitively, it is theoretically possible to assess the degree to which it fits with one's perceived abilities, attitudes, values, and interests (Holland, 1973). Obviously, since career choices are based on the individual's current perceptions of the environment, the maximum reward will only be achieved if these perceptions match the reality of the situation (Naylor, Pritchard & Ilgen, 1980, p. 73).

Literature suggests that, in the long-run, an individual will remember decisions which have led to desirable outcomes while others will have been erased from memory. Such a biased recall of past career choices is quite common (Hogarth, 1980). Nonetheless, past career choices, especially the ones which are rated as having helped one's career, are likely to be correlated with a person's perception of career achievement.

#### What Predicts Objective Career Achievement within the Corporate Hierarchy?

Objective measures for career achievement usually include management level and department (e.g., Kotter, 1982; Rosenbaum, 1984). Other indicators that outsiders use when measuring the achievement of others are the type of industry in which the individual is employed, whether or not the individual's position is a line or a staff one, and the relationship of the position to top management (e.g., Larwood & Gattiker, 1986; Rosenbaum, 1984, 1985).



Demographics. It is well established in the literature that certain demographic characteristics affect career achievement (Jaskola et al., 1985; Pfeffer & Ross, 1982; Rosenbaum, 1985); for instance, Gould and Penley (1984) found that demographics such as education explained career and salary progress in a corporate hierarchy (i.e., higher education correlated positively with career and salary progress). Larwood and Gattiker (1986) reported that gender affected career achievement (women had a slower and different career achievement), while Jaskola et al., (1985) reported that tenure with the same employer facilitated it (i.e. positive correlation). Other variables such as age and marital status may also relate to career achievement. For instance, Pfeffer and Ross (1982) reported that being married facilitated career achievement for males.

Success criteria. How subjective perceptions of the influence of success criteria predict objectively measured corporate career achievement is still unclear as the results of various studies analyzing these have been mixed (e.g., Gattiker & Larwood, 1986; Gould & Penley, 1984). The individual who attaches great significance to corporate ascent is likely to strive to achieve promotion, possibly by entering into a highly-mobile profession or by joining a department in an organization which offers such opportunities (Useem & Karabel, 1986; Feldman & Arnold, 1986). The individual who places similar significance on income will likely follow a similar course (O'Reilly & Caldwell, 1981). Based on the above, the importance of certain success criteria should correlate positively with objective career achievement.

Family variables. Some research also indicates that having a family tends to relate positively to one's level in an organization's hierarchy and to income. For instance, Pfeffer and Ross (1982) reported that married managers held higher positions and received higher remuneration packages compared to their single peers. Particularly, managers felt that families provided the moral and spiritual support needed to cope with stressful and tense work environments. Evans and Bartolomé (1980) reported that success in family life

will influence a manager's career achievement positively. Conversely one's family may influence one's decision to move to a certain area and may help in deciding against relocation which in turn influences hierarchical progression negatively (Rosenbaum 1984). Based on the literature, the spillover effect of family life upon career achievement is not clear, and can be either positive or negative depending upon the individual's personal situation.

Career choices. Whether or not they are rationally made, and despite personal beliefs concerning their worth, certain types of career choice seem to have definitely predictable effects. Larwood and Gattiker (1986) found that corporate ascent was facilitated by entering the corporate ladder at the highest possible level, and others have found that starting a career in a fast growing industry or company enhances the prospects for corporate ascent and transfer (Mainiero, 1986; Rosenbaum, 1985). The effects of career choices upon objectively measured career achievement have reasonable limits, however; the fact that an employee holds a specific job within a specific department, for example, would be difficult to attribute to a career choice made years ago, or, indeed, to any other single factor (Bandura, 1982; Naylor et al., 1980).

#### Summary

This paper is distinguished from previous research in three ways. First, it concentrates on career achievement using both (a) the individual's perceptions and (b) society's objective standards of achievement within the corporate hierarchy, and thus adds to previous work which has primarily concentrated on objective indicators (e.g., Rosenbaum, 1984). Secondly, this article looks closely at career success criteria, career choices, and family and demographic variables in order to explain the variance between individual and societal perceptions of achievement and to see if the predictors for objective career achievement are the same as the ones for perceptions of career achievement. Previous work has looked at the relationships between these factors and

success and satisfaction, but not career achievement specifically (e.g., Gattiker & Larwood, 1988). Finally, this study attempts to expand upon congruence research by using both objective and perceptually-based measures to explain both objective career achievement and individual perceptions of it, which is, as we have seen, uncharacteristic of congruence research (Spokane, 1985).

### Research Issues

In order to test the theory that correlations exist between career achievement and demographics, success criteria, career choices and family variables, this study proposed the following two sets of hypotheses, which have been implied by several research studies (e.g., Kotter, 1982; Heisler & Gemmill, 1978). Two non-directional hypotheses had to be made due to the conflicting research results available which do not allow for directional hypotheses (cf. Blalock, 1984). The hypotheses for perceptions of career achievement were:

**Hypothesis 1.** Demographics will predict a statistically significant part of the variance in a person's perception of his or her achievement within a corporate hierarchy.

As noted earlier, while increased education may affect perception of achievement negatively (e.g., more education reduce one's perception of achievement), older employees tend to be more satisfied with career achievement than their younger colleagues. The potentially positive relationship between demographics and achievement is thereby counterbalanced, hence hypothesis No. 1 is non-directional.

**Hypothesis 2.** Success criteria and family variables will correlate positively and predict a statistically significant part of the variance in a person's perception of his or her achievement within a corporate hierarchy.

The above hypothesis is based on the literature reviewed earlier which suggests that

success criteria (e.g., income and organizational level) and family variables are positively correlated with perceived career achievement, while important career choices are not.

For objective organizational career achievement, the following parallel group of hypotheses were proposed:

**Hypothesis 3.** Demographics will correlate positively and predict a statistically significant part of the variance in a person's organizational position within a corporate hierarchy.

**Hypothesis 4.** Career choices, success criteria and family variables will predict a statistically significant part of the variance in a person's organizational position within a corporate hierarchy.

As discussed in the literature review, family variables can facilitate or hinder career development depending upon the individual circumstances of the employee. Moreover, an individual may justify past choices by attributing to them a certain importance for current career achievement which may fail to be reflected in the case of objective career achievement. Similarly, success criteria may correlate positively or negatively to objective career achievement. Consequently, Hypothesis 4 is non-directional.

## Method

### Design and Subjects

For this study, we selected thirty-one major corporations from a published list of the largest firms operating in California. Selection was based on firm size and headquarter location--in this case, firms in metropolitan Los Angeles employing more than 1000 people locally. Except for this stipulation of locale and size, organizations were chosen at random. Seventeen firms agreed to participate in a study of their managers' career achievement. Managers were used as subjects not only because they

represent career achievement as viewed from an external perspective (Van Maanen & Schein, 1977) but also because they should represent individuals who perceive themselves as having climbed the corporate ladder (Korman, 1980).

Personnel officers in the participating firms were instructed to distribute questionnaires to managers who (1) supervised other individuals and (2) had budget as well as hiring responsibility and authority (e.g., manager of operations, vice-president marketing). Although achievement was not defined, the above two parameters limited the selection process considerably, weeding out individuals who might have been selected solely for their willingness to respond, and individuals carrying the title of manager but not qualifying on both of the above counts. These selection criteria represent commonly used objective and visible indicators of career achievement (Jaskola et al., 1985; Kotter, 1982; Rosenbaum, 1984, chap. 1 & 2). Since we also looked at staff positions, this sample included professionals with primarily managerial duties.

As suggested by Baron and Bielby (1986) we asked for a stratified sample with approximately equal numbers of men and women in similar positions (line and staff). This was done specifically to eliminate any gender effects which might be due solely to different positions held by women when compared to men. The large size of the organizations involved in this study allowed for such an approach. Each organization distributed 18 surveys, for a total of 306 surveys distributed, 215 were returned directly to the researchers. Response rates between the different companies ranged between 50% and 75%.

Of the 215 participants returning their surveys, 45% were female and 55% were male; 61% held line positions and 39% held staff positions; and 65% worked in industrial firms and 35% were from non-industrial organizations. Respondents had worked an average of 15.5 years in their career, with an average tenure of 10.5 years with their current employer, indicating some general congruence between respondents and their employers (Joyce et al., 1982). A great lack of congruence would likely have resulted in lower organizational

tenure (Spokane, 1985). The average respondent was about 41 years old (cf. Table 1).

84% of the participants had families; 61% of the men and 57% of the women were married. The fact that women were nearly as likely to be married as men in this sample suggests that possible marital status effects were not due to gender (see later sections of this paper).

### Instrument

Participants were asked to complete an anonymous questionnaire designed to investigate "career paths which key individuals such as yourself have followed". Six major blocks of data were obtained in the survey (described below) and each dimension consisted of several variables. Perception of career achievement and position in the corporate hierarchy were measured using several items. The items were especially developed for this study based on an extensive literature review which helped identify these areas as important in explaining a person's position within a corporate hierarchy (e.g., Korman, 1980; Kotter, 1982; Rosenbaum, 1984 & 1985).

The first part of the questionnaire concerned demographic variables such as gender, marital status, number of children, age, education, years in career, and years with present organization. The second part asked respondents about their position within the corporate hierarchy. Participants indicated their job title, department, whether they had a staff or line position, and the type of industry they worked in. The third part of the questionnaire looked at respondents' perceptions of their position within the corporate hierarchy. Respondents were asked how they felt about their level in the corporate hierarchy (responding on a seven-point scale), and were also asked about how many levels below the chief executive officer of their firm they perceived themselves to be.

The fourth part of the questionnaire sought information about the executives' families, inquiring (among other things) into how family considerations may have

influenced decisions on whether to move or stay in a geographical area. In addition, three questions using seven-point scales asked how family responsibilities affected opportunities for promotion and the amount of time the individual devoted to work and domestic life. They were also asked if they had ever chosen to leave their career due to family considerations.

The fifth part explored the respondents' critical career choices up to the present time, including choices made early in the individual's career as well as those made recently. Categories included relocation, change of field, education obtained, choice of company, and career changes. The sixth and final part of the questionnaire sought information about success criteria evaluated on seven-point scales. Criteria items included income, organizational level, respect, personal growth, and family life.

#### Analyses

Multiple regression was used to predict both objective career achievement and individual perceptions of this. The procedure used was hierarchical; several regressions were run using each predictor set by itself (e.g., demographics) and one analysis was done with all sets combined (i.e. demographics, career choice, success criteria, and family variables). The order within each set of variables was not important, and they were therefore entered all at one step. At this exploratory stage it was considered advisable not to look at each independent variable separately when trying to explain the variance in each dependent variable as we were more interested in whether or not the group of variables could explain part of the variance in the dependent variable (cf. Blalock, 1984, chap. 5-7; Cohen & Cohen, 1983, chap. 3).

According to Cohen and Cohen (1983, chap. 1), multiple regression is best suited when trying to determine the magnitude of a phenomenon. For correct application, multiple regression assumes that the residuals are normally distributed (bivariate and multivariate normal distribution). To test this assumption, the data used in each of the regression

runs was tested for data outliers by looking at standardized residuals first, and then evaluating a histogram of the standardized residual plots. The analysis of these two procedures, and also the normal probability plots of the standardized residuals obtained, showed that the data collected met the normal distribution assumption.

### Results

Tables 1 to 5 show the means, standard deviations and Pearson correlation coefficients for demographic, success criteria, family and career choice variables, as well as for career achievement and perceptions of it. The correlation coefficients are relatively low in magnitude, indicating that these variables measure different facets of each dimension showing some discriminant validity within each set of measures.

-----  
Insert Tables 1 - 5 about here  
-----

To facilitate comparisons and subsequent discussions, the results of this research have been divided into two sections according to the two groups of hypotheses stated earlier, with a third section concerning the assessment of the combined adjusted  $R^2$  for all the independent variable sets.

#### Perception of Career Achievement

Demographics. Hypothesis 1 held that demographics would predict a significant part of the variance in a person's perception of career achievement. Demographic variables (gender, number of children, age, years in career, and education) predicted a significant part of the individual respondent's organizational level (adjusted  $R^2 = .20$ ) and the number of levels between this level and the top position (adjusted  $R^2 = .07$ ). These variables showed negative correlations with management level reported by the respondents, ranging from  $- .20$  to  $-.39$  ( $p < .01$ , using a two-tail test of Pearson's  $r$ ). This indicated that older males, who were well educated and who were parents, had stayed with their firm and in their career for some time, and usually perceived themselves as being higher in



the organization than those with different demographic characteristics. Marital status correlated positively (.25) with management level in the organization ( $p < .01$ , using a two-tail test of Pearson's  $r$ ). Singles perceived themselves to be lower in the organizational hierarchy, while married respondents perceived themselves to be higher.

All demographic variables correlated negatively with the number of levels below the top position, ranging from  $-.14$  to  $-.27$  ( $p < .01$ , using a two-tail test of Pearson's  $r$ ). Apparently, single, well-educated males who spent a number of years with their firms saw themselves as being fewer levels from the top than their married colleagues perceived themselves. This finding might appear to contradict with the aforementioned finding that singles perceived themselves to be lower in the hierarchy; in fact, what it indicates is that single and married individuals have different views regarding what a high level in the hierarchy is. The single individual might perceive him or herself as being, say, one level from the top, while the married individual might perceive him or herself as being five; however, the single individual is statistically less likely to accept this level as being high--reserving that distinction for the very uppermost plateau of the organization--whereas the married individual is more likely to be content with his or her level, and thus perceive it as being high, as the result of an unconscious justification process. Hypothesis 1 is therefore apparently valid. These results support earlier work by Joyce et al., (1982) which showed that satisfaction was well explained by functional congruence.

Career choices, success criteria and family variables. Hypothesis 2 predicted that success criteria and family variables would correlate positively with, and explain a significant part of, the population variance in an individual's perception of career achievement. Personal success criteria did explain a significant part of the variance for level in organization (adjusted  $R^2 = .08$ ) and levels below top position (adjusted  $R^2 = .07$ ) as perceived by the respondent. For family variables, the adjusted  $R^2$  obtained was

.08 when predicting the individual's level in the organizational hierarchy. All success criteria variables correlated positively with the number of levels below top position. This suggests that people who feel that their positions are near the top emphasize success criteria in the areas of respect, position, income, family life and personal growth.

Three success criteria--level in organization, respect, and family life--all correlated positively with the individual's perceived level in the organization ( $p < .05$ , using a two-tail test of Pearson's  $r$ ). The variables measuring the effects of the individual's career on the time that he or she was able to spend with family and the effects of family responsibilities on career achievement correlated positively with level in organization ( $p < .01$ ). This suggests that people who perceived themselves to be higher up in the corporate hierarchy felt that their career had taken time away from their families and that families made career achievement more difficult.

-----  
Insert Table 6 about here  
-----

Results in Table 6 demonstrate that career choices do not correlate with perception of career achievement. Furthermore, the results show that, except for family variables and levels below top position, the rest of the predictor sets explained a significant part of the population variance in subjective measures of career achievement. While success criteria and family variables did predict a significant part of the variance in a person's perception of achievement, career choices did not; therefore Hypothesis 2 is only partially true.

#### Objective Career Achievement

Demographics. Hypothesis 3 claimed that demographic variables would predict a statistically significant part of the variance in objective career achievement and that correlation coefficients would be positive. Demographic variables accounted for a

statistically significant part of the population variance when predicting position in top management, level in organization, type of industry and employment in specific departments (personnel or finance). However, when we consider the magnitude of prediction we find that only in the case of management level in organization (adjusted  $R^2 = .18$ ) did demographic variables seem to be of substantial importance in explaining the variance (cf. Table 1). Again, Pearson's  $r$  was used when determining the direction of the relationships. The two demographic variables of "years in career" (-.20) and "years with firm" (-.17) correlated negatively with level in organization ( $p < .05$ , by a two-tail test of Pearson's  $r$ ). This may mean that, in this sample, employees in high level positions had been in their careers and with the present company a shorter time than their lower-level counterparts. While this hypothesis might seem questionable, it ties in with other research which has indicated that promotions are more frequent at the beginning of one's career (Rosenbaum, 1984). If this is indeed the case, it would seem to follow that individuals may perceive more career achievement in the early stages of their careers than in the later stages.

It could be inferred from the above findings that long organizational tenures may actually be detrimental to corporate ascent. Such tenures might in turn be identifiable with too much general congruence, which is to say that an individual's long tenure in a certain position may be explainable by his or her fitting the job too well. To illustrate: let us suppose that two individuals join an organization at the same time and hold similar positions. When a position higher up in the organization opens, the first individual is promoted since the second, who was apparently "born to do that kind of work", is deemed to be more valuable to the organization in his present capacity. Since Rosenbaum has noted that being passed over even once in the promotional tournament circuit often results in stagnation (1984, chap. 2) the second individual, having missed this first opportunity for promotion, will likely find his upward movement slowed.

Based on the above results, Hypothesis 3 can only be accepted with some reservations, since demographics did not account for a significant variance in all career achievement measures nor were the correlation coefficients always positive as predicted.

Career choices, success criteria and family variables. Hypothesis 4 proposed that career choices, success criteria and family variables might explain a statistically significant part of the population variance in the individual's career achievement. Again, the unique contribution of each predictor set in explaining the population variance in the objective measures of organizational career achievement emerged via separate regression runs.

As Table 6 shows, the career choice variables are statistically significant in explaining the population variance for position in top management (adjusted  $R^2 = .05$ ) and type of industry (adjusted  $R^2 = .03$ ). Two out of five possible correlations are significant ( $p < .05$ , by a two-tail test of Pearson's  $r$ ). While choice of career field correlated positively with a position in top management, further education and career choice correlated negatively. The findings concerning education suggest that, despite the respondents' beliefs concerning the importance of their education in determining their career choices, it was not of major importance in helping them achieve their current position. Top management position also correlated positively with geographical move, and negatively with change of career ( $p < .05$ , by a two-tail test of Pearson's  $r$ ). Individuals who indicated that a geographical move was an important career choice, and who had not changed careers, were typically higher on the corporate ladder.

The results show that, in the case of success criteria, none of the objective position measures can be explained (cf. Table 6). The family variables account for a significant part of the population variance for management level in organization (adjusted  $R^2 = .07$ ) and position in personnel department (adjusted  $R^2 = .05$ ). Since only two of the three variables correlated, Hypothesis 4 is only partially supported.

Combined Adjusted  $R^2$  for Predictors

As column 5 of Table 6 indicates, the amount of variance in perception of career achievement and objective career achievement that is explained is relatively small in magnitude, and most often not significantly beyond what is already accounted for by the demographic variables. Changes in degrees of freedom and suppression may explain why the cumulative adjusted  $R^2$  is smaller or not much greater than the one accounted for by a single predictor set (Cohen & Cohen, 1983, pp. 87-92).

Since the addition of environmental characteristics only clarified the variance minutely, these results indicate that the model of effect congruence, in which personal and environment characteristics together explain variance (Joyce, et al., 1982), does not apply for this study. The functional congruence model does apply, however, since in most cases demographics alone explained most of the variance in perceptions of career achievement (both objective and subjective).

**Discussion and Conclusions**

The most important finding of this study was that the factors explaining objective career achievement and individual perceptions of career achievement were not always identical. Although career choices partially explained the former, they failed to account for any variance in the latter, possibly because the respondents no longer saw relationships between past career choices and present achievements, despite research confirming the existence of these relationships (e.g., Larwood & Gattiker, 1986; Mainiero, 1986). If this is indeed the case, the effects of time on the individual's perception of the importance of career choices should be a concern of future investigation.

Concerning the effects of success criteria on perceptions of achievement, a somewhat opposite effect to that seen in the career choice situation was observed: respondents saw relationships of which research denied the existence, and often believed that where they

ended up in the corporate structure was influenced by the emphasis that they placed upon personal success criteria. Some earlier research has claimed that career achievement is in large part based on the individual's presence in the right place at the right time (Bandura, 1982). This study limits this claim somewhat and, together with previous research, illustrates that choosing the highest position possible (Larwood & Gattiker, 1987) and an industry with potential for growth when starting one's career does help career progress (Gonz, 1988).

In light of these differences in predictors, it is interesting that demographics accounted for variance in both objective career achievement and perceptions of career achievement. This is supported by earlier research which reported the importance of demographics in explaining both objective and subjective career success (e.g., Gattiker & Larwood, 1988; Gattiker & Larwood, 1989; Jaskola et al., 1985; Rosenbaum, 1985), though not necessarily career achievement. Because demographics were so influential in accounting for variance in perceptions, the functional congruence model was found to be the only useful model in explaining the fit between this particular group of respondents and their jobs. This is an important finding in itself, especially since others have previously suggested that congruence models be used outside of their traditional disciplines, (Joyce et al., 1982). Future research, if it wishes to determine the validity of the effect congruence model, should expand the items used in the category of environmental variables, possibly including socio-economic variables, such as the socio-economic status of parents, in the hope that environmental variables not considered will better account for the variance in perceived achievement.

While this study went beyond earlier works by probing into the conflicts that arise from family commitments competing with career obligations, additional variables need to be included to expand the level of prediction even further in the future. We briefly noted that extended and nuclear families might influence achievement in different ways;

similarly, dual and single-income families would represent different conflicts and environmental demands (e.g., Pfeffer & Ross, 1982), as would families composed of children of different ages and number.

### Theoretical Implications

In evaluating the theoretical implications of this study, it is natural that we look first at the implications for future research and at the application of the functional and effect congruence model. Most past research dealing with congruence has used perceptual measures to explain other perceptual measures. The data obtained in this study indicates that a non-perceptual measure (i.e. demographics) best predicts perceptual career achievement as well as objective career achievement. Thus, a certain level of functional congruence does help explain career achievement.

Family variables were mixed in that while they explained the perceptual measure of career achievement, they failed to explain the measure for some objective career achievement. Further, while success criteria explained perception of career achievement, they did not explain objective career achievement. This suggests that future research should investigate the congruence model further, within a single organization, to clarify further whether perceptual measures can only help explain perceptual and objective career achievement to a limited degree, as in this study which uses numerous organizations.

Based on attribution theory, it has been argued that when using a retrospective approach people will try to justify both their past career decisions and, especially, choices (Feldman, 1989). However, people may fail to connect choices made several years ago with their current perception of career achievement. Past research has looked at justification of decisions made somewhat more recently (e.g., 12-24 months previously) (e.g., O'Peilly & Caldwell, 1981), while this study encompassed decisions made over one's whole working career (i.e., possibly over several decades). Consequently, future research should investigate after what time frame individuals may fail to connect certain career



choices with current achievement. This is especially important as past choices did connect to some objective achievement measures (e.g., level in management) used in this study.

What does the lack of fit for the general congruence model mean for future research? This study did not test if a fit between personal career needs and those of an organization would affect career achievement (i.e. objective and perception thereof). Thus, environmental factors, such as the economic growth rate, the organization's growth and profitability rate, may all affect career achievement (cf. Driver, 1985). We are not yet ready to rule out the possibility that the general congruence model applies to career achievement. However, future research must assess the impact of environmental factors upon career achievement by studying one single organization. The reasons for this are twofold: First, environmental factors may differ between organizations in disparate industries and countries. Second, studying more than one firm may lead to results where many contingent relationships are cancelling one another out.

Previous attempts including this study's own have failed to develop approaches to career achievement and success which allow generalizability across firms and situations. Thus, future research should investigate further the relationship between the predictor variables used here, and objective career achievement as well as perception of career achievement in one organizational setting. For instance, past research suggests that, in the U.S. (Rosenbaum, 1984) and the U.K. (Gunz, 1988), a career pattern and development can vary within an organization. In combination with this study this would suggest that certain positive or negative effects on objective career achievement and perception of career achievement in one firm may differ in another, or even between divisions. Moreover, job segregation for minorities may differ between firms and thereby affect (especially) perceived career achievement (e.g., Gattiker 1989). Thus, study of a single organization may be more beneficial in revealing important processes, thereby providing



a more accurate test of the general congruence model's applicability to research in the career achievement domain.

### Practical Implications

The most obvious implication of our findings concerns career counselling. Specifically the data suggest that a person's decision to enter a firm in a particular business field is an important factor for future objective career achievement. This becomes even more important when considering that Carter (1988) reported that in California about half of the native-born men held jobs with 20 years of tenure with the same firm. Consequently, the firm's potential for growth and its career development system will affect the individual's career progress over a substantial period of time.

Our data about how important a person's success criteria are for perception of career achievement may also have direct implications for personnel selection practices. In their simplest form, success criteria can help human resource specialists achieve a fit between the employee's real career opportunities and career needs. It may, therefore, be easier to select individuals to work for the firm whose success criteria can be met by the firm's career opportunities as such a fit will likely increase satisfaction with one's career (Gattiker & Larwood, 1988).

Another important deduction which can be made from our results is that regular employee career development assessment with the supervisor and a specialist may fill an important function for perception of career achievement by the employee. For instance, the importance of career movements and geographical transfers for an individual's current objective achievement must be discussed, and their importance reiterated to facilitate the individual's retrospective understanding and attribution of achievement to such past choices. The results implication could also be interpreted in a less positive sense, indicating that long term career planning may be a fruitless exercise (e.g., career

choices, such success criteria as putting in a lot of hours and going for the highest paying job) as many factors can affect career achievement which are outside both the individual's and the organization's control (e.g., economic growth and being at the right place at the right time).

Going beyond the simplest personnel issues, our findings have additional and perhaps more important implications. Past research shows that older employees are generally more satisfied with their work than their younger colleagues (Rhodes, 1983) while traditional promotion channels through organizational hierarchies are largely blocked for today's younger worker (Driver, 1985). Further, the age-keyed structure of North American businesses will prevent many younger individuals from rising through the ranks as their older colleagues have done. Frequent promotions at a career's front end will become less likely, even though they were necessary to "succeed" within a corporate hierarchy in the not too recent past (Rosenbaum, 1984). Hence, ambitious young employees may never realize their career achievement goals. This may also suggest that career strategies and choices made with a long-term objective in mind may fail to materialize for an individual. Thus, the firm may be better off by avoiding making career progress promises which cannot be kept when recruiting. Moreover, an increased effort to hire "older" employees, who perceive themselves as having accomplished their career objectives, may be of great benefit to the firm as a more contented workforce will be more effective and committed to the organization.

The need to learn how to build this kind of work force is the primary reason for further investigation into the relationship between individual and environmental factors and career achievement. Future research should, therefore, continue to explore the applicability of the functional congruence model for explaining objective and perceived career achievement. Only as a result of this kind of research can one expect to see dynamic revisions in managerial practices that will help in making a higher quality of

work life a reality for many more workers.

References

- Bandura, A. (1982). The psychology of chance encounters and life paths. American Psychologist, 37, 747-755.
- Baron, J. N., & Bielby, W. T. (1986). The proliferation of job titles in organizations. Administrative Science Quarterly, 31, 561-586.
- Bhagat, R.S., & McQuaid, S.J. (1982). Role of subjective culture in organizations: A review and directions for future research. Journal of Applied Psychology Monograph, 67, 653-685.
- Blalock, H. M. (1984). Basic dilemmas in the social sciences. Beverly Hills: Sage Publications.
- Blustein, D. L. & Strohmer, D. C. (1987). Vocational hypothesis testing in career decision making. Journal of Vocational Behavior, 31, 45-62.
- Carter, S. B. (1988). The changing importance of lifetime jobs, 1892-1978. Industrial Relations, 27, 287-300.
- Cohen, J., & Cohen, P. (1983). Applied multiple regression/correlation analysis for the behavioral sciences (2nd Ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Crites, J. O. (1969). Vocational psychology. New York: McGraw-Hill.
- Driver, M.J. (1979). Career concept and career management in organizations. In C. J. Cooper, (Ed.), Behavioral problems in organizations. Englewood Cliffs, NJ: Prentice-Hall.
- Driver, M.J. (1985). Demographic and societal factors affecting the linear career crisis. Canadian Journal of Administrative Studies, 2, 245-263.
- Evans, P.A.L., and Bartolomé, F., (1980). The relationship between professional life and private life. In C. B. Derr (Ed.) Work, family and the career. New York: Praeger.
- Feldman, D. C. (1989). Careers in organizations: Recent trends and future directions. Journal of Management, 15, 135-156.

- Feldman, D.C., & Arnold, H.J. (1986). Personality types and career patterns: Some empirical evidence on Holland's model. Canadian Journal of Administrative Studies, 2, 192-210.
- Fishbein, M. (Ed.) (1967). Readings in attitude theory and measurement. New York: John Wiley & Sons.
- Frone, M. R., & Rice, R. W. Work-family conflict: The effect of job and family involvement. Journal of Occupational Behaviour, 8, 45-53.
- Gattiker, U. E. (1989). Sexual inequality in Western Canada and the U.S. and Perception of career success: Human Capital and Institutional Determinants. Paper presented at annual meeting of Academy of Management, Washington DC.
- Gattiker, U. E. & Larwood L. (1986). Subjective career success: A study of managers and support personnel. Journal of Business and Psychology, 1, 78-94.
- Gattiker, U. E. & Larwood, L. (1988). Predictors for managers' career mobility, success and satisfaction. Human Relations, 41, 569-591.
- Gattiker, U. E. & Larwood, L. (1989). Career success, mobility and extrinsic satisfaction of corporate managers. The Social Science Journal, 26, 75-92.
- Gould, S., & Penley, L.E. (1984). Career strategies and salary progression: A study of their relationships in a municipal bureaucracy. Organizational Behaviour and Human Performance, 34, 244-265.
- Gunz, H. (1988). Organizational logics of managerial careers. Organization Studies, 9, 529-554.
- Heisler, W.J., & Gemmill, G.R., (1978). Executive and MBA student views of corporate promotion practices: A structural comparison. Academy of Management Journal, 21, 731-737.
- Hogarth, R.M. (1980). Judgment and choice: The psychology of decision. New York: John Wiley.

- Holland, J. L. (1973). Making vocational choices: A theory of careers. Englewood Cliffs, NJ: Prentice-Hall.
- Jaskola, G., Beyer, J. M., & Trice, H. M. (1985). Measuring and predicting managerial success. Journal of Vocational Behavior, 26, 189-205.
- Joyce, W., Slocum, J. W., Jr., & Von Glinow, M. A. (1982). Person-situation interaction: Competing models of fit. Journal of Occupational Behaviour, 3, 265-280.
- Korman, A.K. (1980). Career success/Personal failure. Englewood Cliffs, NJ: Prentice-Hall.
- Korman, A.K., Mahler, S.R., Omran, K.A. (1983). Work ethics and satisfaction, alienation, and other reactions. In W.B. Walsh & S.H. Osipow (Eds.), Handbook of Vocational Psychology (Vol. 2) (pp.181-206). Hillsdale, NJ: Lawrence Erlbaum.
- Kotter, J.P. (1982). The general managers. New York: The Free Press.
- Lang, D. (1985). Preconditions of three types of alienation in young managers and professionals. Journal of Occupational Behaviour, 6, 171-182.
- Larwood, L., & Gattiker, U.E., (1986). A comparison of the career paths used by successful women and men. In B.A. Gutek and L. Larwood (Eds.), Women's career development (pp. 129-156). Beverly Hills: Sage Publications.
- Locke, E.A., (1976). The nature and cause of job satisfaction. In M.D. Dunnette (Ed.), Handbook of industrial and organizational psychology. Chicago: Rand McNally.
- Mainiero, L.A. (1986). Early career factors that differentiate technical management careers from technical professional careers. Journal of Management, 12, 561-575.
- Merton, R. K. (1964). Anomie, anomia, and social interaction. In M. B. Clinebar (Ed.), Anomie and deviant behavior (pp. 213-242). New York: Free Press of Glencoe.
- Naylor, J.C , Pritchard, R.D., & Ilgen, D.R. (1980). A theory of behavior in organizations. New York: Academic Press.

- O'Reilly, Ch.A., & Caldwell, D.F. (1981). The commitment and job tenure of new employees: Some evidence of postdecisional justification. Administrative Science Quarterly, 26, 597-616.
- Pfeffer, J., & Ross, J., (1982). The effects of marriage and a working wife on occupational and wage success. Administrative Science Quarterly, 27, 66-80.
- Pond, S. B., & Green, S. B. (1983) The relationship between job and marriage satisfaction within and between spouses. Journal of Occupational Behaviour, 4, 145-155.
- Rhodes, S.R. (1983). Age-related differences in work attitudes and behavior: A review and conceptual analysis. Psychological Bulletin, 93, 328-367.
- Romney, A.K., Smith, T., Freeman, H.E., Kagan, J., & Klein, R.E. (1979). Concepts of success and failure. Social Science Research, 8, 302-326.
- Rosenbaum, J.E. (1984). Career mobility in a corporate hierarchy. New York: Academic Press.
- Rosenbaum, J.E. (1985). Persistence and change in pay inequalities: Implications for job evaluation and comparable worth. In L. Larwood, B.A. Gutek & A. Stromberg (Eds.), Women and work (Vol.1) (pp. 115-140). Beverly Hills: Sage Publications.
- Spokane, R. (1985). Monograph: A review of research on person-environment congruence in Holland's theory of careers. Journal of Vocational Behavior. 26, 306-343.
- Useem, M., & Karabel, J. (1986). Pathways to top corporate management. American Sociological Review, 51, 184-200.
- Van Maanen, J., & Schein, E.H. (1977). Career development. In J.R. Hackman & J.L. Shuttle (Eds.), Improving life at work. Santa Monica, Ca: Goodyear.

Table 1

Pearson Correlation Coefficients for Demographic Variables

Variables	Means	Standard Deviations	1	2	3	4	5	6
Sex (Male/Female)	.11	1.00						
Marital Status	1.51	.77	-23					
Number of Children	2.30	1.08	23	-09				
Age	40.56	9.77	23	-25	37			
Years in Career	16.53	9.63	23	-33	31	86		
Years with this Firm	10.51	8.33	11	-18	21	57	63	
Education	2.92	.94	27	01	21	-03	-03	-1

Sex had two levels: 1 = male and -1 = female.

Marital Status had three levels: 1 = married, 2 = single

Education had four levels: 1 = no college, 2 = some college, 3 = college graduate and 4 = graduate school.

All correlations above .12 are significant at  $p < .05$ ; all correlations above .16 are significant at  $p < .01$ ;  $n = 202$ . Decimals omitted.



Table 2

Pearson Correlation Coefficients for Success Criteria Variables

Variables	Means	Standard Deviations	1	2	3	4
How important are the following success criteria to you:						
Income	2.30	1.14				
Level	2.42	1.18	54			
Respect	1.76	1.20	34	43		
Personal Growth	1.61	1.20	41	27	60	
Family Life	2.36	1.59	21	16	46	49

Each variable was coded from 1 = very important to 7 = very unimportant.

All correlations above .12 are significant at  $p < .05$ ; all correlations above .16 are significant at  $p < .01$ ;  $n = 202$ . Decimals omitted.

Table 3  
Pearson Correlation Coefficients for Family Variables

Variables	Means	Standard Deviations	1	2	3	4	5	6
Family <sup>1</sup>	1.16	.37						
Family influenced to stay area	1.52	.50	-.01					
Family influenced to come to this area	1.68	.48	-.08	.44				
Has residing in this area affected your career opportunities <sup>2</sup>	1.51	.61	-.11	-.03	.13			
Do family responsibilities ever make your work or career difficult <sup>3</sup>	5.16	1.77	.00	.07	.16	-.16		
Has your career taken time from your family responsibilities <sup>3</sup>	4.14	2.00	.05	.00	.03	-.13	.57	
Has your family affected your opportunities for promotion <sup>4</sup>	2.93	1.49	.13	.01	-.10	-.16	-.16	-.10

<sup>1</sup>A categorical variable which was coded with 1 = yes, 2 = no.  
<sup>2</sup>Variable 4 was coded with 1 = expanded, 2 = no effect, 3 = contracted.  
<sup>3</sup>Variables 5 and 6 were coded from 1 = very often to 7 = never.  
<sup>4</sup>Variable 7 was coded from 1 = helped considerably to 7 = hurt considerably.

All correlations above .12 are significant at  $p < .05$ ; all correlations above .16 are significant at  $p < .01$ ;  $n = 202$ . Decimals omitted.

Table 4

Pearson Correlation Coefficients for Career Choice Variables

Variables	Means	Standard Deviations	1	2	3	4	5	6
Did person indicate that [variable] was one of the three most important career choices she/he made influencing present position <sup>1</sup>								
Move	1.76	.43						
Education	1.50	.50	-10					
Choice of firm	1.61	.49	-16	09				
Career change	1.77	.42	-17	01	02			
Choice of field	1.61	.49	05	-09	-03	-03		
Left career temporarily because of family responsibilities	1.88	.32	03	01	02	-02	-03	

<sup>1</sup> Responses were coded with 1 = yes, indicated, 2 = no, not indicated as important choice.

All correlations above .12 are significant at  $p < .05$ ; all correlations above .16 are significant at  $p < .01$ ;  $n = 202$ . Decimals omitted.

Table 5

Pearson Correlation Coefficients for Perception of Career Achievement and Objective Career Achievement in the Corporate Hierarchy

Variables	Means	Standard Deviations	1	2	3	4	5	6	7	8	9
<u>Perception of Career Achievement:</u>											
Level in organization <sup>1</sup>	2.83	1.23									
Levels below top position <sup>2</sup>	2.75	2.05	.46								
<u>Corporate Career Achievement (objective):</u>											
Position in top management <sup>3</sup>	1.58	.49	.26	.29							
Management level in organization <sup>4</sup>	1.81	.39	.04	.05	.17						
Type of industry <sup>5</sup>	.30	.96	.05	.08	-.04	-.15					
Position (line/staff) <sup>6</sup>	-.22	.98	-.02	.06	-.22	-.06	.13				
Position in personnel dept. <sup>7</sup>	1.85	.36	-.01	.14	.01	-.02	.17	.04			
Position in marketing dept. <sup>7</sup>	1.91	.29	.03	.00	-.10	-.02	.04	.05	.13		
Position in operations, manufacturing, production department <sup>7</sup>	1.60	.49	-.03	-.06	.07	-.03	-.08	.00	-.34	-.26	
Position in accounting and finance department <sup>7</sup>	1.79	.41	-.13	-.14	-.19	-.02	.02	.18	.21	-.16	-.42

Note. All correlations above .12 are significant at  $p < .05$ ; all correlations above .16 are significant at  $p < .01$ ;  $n = 202$ . Decimals omitted.

<sup>1</sup>Variable was coded from 0 = CEO or president to 9 = nine or more levels.

<sup>2</sup>Variable was coded from 1 = very high to 7 = very low.

<sup>3</sup>Variable was coded as follows: 1 = position in top management, 2 = other

<sup>4</sup>Variable was coded as follows: 1 = entry level, 2 = mid-level, 3 = high in department/division

<sup>5</sup>Variable was coded as follows: 1 = industrial, -1 non-industrial

<sup>6</sup>Variable was coded as follows: 1 = line, -1 = staff

<sup>7</sup>Variables were coded as follows: 1 = indicated, 2 = not indicated

Table 6

Career Achievement in a Corporate Hierarchy

Predictor Set:	#1 Demographic Variables	#2 Career Choice	#3 Success Criteria	#4 Family Variables	#5 $\Sigma$
Prediction of Measures of Career Achievement	Adjusted $R^2$	Adjusted $R^2$	Adjusted $R^2$	Adjusted $R^2$	Adjusted $R^2$
<u>Perception of Career Achievement</u>					
Level in organization	.20****	.00	.08***	.08**	.25****
Levels below top position	.07**	.00	.07**	.02	.11**
<u>Corporate Career Achievement (objective)</u>					
Position in top management	.07**	.05*	.00	.01	.11**
Management level in organization	.18****	.00	.00	.07**	.17****
Type of industry	.06**	.03*	.00	.00	.09**
Position (line/staff)	.00	.00	.00	.01	.00
Position in personnel department	.03*	.01	.00	.05*	.07*
Position in marketing department	.00	.00	.00	.00	.00
Position in operations, manufacturing, production department	.02	.01	.00	.00	.01
Position in accounting and finance department	.03*	.00	.00	.02	.05*

Note. Adjusted  $R^2$  is a statistically adjusted estimate of the population  $R^2$  (cf. Cohen & Cohen, 1983, 106-107). Columns 1-4 give the adjusted  $R^2$  between the item and an independent variable set; column 5 provides the combined adjusted  $R^2$  for predictors in columns 1-4.

\* $p < .05$  by an  $F$  statistic calculated on the sample  $R^2$ .  
 \*\* $p < .01$   
 \*\*\* $p < .001$   
 \*\*\*\* $p < .0001$ .

**BIOGRAPHICAL NOTES**

URS E. GATTIKER is Assistant Professor of Organizational Behaviour and Technology Management in the Faculty of Management at the University of Lethbridge, Alberta, Canada. He received his Ph.D. in Organization and Management from Claremont Graduate School, USA, in 1985. Before entering academia he worked in Switzerland, South Africa, and the United States. Gattiker's most recent book is **Technology Management in Organizations**. He is editor of **Technological Innovation and Human Resources**. His research interests presently include skill acquisition theory, technological change and development and quality of work life issues. Gattiker is Chair of the Academy of Management's Research Methods Division.

LAURIE LARWOOD is Dean of the School of Business at the State University of New York at Albany. Before obtaining her doctorate at Tulane University she headed a manufacturing firm. She has edited **Women and Work**, **Journal of Management Case Studies**, and **Group and Organization Studies**. Recent books include **Organizational Behavior** and **Women's Career Development**. Her research interests presently include rational bias theory, strategic envisioning, and technological development. Larwood is past chair of the Academy of Management's Technology and Innovation Management, and Women in Management Divisions and is the Vice-Chair of the Managerial Consultation Division.