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THE PROFESSIONAL-BUREAUCRATIC DILEMMA:  
ALIENATION FROM WORK AMONG  
UNIVERSITY FACULTY

By

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## CHAPTER I

### INTRODUCTION

#### Background

Etzioni observed that in our modern world organizations dominate all our lives: most of us are born in organizations, educated by organizations, and spend much of our leisure time paying, playing, and praying in organizations.<sup>1</sup> Moreover, these organizations, which touch the facets of our lives, have tended to become increasingly bureaucratic.

Even the occupations traditionally considered to be professions have been touched by the increasing prevalence and pervasiveness of bureaucratic organizations. The encroachment of bureaucratic organizations upon professionals and professional groups has been commented on by Hall. Work, he stated, is increasingly becoming organizationally based. This is true among both the established professions and the professionalizing occupations.<sup>2</sup>

This growing interdependence of professionals and bureaucratic organizations has been the subject of many studies which have investigated the relationship between professionals and bureaucracies.<sup>3</sup> An assumption undergirding these studies is that there is an inverse relationship between professionalization and bureaucratization, with the central issue being the problem of conflict between the professional and

bureaucratic modes of organization. As Blau and Scott have pointed out in Formal Organizations,

. . . the professional . . . and the bureaucratic forms of organizational administration are two institutional patterns prevalent today, and while professional principles share many elements with bureaucratic ones, they include some that are not common.<sup>4</sup>

Accordingly, a number of researchers have argued that when a professional is employed in a bureaucracy, the professional is confronted with conflict because of the basic differences between two normative systems.<sup>5</sup>

Discussions about the nature of this conflict typically revolve around contrasts between the professional and bureaucratic models.<sup>6</sup> While these two models and their conflicting dimensions will be discussed extensively in the Review of Literature, a brief indication of the more obvious sources of conflict is in order here.

The basic difference between these two models of organization of work activities has been summed up by Morrissey and Gillespie. "Professionals organize around individual expertise while bureaucracies organize in hierarchical arrangements."<sup>7</sup> Etzioni elaborated on this distinction, maintaining that it is this highly individualized principle of professional organization which is diametrically opposed to the very essence of the bureaucratic organizational principle of coordination and control.<sup>8</sup> The tension of professional autonomy versus bureaucratic integration continually recurs as one of the central sources of conflict for professionals employed in bureaucratic organizations.<sup>9</sup> More recent studies have cast doubt on the simple assumption that the professional and bureaucratic models are inherently antithetical and that conflicts between them are inevitable. These studies have found that the professional and bureaucratic models have many commonalities such that

the intimate relationship between the professional and bureaucratic processes is fast becoming an accepted sociological tenet. Differences--even points of conflict--between the processes of the two models are not completely denied, however. Rather, a concerted attempt is made to delineate under exactly what type of circumstances which specific dimensions of the two models are more prone to conflict.<sup>10</sup>

One possible result of the professional-bureaucratic dilemma and its possible ensuing conflict is that the professional who experiences such conflict may become alienated from his work, the organization, or both.<sup>11</sup> The theoretical origins and types of alienation as well as their empirical investigation will be dealt with extensively in the Review of the Literature, with only two of the more recent and prominent studies on the alienation of professionals in bureaucracies alluded to at this point.

Aiken and Hage studied alienation among professionals in 16 welfare organizations. They linked two forms of alienation with two specific structural properties of the bureaucracy--centralization and formalization. They found that the greater the degree of formalization (job codification and rule enforcement) and centralization, the more alienated were the professionals.<sup>12</sup> George Miller, in his research on the extent and roots of alienation from work among scientists and engineers employed in the industrial setting, found that these professionals experienced more alienation when their supervisors used directive rather than participative or laissez-faire decision-making or leadership styles. He also found that the degree of alienation varied according to the type and length of professional training. Alienation was greater for scientists with the Doctorate than for engineers with the Masters Degree.



Professionals employed in production divisions of the corporation, rather than in research, also manifested greater alienation from work.<sup>13</sup>

Most of the research investigating the organization's impact upon the work alienation of professionals, like these two studies, has been undertaken in the business or service sector.<sup>14</sup> Research on the relationship between bureaucratic organizations and the professional's alienation from work in the educational setting, particularly that of higher education, is sparse.<sup>15</sup> Although a few authors have investigated sources of professional-bureaucratic conflict in higher education, the work alienation resulting from this conflict has not been examined to any great extent.<sup>16</sup> Recently, Hoy and his colleagues have begun investigating bureaucracy and its impact on certain specific types or categories of alienation, but this research has been undertaken largely in the school setting rather than in the college or university setting.<sup>17</sup>

#### Importance of Study

Work alienation and its effects are of particular concern and relevance today in higher education. Academics have often been considered among the more ideal professional types,<sup>18</sup> and particularly during the growth decades of the fifties and sixties they were understood to possess an immunity from ordinary social pressures,<sup>19</sup> leaving them ". . . free to investigate, experiment, to take risks without the usual social repercussions of failure. . . .,"<sup>20</sup> all of which allowed the faculty member to carry out his or her work effectively. That this almost ideal professional situation was due primarily to the abundance of research dollars, the enrollment growth and the dearth of qualified

has been alluded to by several scholars, among them Clark Burton, Clark Kerr and Victor Baldrige.<sup>21</sup> Baldrige maintains that

faculty autonomy and power developed because of a fortunate convergence of forces in the society; expanding enrollment, public belief in the ability of education to solve social problems, generous financial support, the growth of large-scale research demanding more faculty experts, and a shortage of personnel have placed faculties in a powerful bargaining position.<sup>22</sup>

In the seventies and the future, however, as a result of the shattered belief that education could solve social problems, the decline in enrollment and research funds, the over abundance of doctorates in the market place, the change in social priorities, lowered financial support, more statewide control, and increase in bureaucratization, the conditions under which this ideal professional situation arose and was sustained have largely disappeared. Consequently, the organizational and bureaucratic factors that directly affect the professional's freedom and ability to work increase. Yet, studies of faculty in higher education organizations have generally failed to analyze the consequences of this increasing bureaucratization for professional values and performance and for potential alienation from work.<sup>23</sup>

The increasingly bureaucratic features of colleges and universities loom large as forces potentially affecting and contributing to faculty alienation from work by more frequently and consistently coming into conflict with professional norms and orientations. As Morrissey and Gillespie have noted, the efficiency and effectiveness of any organization may be hampered when its members are alienated.<sup>24</sup> Thus if higher education institutions intend to maintain their educational standards, the investigation of work alienation among faculty is necessary.

In summary, further investigation into the work alienation of faculty is warranted on the grounds that there is a lack of substantive research in this area and also on the grounds that there is a need for such research if the viability and effectiveness of our educational institutions is to be maintained as they become more bureaucratic.<sup>25</sup>

#### Statement of Problem

The purpose of this research was to examine work alienation as one major consequence arising from the professional-bureaucratic dilemma for faculty in a university setting. More specifically, and following George Miller's research in the industrial setting for professional scientists and engineers, the relationship between work alienation and perceived organizational controls was investigated. In addition the relationship of educational level as well as discipline orientation upon the above was examined.

#### Research Questions

The following research questions guided this study:

- I. Is work alienation among faculty related to perceptions of selected factors of organizational control?
- II. Does work alienation, when measured as a function of these perceived organizational control variables, vary according to discipline orientation?
- III. Does work alienation, when measured as a function of these perceived organizational controls, vary according to level of education?

### Limitations

This study was limited to a population of faculty members associated with the Oklahoma State University. Oklahoma State University is a large, state-supported, land-grant institution in the southwest with an enrollment of approximately 22,000 students. Therefore the results of this study should not be generalized to a population at another campus that differs significantly from that of Oklahoma State University. A final caution is that the study investigated only one type of alienation, that of alienation from work, and did not investigate other dimensions of alienation, such as alienation from self, from the organization, and from society.

#### FOOTNOTES

<sup>1</sup>Amitai Etzioni, Modern Organizations (Englewood Cliffs, 1964), p. 1.

<sup>2</sup>Richard Hall, "Professionalization and Bureaucratization," American Sociological Review, 33:1 (February, 1968), p. 92.

<sup>3</sup>Among the earlier examinations of this development of interdependence, including some which focus on education, are: Logan Wilson, The Academic Man (New York, 1942); Peter Blau, The Dynamics of Bureaucracy (Chicago, 1955); Rogy Francis and Robert Stone, Service and Procedure in Bureaucracy (Minneapolis, 1956); Harold Wilensky, Intellectuals in Labor Unions: Organizational Pressures on Professional Roles (New York, 1956); Alvin Gouldner, "Cosmopolitans and Locals: Toward an Analysis of Latent Social Roles Parts I and II," Administrative Science Quarterly, 2 (1957, 1958), pp. 281-306 and pp. 444-480; Everett Hughes, Men and Their Work (Glencoe, 1958); and Leonard Reissman, "A Study of Role Conceptions in Bureaucracy," Social Force, 27 (1949).

<sup>4</sup>Peter Blau and W. R. Scott, Formal Organizations (San Francisco, 1962), p. 65.

<sup>5</sup>See for example: Melville Dalton, Men Who Manage Change (New York, 1959); W. R. Scott, "Professionals in Organizations--Areas of Conflict," in H. Vollmer and D. Mills (eds.), Professionalization (Englewood Cliffs, 1966), pp. 265-275; William Kornhauser, Scientists in Industry: Conflict and Accommodation (Berkeley, 1962); Michael Aiken and Jerald Hage, "Organizational Alienation: A Comparative Analysis," American Sociological Review, 31 (August), pp. 497-507; George Miller, "Professionals in Bureaucracy: Alienation Among Industrial Scientists and Engineers," American Sociological Review (October, 1967), pp. 755-767.

<sup>6</sup>Hall, "Professionalization and Bureaucratization," provides the most concise analysis of the past literature on the components of the professional and bureaucratic models.

<sup>7</sup>Elizabeth Morrissey and David Gillespie, "Technology and the Conflict of Professionals in Bureaucratic Organizations," The Sociological Quarterly, 16 (Summer, 1975), p. 319.

<sup>8</sup>Etzioni, p. 76.

<sup>9</sup>Kornhauser, pp. 195-197, cites this as the central problem of the interdependence of professionals and bureaucracies, particularly in the industrial setting. See also Hall, and Morrissey and Gillespie.

<sup>10</sup>See R. Bucher and J. Stelling, "Characteristics of Professional Organizations," Journal of Health and Social Behavior (1969), pp. 3-15; G. V. Engel and R. Hall, "The Growing Industrialization of the Professions," in Eliot Freidson (ed.), The Professions and Their Prospects (Beverly Hills, 1969); Paul Montagna, "Professionalization and Bureaucratization in Large Professional Organizations," American Journal of Sociology (1968), pp. 138-146; Erwin Smigel, The Wall Street Lawyer: Professional Organization Man (Bloomington, 1969); Hall, "Professionalization and Bureaucratization;" Morrissey and Gillespie; Perrow, pp. 52-58; James E. Sorensen and Thomas L. Sorensen, "The Conflict of Professionals in Bureaucratic Organizations," Administrative Science Quarterly (1974), pp. 98-106; George Ritzer, "Professionalization, Bureaucratization and Rationalization: The Views of Max Weber," Social Forces, 53:4 (June, 1975), pp. 627-636. For example: Although Hall, pp. 103-104, states that ". . . an assumption of inherent conflict between the professional . . . and the employing organization appears to be unwarranted" and maintains that "in some cases an equilibrium may exist between the levels of professionalization and bureaucratization," he still says that ". . . conflict may ensue if the equilibrium is upset between levels of professionalization and bureaucratization." Another example is presented by Morrissey and Gillespie. They establish that ". . . the presence of rules and procedures per se are not incompatible with professional autonomy, but rather, the kind of rules and procedures, and these are determined to a large extent by the nature of the organization's technology" (p. 330). Points of difference and conflict arise between the professional and his or her employing organization only when the technology of the organization is not compatible with that of the professional. Thus, according to Morrissey and Gillespie, a professional trained to be compatible with an intensive technology organization would be able to work without many conflicts or problems in an intensive organization. But this same professional would not be likely to work without conflict in a long-linked type of organization (p. 330).

<sup>11</sup>Leonard Pearlin, "Alienation from Work: A Study of Nursing Personnel," American Sociological Review, 27 (June, 1962), pp. 314-326; George Miller, pp. 755-797; Michael Aiken and Jerald Hage, "Organizational Alienation: A Comparative Analysis," American Sociological Review, 31 (August, 1966), pp. 497-507 are a few of the studies which have investigated alienation among professionals in bureaucracies.

<sup>12</sup>Aiken and Hage, "Organizational Alienation," pp. 497-507.

<sup>13</sup>George Miller, pp. 755-797.

<sup>14</sup>Geoffrey Isherwood and Wayne Hoy, "Bureaucracy, Powerlessness, and Teacher Work Values," Journal of Educational Administration, 11:1 (May, 1973), pp. 124-138, comment on this rich tradition of studies and lucid writings in the business and industrial sectors on the subject of alienation from work.

<sup>15</sup>Gerald Oncken, "Organizational Control in University Departments," Technical Report 71-20, Department of Psychology, University of Washington (June, 1971), pp. 1-51. Actually, as Gerald Oncken points out, the university is one important organization which has been left largely untouched by systematic observational techniques of social scientists. Thus, it comes as no surprise that the specific topic of alienation from work has received little attention in this setting.

<sup>16</sup>Alvin Gouldner, "Cosmopolitans and Locals: Toward an Analysis of Latent Social Roles I and II," pp. 282-306 and pp. 444-480, for example examined conflicts between professional and organizational commitments in private liberal arts colleges, but did not address the subject of alienation. Russell Thornton, "Organizational Involvement and Commitment to Organization and Profession," Administrative Sciences Quarterly, 15 (December, 1970), pp. 417-425, did a study similar to Gouldner's but for junior college teachers; and, of course, the early study on loyalty struggles between profession and organization in a university context by Theodore Caplow and Reece McGee, The Academic Marketplace (New York, 1958), does not deal with the concept of alienation either.

<sup>17</sup>Isherwood and Hoy, "Bureaucracy, Powerlessness, and Teacher Work Values," pp. 124-138. As the title indicates the "powerlessness" dimension of alienation, originally delineated by Melvin Seeman, "On the Meaning of Alienation," American Sociological Review, 24 (December, 1959), pp. 783-791, was the type or form of alienation researched by Isherwood and Hoy. This study, on the other hand, will examine a form of alienation that is more nearly approximated by Seeman's "Self-Estrangement" dimension.

<sup>18</sup>To cite only a few examples: George Miller, p. 759, when speaking of industrial research scientists, favorably compared the work environment of an industrial Basic-Science Lab as similar to that of the University. Scott, "Professionals in Organizations," p. 286, commented that universities are the most professionalized employers of professional people and attempt to adapt their organizational structure to the needs of the professional staff members, rather than requiring professional staff members to adapt to pre-existing bureaucratic requirements.

<sup>19</sup>Burton Clark, "The Role of Faculty Authority" (Paper presented at President's Institute, Harvard, June 20, 1963: ED 026 947), pp. 7-8, in a now rather dated study, observed in the sixties that ". . . though the elements of bureaucracy are strong, they do not dominate the campus." This is mainly because the authority of the professional in the university had been increased due to the competitiveness of the job market and availability of external funds.

<sup>20</sup>Etzioni, p. 76, classes universities among his full-fledged professionals in these organizations and indicates that professionals in these organizations are free to decide what they want to do and how they are going to do it.

<sup>21</sup>Burton, "Role of Faculty Authority," pp. 7-8, quotes Clark Kerr as saying that faculty power in the sixties was largely due to the availability of external sources of support and the competitive market in which few qualified Ph.D.'s were found. Victor Baldrige, "The Impact of Institutional Size and Complexity on Faculty Autonomy," Journal of Higher Education, 44 (1973), pp. 532-547, elaborates on this theme and also on the inverse situation which exists in the seventies.

<sup>22</sup>Baldrige, p. 532.

<sup>23</sup>Kornhauser, p. 293, refers to the negative consequences of organization pressures for professional values and performance in the industrial setting and notes that students of organizational theory have failed to investigate these possible negative consequences even in the industrial setting, which, by and large, is ahead of similar research in the educational environment.

<sup>24</sup>Morrissey and Gillespie.

<sup>25</sup>Frank Newman, "Taking the Helm," in The Third Century (New Rochelle, 1974), p. 116, has noted that higher education is steadily becoming more and more bureaucratized with ". . . multi-campus systems and 1201 commissions; federal and state regulations; unions and system-wide personnel practices, teaching load requirements and cost per full-time equivalent student; affirmative action and grievance procedures; lawyers and courts; budget reviewed and budget re-reviews; WICHE systems to standardize terminology; accounting practices and rank and serial numbers."



## CHAPTER II

### REVIEW OF THE LITERATURE

#### Introduction

Since this study examines work alienation as one consequence of the professional-bureaucratic dilemma for faculty members employed at a large state-supported University, this chapter is used to present a review of the literature that will provide an understanding of the major concepts involved. The chapter has been divided into two major sections. The first section deals with the concept of alienation from work, its various formulations, and the formulation chosen for the purposes of this study. The second section deals with the professional-bureaucratic dilemma by presenting models for both the professional and bureaucratic modes of organizing the work activity. These models are then used to describe and discuss the major sources of conflict for the professional employed in an organizational context.

Each section is summarized and contains references to studies undertaken in the field of education, particularly higher education, which are germane to the present study.

#### Alienation

##### Background

Alienation has in many ways been the watchword of the twentieth

century and is a persistent theme both in modern novels and in commentaries about modern life and man.<sup>1</sup> In a recent study on alienation by Schacht attention is called to the frequency with which the term alienation is used:

It is becoming increasingly common to hear life in the present age characterized in terms of 'alienation'. . . . We hear of 'alienation' in critiques of the nature of work in modern industry and bureaucratic organizations, the quality of life in middle class bourgeois society, the relation of government to the governed, and the neglect and dispoilment of our environment.<sup>2</sup>

The frequency with which the term is used, however, is not paralleled by a corresponding consistency in the meaning of the term. Different writers, sociologists and philosophers tend to use the term in different ways, which results in a confusing proliferation of concepts. "Indeed," notes Schacht, "one gets the impression that they think they are all discussing the same thing."<sup>3</sup>

The confusion and misunderstanding surrounding the general concept of alienation has been commented upon by a number of other scholars as well. Peter Ludz, for example, in a recent overview of the concept of alienation, states that it can be employed in any sphere of social life being researched; is often used to denote subjective feelings and objective facts, often simultaneously; and is used in global as well as analytical-empirical studies without sufficient definition. He concludes with the warning that as a result ". . . alienation is always in danger of becoming an empty formula."<sup>4</sup> Ada Finifter, in her anthology of selections on alienation concurs with Schacht and Ludz: "So many meanings have been attributed to this concept, many of them vague and mystical, that it verges on losing much of its scientific utility."<sup>5</sup> Igor Kon, when discussing the concept of alienation as it is used in

modern sociology, goes even further than Finifter, and on the basis of the several possible meanings of the term alienation as well as its vagueness, states that as a scientifically analytical concept it is unsatisfactory.<sup>6</sup>

The confusion surrounding the conceptualization of alienation has been traced by scholars to the two major sources of the current usage, ". . . the Hegelian-Marxian concept of Entfremdung and Durkheim's concept of anomie."<sup>7</sup> Steven Lukes maintains that underlying these two approaches to the concept of alienation are two distinct understandings of human nature: Emile Durkheim assumes man's nature as requiring a certain amount of social control happiness. Thus, with the breakdown of societal norms a condition of individual anomie (normlessness) results. Marx, on the other hand, assumes that the full realization of human powers can only take place when his activities and way of viewing himself are not dictated by a system within which he and other men play specified roles. According to Marx, more societal restraints are imposed upon an individual's attempts to realize his own powers and potential, the more he is alienated, from himself, from his work, and from other men.<sup>8</sup>

However, the use of the term alienation in recent sociological literature is by no means consistent with either Durkheim or Marx's conceptualization. Although it is difficult to generalize about the use of the term, Schacht and Finifter both note that it is typically (but not always) used in connection with some form of separation of the individual from some aspect of society,<sup>9</sup> with the apparent diversity of things subsumed under the term alienation handled by an understanding of the concept as multidimensional.<sup>10</sup>

It is not within the scope of this study to sort out the theoretical confusion and empirical chaos surrounding the many conceptualizations and applications of alienation. An excellent summary of the more recent scholarly attempts to establish order in both the theoretical and empirical domains is provided by Forsyth and Hoy.<sup>11</sup>

Since this study centers on professionals and their alienation from work, the Review of the Literature will be limited to the theoretical and empirical aspects of alienation from work. It must be reiterated, however, in light of the above discussion that alienation from work is only one type of alienation.

#### Alienation from Work

When investigating the relationship of man to his work, the term alienation is frequently applied. However, ". . . there is no uniformity in the way in which alienation from work or alienated work<sup>12</sup> is conceived, in spite of the fact that virtually all those who use the expression acknowledge that they do so under the influence of Marx."<sup>13</sup> Marx's understanding of human nature and its relationship to a social system has already been alluded to above. His understanding of alienation from work in conjunction with his understanding of the nature of man requires further explication.

#### The Marxian Formulation

Marx's formulation of alienation from work is important primarily because it is with Marx that alienation first becomes a sociological rather than a metaphysical or theological concept.<sup>14</sup> Consequently, almost all studies on alienation, and alienation from work in particular,

use Marx's formulation rather than Durkheim or Hegel's as their focal point.

In his early writings Marx distinguishes four aspects of alienation, which he views as occurring in a stepwise fashion: (1) alienation from objects produced; (2) alienation from the work process itself; (3) alienation from oneself; and (4) alienation from fellow workers and other men in general. Man, according to Marx, is alienated from his work when it is not part of his nature, which means that his work has no connection with his own interests or his own personality. Only when man's work is a spontaneous, free, and self-directed activity is he not alienated from his work.<sup>15</sup> In Schacht's words, man for Marx is not alienated from his work only when that work ". . . reflects his own interests . . . and is prompted by his own need to build or create or do something of his own choosing. It must, in short, be precisely what he wants to do."<sup>16</sup> Simply stated, it must be labor which is performed for its own sake, as an end in itself. It is when work is no longer free and self-directed that the relationship between man and his work is characterized by Marx in terms of alienation. As long as man is engaged in a work activity through which he realizes, expresses and develops himself, he is satisfying a basic need according to Marx. When work becomes a means for satisfying other needs, or when it is performed under the direction of another and not himself, it loses its human significance and worth.<sup>17</sup>

With the original Marxian concept of work alienation clarified, the various approaches analyzing this phenomenon in the work environment can now be reviewed. The review is limited to those empirical studies purporting to measure alienation from work in Marxian terms.

### Current Formulations

Many scholars, including Schacht, Finifter and Golubovic, have pointed out that these studies are predominantly subjective considerations or measures of work alienation, whereas Marx's formulation emphasized objective states.<sup>18</sup>

The major studies which directly pertain to this study are highlighted with Schacht's assistance. Schacht categorized the major studies on alienation from work using their different formulations of the term. The three categories are: (1) job dissatisfaction, (2) dissatisfaction with the degree to which one's work is self directed, meaningful to one, and self expressive, or (3) the feeling that one's work is intrinsically satisfying.<sup>19</sup>

Each of the formulations employed for alienation from work is always compared with Marx's original formulation of the concept. Those formulations and/or operational definitions most nearly approximating the Marxian one will be considered as more appropriate and used as guides for this study.

(1) Aiken and Hage's examination of the relationship between two types of alienation in a comparative study of 16 welfare organizations exemplifies the utilization of the first category of alienation from work: job dissatisfaction.<sup>20</sup>

Alienation from work is described and characterized by Aiken and Hage as reflecting ". . . a feeling of disappointment over the inability to fulfill professional norms."<sup>21</sup> Although Aiken and Hage maintain that this type of alienation can be compared with Marx's alienation from the process of production,<sup>22</sup> the above statement about alienation

from work clearly emphasizes the satisfaction a professional employee has with regard to his professional status expectations. Aiken and Hage's index of work alienation consists of the following six questions:

1. How satisfied are you that you have been given enough authority by your board of directors to do your job well?
2. How satisfied are you with your present job when you compare it to similar positions in the state?
3. How satisfied are you with the progress you are making towards the goals which you set for yourself in your present position?
4. On the whole, how satisfied are you that (your superior) accepts you as a professional expert to the degree to which you are entitled by reason of position, training and experience?
5. On the whole, how satisfied are you with your present job when you consider the expectations you had when you took the job?
6. How satisfied are you with your present job in light of career expectations?<sup>23</sup>

As Schacht has pointed out, Aiken and Hage's index and definition of alienation from work "is conceived in terms of dissatisfaction with the limitations and associated with one's position in the hierarchy of employment" and not with ". . . whether or not one's productive activity is spontaneous and self-directed, and has no end other than the expression and development of one's personality."<sup>24</sup> The latter, however, is the crucial consideration for Marx in his delineation of the concept of work alienation. Schacht, as well as George Miller and Finifter, argue persuasively that one can be quite satisfied with the conditions of one's job but still be alienated from one's work.<sup>25</sup>

Thus the finding of Aiken and Hage, that alienation from work is more prominent in highly centralized and highly formalized organizations, when restated in terms of its operationalization as job satisfaction ". . . hardly seem noteworthy."<sup>26</sup>

(2) Blauner's study, which analyzed the effects of various patterns of industrial organization on several different types of alienation for workers,<sup>27</sup> is representative of Schacht's second category: dissatisfaction with the degree to which one's work is self-directed, meaningful to one, and self-expressive. Blauner builds on Seeman's categorization of the types of alienation as identified in the literature.<sup>28</sup> Blauner defines alienation as existing

when workers are unable to control their immediate work processes, to develop a sense of purpose and function which connects their jobs to the overall organization of production, . . . and when they fail to become involved in the activity of work as a mode of self-expression.<sup>29</sup>

Blauner appears initially to be investigating the relationship of the individual to his work in a manner consistent with the Marxian formulation. However, work for Blauner, in contrast to Marx, can indeed have meaning and enhance self-expression for the individual worker when he feels his work has a purpose and contributes to some meaningful result (not, however, of his own determination).<sup>30</sup> This type of work, however, may still not be labor performed for its own sake, as Marx ideally would have it.

(3) The studies of Seeman, Middleton and George Miller are prime examples of studies falling into Schacht's third category of work alienation: a feeling that one's work is not intrinsically satisfying. These authors adhere the closest to the original Marxian formulation of work alienation.<sup>31</sup>

Seeman categorizes and discusses five separate conceptualizations and uses of alienation found in a wide variety of writings: powerlessness, normlessness, meaninglessness, isolation, and self-estrangement. He does not suggest that his categories constitute an exhaustive taxonomy



of Alienation. Indeed there have been other studies providing alternative ways of organizing the formulations of alienation.<sup>32</sup> None, however, has been as influential or inspired the number of empirical studies that Seeman's has.<sup>33</sup>

Of the five types of alienation designated by Seeman, the one most closely approximating Marx's alienation from work is "self-estrangement."

The second feature of self-alienation [self-estrangement] . . . is that aspect of self-alienation which is generally characterized as the loss of intrinsic pride in work, a loss which Marx and others have held to be an essential feature of modern alienation.<sup>34</sup>

In a subsequent article Seeman further elaborates on the notion of work alienation as work which is "not intrinsically satisfying" by measuring it in terms of negative responses to questions which ". . . ask essentially whether the respondent finds his work engaging and rewarding in itself."<sup>35</sup>

The idea of intrinsically meaningful activity as behavior which does not focus on rewards that lie outside the activity itself or upon some anticipated future reward or result is closely allied to Marx's formulation of alienation from work.

Middleton, in his 1963 study on "Alienation, Race and Education,"<sup>36</sup> follows Seeman, and thus also the Marxian tradition, by defining and measuring work alienation as someone who agrees with the statement, "I don't really enjoy most of the work that I do, but I feel that I must do it in order to have the things that I need and want."<sup>37</sup>

An important study on work alienation, particularly since it deals with the alienation from work of professionals is that of George Miller, "Professionals in Bureaucracy: Alienation Among Industrial Scientists and Engineers."<sup>38</sup> Miller also follows Seeman's lead and measures work

alienation by an index ". . . consisting of statements referring to the intrinsic pride or meaning of work."<sup>39</sup> This conceptualization and measure of work alienation is explicitly chosen by Miller because it recalls and corresponds to the Marxian formulation of alienated work as "work which is not performed for its own sake, as an end in itself."<sup>40</sup> Furthermore, Miller clearly understands and states the distinction between work alienation and job dissatisfaction, ". . . a person may be alienated from his work, yet still be satisfied with his job," quoting Mills' and Wilensky's arguments against those measures or studies which equate work alienation with job dissatisfaction.<sup>41</sup> Miller's study, then, is particularly appropriate because he logically--via Seeman--relates his concept of work alienation to Marx's and also clearly distinguished it from the measure or conceptualization of work alienation as job dissatisfaction, which has been mistakenly used as a measure of work alienation.<sup>42</sup>

#### Summary of Alienation from Work

Alienation is a persistent modern theme which is employed in almost every sphere of social research and which possesses such a variety of meanings that it verges on losing any scientific and conceptual utility. Much of the confusion surrounding the general concept of alienation stems from the distinctions between Marx and Durkheim's formulations. This examination of the concept of alienation has focused on work alienation with a view toward delineating that formulation of work alienation most suitable for this research.

This research examines work alienation, rather than cultural,

social or self-alienation, as one consequence of the professional-bureaucratic dilemma. Work which is not part of man's nature, which has no connection with his own interests or his own personality, which is neither free nor self-directed and which lacks spontaneity<sup>43</sup> was chosen as the reference point against which subsequent analyses and more modern studies have been categorized and judged.

Although a case can be made for considering any one of the three categories or conceptualizations and measures of work alienation, as identified by Schacht, as alienation from work, the close approximation of the last category examined the Marxian formulation, will here be considered as corresponding to Seeman's fifth type of alienation (self-estrangement) and defined as lack of intrinsic pride in or meaning of work.

A review of the specific research studies conducted on work alienation in the field of education, particularly higher education, reveals a rather startling void. Alienation of students, particularly during the decade of the sixties, was the subject of much research,<sup>44</sup> and alienation of teachers on the primary and secondary level<sup>45</sup> has been and is currently under investigation by Hoy and his colleagues. However, these studies focus primarily upon developing and investigating Seeman's dimension of powerlessness rather than his dimension of self-estrangement, under which alienation from work is subsumed.

Otherwise the alienation from work of professionals in higher education has been limited to a minor component of a much larger study<sup>47</sup> or has fallen into the category of articles which provide little empirical evidence or logical argumentation and much emotional rhetoric.<sup>48</sup>

## Professional-Bureaucratic Dilemma

### Professional Models

In recent decades the increase in both the professionalization of work and the bureaucratization of organizations has made the analysis of professionals employed by organizations an important topic.<sup>49</sup> The central issue in these analyses is the problem of conflict between the professional and bureaucratic modes of organizing the work activity.<sup>50</sup>

Simplified professional and bureaucratic models are typically used as a starting point for delineating the types of conflict that may occur when professionals are employed by an organization.<sup>51</sup> It needs to be noted, however, that conflict is not inevitable among all the dimensions of these two models. Several authors, in fact, have attempted to specify those conditions which precipitate or preclude conflict on certain dimensions.<sup>52</sup> Morrissey and Gillespie, for example, suggest that the type and degree of organizational technology may have a significant influence on the type and degree of conflict.<sup>53</sup> When the character of the professional's work activity is compatible with the technology of the organization, then differences and conflicts are minimized. When these two are not compatible, differences and conflicts emerge. Perrow has also argued against the simplistic notion of inherent incompatibility among all dimensions of the two models. He notes that administrators and managers are also professionals and have a special expertise. This expertise may be different from that of the professionals supervised without there, of necessity, being any conflicts between the two groups as Parsons and other sociologists have contended. Perrow's understanding, however, does not preclude the possibility of the administrative and

professional expertise coming into conflict as the power of the former over the latter increases.<sup>54</sup>

Hall summarized the attributes and characteristics of both the professional and bureaucratic models as advanced by various authors.<sup>55</sup> In his analysis of attributes of the professional model as delineated by previous scholars, Hall distinguishes two groups of characteristics: those which are part of the structure of the particular occupation, such as formal education and entrance requirements; and those which are attitudinal, such as a sense of calling and colleague reference group.<sup>56</sup> Following the 1964 formulation of the professional model by Wilensky,<sup>57</sup> Hall specifies the following four structural attributes of the professional model:

- (1) creation of a full-time occupation
- (2) establishment of a training institution
- (3) formation of a professional association
- (4) formation of a professional code of ethics both for internal and external relations which are designed to be enforced by the association.<sup>58</sup>

While the structural characteristics set out the basic parameters of the professional model, they are so broad that many occupations could qualify as professions based on the structural attributes alone. The following five attitudinal attributes of Hall's professional model, however, are more to the point. They focus upon the individual's attitude toward and relationship to his profession. Moreover, one of the attitudinal attributes specifically deals with the professional's relationship to his work. Therefore, these five attitudinal attributes are more suited to the present study which deals with work alienation.

- (1) The major reference groups as the sources of ideas and judgments are other professionals and the professional organization.<sup>59</sup>
- (2) The belief that the work performed is an indispensable

service to the public at large while at the same time benefiting the professional.<sup>60</sup>

- (3) Self-regulation and/or colleague control because only other professionals are regarded as qualified to judge the work of other professionals.<sup>61</sup>
- (4) A sense of calling and dedication to his or her work to such an extent that if fewer extrinsic rewards were available he would probably do the work anyway.<sup>62</sup>
- (5) Autonomy or the belief that professional decisions ought to be made by the professional himself and without being subject to external organizational controls and pressures.<sup>63</sup>

These structural and attitudinal attributes, then, comprise the professional model as delineated by Hall.

### Bureaucratic Model

The dimensions of the bureaucratic model, cited by Hall, are derived from Weber's original discussion of bureaucracy.<sup>64</sup> The following characteristics of the bureaucratic model also follow substantially the analysis of Weber's concept of bureaucracy as set forth by Blau and Scott except for one characteristic: employment by the organization constitutes a career for officials.<sup>65</sup> In Weber's view, according to Blau and Scott, the full-time employee in a bureaucracy ". . . looks forward to a life-long career in the agency."<sup>66</sup> This is an important aspect of the concept of bureaucracy and must be added to the following attributes of bureaucracy as specified by Hall:

- (1) The hierarchy of authority--the extent to which the locus of decision making is prestructured by the organization.
- (2) Division of labor--the extent to which work tasks are subdivided by functional specialization decided by the organization.
- (3) Presence of rules--the degree to which the behavior of organizational members is subject to organizational control.
- (4) Procedural specifications--the extent to which organizational members must follow organizationally defined techniques in dealing with situations which they encounter.

- (5) Impersonality--the extent to which both organizational members and outsiders are treated without regard to individual qualities.
- (6) Technical competence--the extent to which organizationally defined universalistic standards are utilized in the personal selection and advancement process.<sup>67</sup>
- (7) Employment by the organization constitutes a life-long career.<sup>68</sup>

### Conflicts

The professional who is employed in an institutional context may be thus subject to two different sets of principles for organizing his work activities. The conflicts which may result between various dimensions of the professional and bureaucratic models in this situation have been the subject of many studies.<sup>69</sup>

One of the major sources of potential conflict in this situation is in the realm of authority relations and/or control structures.<sup>70</sup> The professional and the organization can have divergent authority patterns or control structures that are basically incompatible. As Etzioni has pointed out the essence of the organizational principle in a bureaucracy is control and coordination of all work activities to achieve the ends or goals of the organization.<sup>71</sup> Weber maintained that this coordination and control was achieved by a line authority structure in which subordinates accepted the rules and orders of supervisors as legitimate because the higher the rank of an official, the better equipped he would be to make a rational decision.<sup>72</sup> Performance in a bureaucracy is controlled and evaluated by one's superiors.

The demand for compliance to organizational rules and procedures and to directives from superiors is significantly different from the distinctive control structure of the professional. The control

structure of the professional rests upon a superior expertise in an acquired body of knowledge, an internalized professional code of ethics governing conduct supported and regulated by a peer colleague group,<sup>73</sup> and autonomy in decision-making and task operation.<sup>74</sup>

One source of conflict, then, is clear. Professionals employed in an organization may refuse to accept and adhere to the typical hierarchy of authority relations which exist in bureaucracies. As Parsons has contended, professional authority is based on the professional's own superior expertise and competence which is apart from the concept of hierarchical authority.<sup>75</sup> Furthermore, Scott has stated, that the professional even resists taking orders from his professional colleagues whom he considers qualified. He adds that if this is so ". . . how much more will he object to the orders received from persons not qualified in his specialty?"<sup>76</sup> Professionals expect to work independently, perhaps seeking the advice, counsel or help of more experienced and competent colleagues, but still making their own decisions and accepting the consequences.

Many studies have indicated that many kinds of professionals are indeed both uncomfortable and dissatisfied with the typical supervisory and managerial arrangements of their organizations, and that conflicts in the area of authority relations for professionals employed in a bureaucracy are widespread.<sup>77</sup>

The differing authority structures of the professional and bureaucratic models cannot easily be separated from that most important professional attribute, autonomy;<sup>78</sup> the perception that professional decisions concerning the work activity ought to be made by the professional himself without being subject to external organization pressures



and controls.<sup>79</sup> Individual autonomy in the work setting for a professional means that he is to decide and direct his own activities toward desired ends free from constraining regulations and interference from others.<sup>80</sup> The professional expects the freedom to make decisions, to take responsibility, and to make judgments independent of the organization and dependent only upon the internalized norms of his professional group.<sup>81</sup>

Bureaucracies, however, strive to make those types of decisions for the professional that he alone feels competent to make and that he should make. As bureaucratization increases, it comes more frequently into direct conflict with the professional's strong drive for autonomy. Indeed, Hall demonstrated that the variable of professional autonomy was the one most threatened and undermined by increased bureaucratization.<sup>82</sup>

The final area of potential conflict between the professional and bureaucratic models considered here centers around the sense of calling and dedication a professional has to his work.<sup>83</sup> Hall even goes so far as to state that the fewer the material rewards the higher the level of dedication of the professional is likely to be.<sup>84</sup> In the industrial sector it has been demonstrated by Orsack that the work of professionals plays a much more important role in their life than it does for the non-professional worker.<sup>85</sup> This orientation to one's profession or work, almost with a sense of calling, rather than to one's employing organization has also been the subject of extensive investigation. Hughes, Reissman, Caplow and McGee, Wilensky and Gouldner, in studies dealing with many different types of professionals, found that they tended to be oriented more toward given professional group norms that were outside of a specified organization.<sup>86</sup> Moreover, most of these studies also

concluded that professionals who have a high commitment to their professional work manifest a lack of loyalty to any particular organization.<sup>87</sup> The professional's commitment to his work may come into conflict with the requisite demands of the organization for loyalty to its goals, means, directives, control structures and norms. Thorton and others have noted that many professionals ". . . are able to harmoniously relate their organizational and professional activities if their situation within the organization reaffirms certain principles of professionalism."<sup>88</sup> However, when the organization norms begin to impinge upon the professional's commitment to his work, he may simply find a location ". . . which has superior facilities and allows a maximum of freedom for him to pursue his interests."<sup>89</sup> Thus the professional who is highly committed to his work and his interests tends to manifest a lack of loyalty to any one particular organization and a willingness to move from one employer to another.<sup>90</sup>

Clearly the professional's commitment and loyalty to his own interests and work is paramount and may conflict with many dimensions of the bureaucratic model, but most decidedly with that characteristic of bureaucracy which views employment by a specific organization as a lifelong career or commitment.<sup>91</sup> Professionals have a lifelong commitment to their work, not their employing organizations.<sup>92</sup>

### Summary

The major sources of potential conflict along the dimensions of control structures, autonomy, and work commitment of the professional-bureaucratic models have been examined with particular attention given to the case of a professional employed in an organizational context.

The hierarchy of authority, presence of organizationally based rules and procedures governing the work environment in a bureaucracy were seen to be particularly incompatible with the professional attributes of self-regulation and autonomy.<sup>93</sup> Performance and work in a bureaucracy is controlled by directives received from superiors rather than from self-imposed choices and standards, and peer-group surveillance, as is the case among professionals. Because professional authority is based on a sense of superior expertise rather than organizational position, it may come into direct conflict with the first five dimensions of a bureaucracy as specified by Blau and Scott.

Furthermore, the professional's sense of calling and dedication to the intrinsic rewards of his professional work may result in an ambivalent commitment to the employing organization. As long as the professional is afforded the autonomy and self-regulation to pursue his "calling," the professional and the bureaucracy can exist in harmony. But when the employing institution demands increasing adherence by the professional to bureaucratic norms, the professional will feel threatened and finds himself in conflict with the institution.

### Professional Training

#### Importance

Hall has suggested that one of the sources, as well as the strengths, of the conflicts between professional authority and bureaucratic hierarchy ". . . appears to be based on the kind of socialization which has taken place both in the professional's training program and in the work itself."<sup>94</sup> In the industrial sector the impact of the professional's training program, i.e. education, has been described by Orth as

appearing ". . . to predispose those who go through it to unhappiness and rebellion when faced with the administrative process as it exists in most organizations."<sup>95</sup>

### Type of Professional Training

Kornhauser goes even further than Orth and contends that the type of professional training affects the identification and loyalty a professional feels to the profession as opposed to the organization.<sup>96</sup>

Becker and Carper also noted significant differences in the professional versus bureaucratic identification of students majoring in engineering and those majoring in psychology.<sup>97</sup> While the engineers felt that their future lay somewhere within the system, the psychologists did not. This contention of a difference in degree of professional identification according to type of training or education has been pursued extensively within the industrial setting.<sup>98</sup> The arguments and conclusions generally agree that professionals trained as engineers typically identify more readily with the organization because they see a concurrence of their goals and the goals of the organization. Professionals trained as scientists, however, tend to identify less readily with the organization and more with their own professional work because they seek rewards in their own work--not the system--and thus resist the atmosphere which puts pressure on them to conform to organizational norms.<sup>99</sup>

Even within the industrial sphere, then, it is evident that not all types of professionals necessarily come into conflict with the demands placed upon them by their employing organizations. The degree to which bureaucratic work norms are offensive to the professional can be a function of the type of professional training or education he has undergone.

The professional's educational program can diverge to a greater or lesser extent from those norms and standards utilized to guide the actual operation of an organization.<sup>100</sup> Not all professional groups require the same high-level identification with the norms of the professional model.

Within the sphere of education a few studies have substantiated the same general impact of type of educational program on the degree of identification with professional norms. At the primary and secondary level Kuhlman, in his study of the adjustments of teachers to the demands of the organization during the first year of teaching, found that

the bureaucratic orientation of teachers trained in liberal arts colleges was significantly lower than that of teachers trained in more traditional teacher education colleges. Deference to the norms of bureaucracies and identification with the hierarchical power structure within organizations did not appear to be a general characteristic of liberal arts college trained teachers, a finding consistent with the philosophy of a liberal arts education.<sup>101</sup>

Blau in his empirical study, On the Nature of Organizations, found that research oriented academics ". . . enmeshed in the wider community of scientists or scholars in their discipline . . . limit their local commitment . . ." to the organization, whereas "individual faculty members who emphasize the importance of teaching are considerably more loyal to their institution."<sup>102</sup>

Within the realm of higher education, then, those whose training and discipline largely leads them to follow the established guidelines of a received body of knowledge who deal with more applied and practical matters appear to have a weaker identification with and loyalty to the professional norms than those professionals who wish to work on the frontiers of knowledge and who deal with matters less directly practical.

### Level of Education

In addition to differences in type of professional training and consequent impact upon degree of professional identification, differences in the actual length or level of the professional's educational program are related to the degree of professional versus bureaucratic commitment. Thorton, along with Becker, Cogan, Goode and Greenwood, argue that one of the most important characteristics of a professional is the level of education: "None [of the characteristics] seems more important, however, than the level of education of the members of the profession. . . . The higher level of education is probably the primary basis for their professionalism."<sup>103</sup> Scott argues in agreement with Thorton that longer training periods furnish the time necessary for a more complete and successful inculcation of professional values and norms, particularly regarding the work activity.<sup>104</sup> Simply prolonged and intensive contact with a training or educational institution may have profound consequences upon the degree of a professional's commitment to an employing organization. And indeed, George Miller's results partially support this contention. He found that the level of education has an impact on professionals' reactions to organizational controls.<sup>105</sup>

Blau deals with this issue within the sphere of higher education.<sup>106</sup> He addresses the problem of "how varying conditions of academic life influence the orientations of faculty members to work in their discipline and to their own institutions."<sup>107</sup> Even though Blau is focusing specifically on the influence of the colleague climate independent of an individual's training and of institutional conditions, he, nonetheless, draws some conclusions which are pertinent here. Graduate education, Blau

maintains, socializes and trains many faculty members for research, and he finds that "faculty members who have advanced degrees are actively involved in research more than those who do not."<sup>108</sup> Moreover, a faculty member's involvement in research "reduces his commitment to his place of employment."<sup>109</sup> Thus, in line with the arguments of Scott, Thorton, and George Miller, Blau indicates that length of training, leading to a commitment to research, results in a decreased allegiance to the employing institution.

### Summary

It has been argued and substantiated that the type or character as well as the level of the educational program of a professional affect the degree and strength of his professional versus bureaucratic orientation. The degree of commitment to professional norms is weaker for professionals, whose education is of a more applied and practical nature because their professional goals are more easily integrated into and congruent with those of the bureaucratic structure of an employing organization. Thus engineers, engineering majors, school teachers trained in schools of education and faculty who emphasize teaching were found to be less professionally oriented than research scientists in industry, psychology majors, school teachers educated in liberal arts colleges, and faculty members who preferred research activities. The length or level of the training/educational program was also found to have similar effects. The longer the training period, the more the individual identified with professional as opposed to bureaucratic norms regarding work. This was demonstrated to be the case with the industrial setting as well as the educational setting.

### Rationale and Hypotheses

In the previous literature review work alienation was examined from the perspective of its theoretical formulation by Marx. According to Marx, man is alienated from his work when his work is not part of his own interests, is neither free nor self-directed and lacks spontaneity. Only when man is engaged in a work activity that realizes, expresses and develops himself is he satisfying one of man's basic needs. When work becomes a means for satisfying other needs, not done for its own sake, or when it is performed under the direction of another and not oneself, it loses its human significance and worth.<sup>110</sup> The formulation of work alienation in Seeman's study was seen to adhere closely to the Marxian one. According to Seeman, man is alienated from his work when it is not intrinsically satisfying, engaging, rewarding and meaningful in itself.<sup>111</sup>

It is exactly work which is intrinsically rewarding and meaningful, which is done for its own sake, and which is self- and not other-directed, that is central to the professional model and relates directly to the preservation and continuation of a professional orientation.<sup>112</sup> The paramount importance of intrinsically meaningful and self-rewarding work for the professional is underscored by Weber himself, as evidenced in the following comment on the professional scientist:

Whoever lacks the capacity to put on binders, so to speak, and to come up to the idea that the fate of his soul depends upon whether or not he makes the correct conjecture at this passage of his manuscript may as well stay away from science, he will never have what one may call the 'personal experience' of science. Without this strange intoxication, ridiculed by every outsider; without this passion, this 'thousands of years must pass before you enter into life and thousands more wait in silence'--according to whether or not you succeed in this conjecture; without this, you have no calling for science and



and you should do something else. For nothing is worthy of man unless he can pursue it with passionate devotion.<sup>113</sup>

Within the field of higher education specifically the importance of work to faculty has been commented upon. Clark observes:

Academic man is a case of the modern professional man in the organization, but he is in some respects an extreme and special case. Of all professionals, academic man needs rather extreme autonomy, for research that leads where he knows not, or for teaching that is unfettered by dictated dogma, or of scholarship that follows the rules of consistency and proof that develop within a discipline.<sup>114</sup>

Baldrige adds:

Not only does the professional want control over the core tasks of teaching, research, and service, he needs to be able to determine the means by which these tasks are accomplished . . . to decide work patterns, to actively participate in major academic decision-making, to have work evaluated by professional peers, and to be relatively free of bureaucratic regulations and restrictions.<sup>115</sup>

The bureaucratic orientation toward work diverges sharply from the professional orientation. As Etzioni pointed out, the essence of the organizational principle in bureaucracy is control and coordination of all work activities to achieve the ends or goals of the organization.<sup>116</sup> The work activity is only important as a means of contributing to some other outcome and not as an end in itself. In an effort to achieve the control and coordination necessary to reach organizational goals beyond or outside of any individual's specific work activity, bureaucracies strive for compliance with organizational rules and procedures and with directives from superiors in the hierarchical line authority structure. Furthermore, a commitment to the organization and its goals by individual employees must supercede in importance any commitment to specific work activities.<sup>117</sup>

When a professional is employed in a bureaucratic organization,

certain conflicts regarding the professional's work may arise. In the literature review the professional and bureaucratic models provided the framework for examining these potential conflicts. Conflicts were seen to occur because of the differences in the two models' authority and control structures, degree of autonomy, and commitment to a specific work activity.<sup>118</sup> Many professionals were found to be uncomfortable and dissatisfied with the typical supervisory and managerial arrangements in their employing organizations.<sup>119</sup> Indeed, increased bureaucratization, which tends to make exactly those decisions concerning the work situation which the professional alone feels competent to make, has been demonstrated by Hall as threatening an important variable of the professional model--autonomy.<sup>120</sup> Finally, various authors were cited who demonstrated the professional's commitment and loyalty to his work rather than to his employing organization.<sup>121</sup>

Therefore, when a professional is employed in a bureaucracy which attempts to exert organizational control over his work activity, the professional's relationship to that work activity, to the degree in which the bureaucracy is successful at achieving its ends, will be undermined. When the professional no longer has a substantial amount of autonomy over his work activity, when his work is not self-directed but performed under the guidance and control of another, when his work becomes a means to another end rather than an end in itself, then that professional can no longer possess maximum intrinsic pride in a meaningful work activity. He is, therefore, alienated from his work according to the traditional Marxian formulation and understanding of work alienation.

Some evidence already exists within the industrial sector that this is indeed the case. George Miller's research on alienation from work of industrial scientists and engineers indicated that when organizational controls violate or impinge upon the professional's mandate for freedom of choice as regards his work, he was indeed alienated from his work.

This present study examined work alienation within the context of higher education. Faculty members in a university context have been regarded as the most ideal of professional types.<sup>123</sup> Consequently, as organizational controls increasingly impinge upon the work activities of faculty, it is predicted that the intrinsic pride they have in their work and the intrinsic meaning of their self-rewarding and self-directed work will no longer be possible, resulting in the faculty becoming alienated from their work. This leads to the first major hypothesis.

Hypothesis I: Work alienation is positively related to perceived organizational control.

In the Review of the Literature the degree of identification with the norms of the professional model by professionals was also explored. Several studies indicated that at least two variables had an impact upon the degree of a professional's commitment to professional norms. These were the type or character of the professional's educational/training program and the actual length of the educational/training program. The affiliation of the professional with the norms of the professional model was found to be weaker as the length of the educational period decreased and/or as the nature of the educational programs became more applied rather than pure in emphasis.<sup>124</sup> These two variables, then, affect the degree of commitment by professionals to professional norms, and thus,

those professionals with a stronger resultant commitment to professional norms should be more adversely affected by increased bureaucratization.

It is this type of professional who should be even more alienated from his work when organizational controls impinge upon his self-determined, intrinsically meaningful work activity. The second and third major hypotheses to be tested dealt with the conditioning effects on alienation from work of level and education and type of educational program, here understood to be the nature of the discipline orientation of the faculty member.

Hypothesis II: Alienation from work should be positively related to perceived organizational control, and this relationship should vary according to discipline orientation with work alienation being greater for a pure discipline orientation than for an applied.

Hypothesis III: Alienation from work should be positively related to perceived organizational control, and this relationship should vary according to level of education with the higher level of education having the greater work alienation.

## FOOTNOTES

<sup>1</sup>In the fifties and early sixties "alienation" was constantly mentioned and indexed in such seminal books as: Herbert Marcuse, One Dimensional Man (Boston, 1964); Erich Fromm, The Sane Society (New York, 1955); Erich Kahler, The Tower and the Abyss (New York, 1957); Hannah Arendt, The Human Condition (Chicago, 1958); Erich Fromm, Marx's Concept of Man (New York, 1961); and the translation and publication in paperback of Albert Camus', The Stranger, trans. by S. Gilbert (New York, 1946). All these works furthered the explosion of interest in alienation.

<sup>2</sup>Richard Schacht, Alienation (New York, 1977), p. 1

<sup>3</sup>Ibid., p. 168.

<sup>4</sup>Peter Ludz, "Alienation as a Concept in the Social Sciences," Current Sociology, 21:1 (1975), p. 39.

<sup>5</sup>Ada Finifter, Alienation and the Social System (New York, 1972), p. 3.

<sup>6</sup>Igor Kon, "The Concept of Alienation in Modern Sociology," in Peter Berger (ed.), Marxism and Sociology: Views from Eastern Europe (New York, 1969), p. 166.

<sup>7</sup>See for example, Ludz, p. 12, and Finifter, pp. 4-5.

<sup>8</sup>Steven Lukes, "Alienation and Anomie," in Peter Laslett and W. Runciman (eds.), Philosophy, Politics, and Society (Oxford, 1967); reprinted in Ada Finifter, Alienation and the Social System (New York, 1972), pp. 24-32.

<sup>9</sup>Schacht, p. 163, and Finifter, p. 9, say the same thing. Finifter states: "There seems to be a convergence in both the theoretical and empirical writings about the idea that alienation is produced by a discrepancy between strongly internalized aspirations, norms and values, on the one hand, and the opportunities perceived by the individual for fulfilling them, on the other.

<sup>10</sup>Schacht, p. 163, and Finifter, pp. 9-10. Schacht argues persuasively that the application of the concept of multidimensionality to the idea of alienation is misleading. "No significant relation between phenomena is established by the mere fact that the term is used to refer to them severally. The example of the three traditional uses of 'alienation'--in connection with the transfer of property, mental

derangement, and separation from others--is sufficient to illustrate this point. In each case something becomes 'alien' in some way; but while this formal similarity accounts for the use of the term in three contexts, it would be absurd to conclude that it warrants regarding the three things as 'aspects' of a single 'multidimensional' phenomenon: 'alienation'."

<sup>11</sup>Patrick B. Forstyh and Wayne K. Hoy, "Isolation and Alienation in Educational Organizations," Educational Administration Quarterly, 14:1 (Winter, 1978), pp. 80-96. See also the unpublished Ed.D. of the same name by Forsyth, Rutgers State University, 1977, for more detailed information than the subsequent article.

<sup>12</sup>These terms, alienation from work and alienated work, will be used interchangeably throughout.

<sup>13</sup>Schacht, pp. 168-196.

<sup>14</sup>Finifter, p. 3.

<sup>15</sup>Karl Marx, Early Writings, ed. and trans. by T. B. Bottomore (New York, 1963), pp. 120-134; see in particular pp. 125-127.

<sup>16</sup>Schacht, p. 99.

<sup>17</sup>Marx, Early Writings, p. 125.

<sup>18</sup>Schacht, p. 162; Finifter, p. 6; Golubovic, "A Critical View of the Interpretation of the Use of the Concept of Alienation in Sociological Research" (Paper presented at the 8th World Congress of Sociology, Toronto, Canada, August, 1974), Mimeographed, p. 10; and J. Clark, "Measuring Alienation Within a Social System," American Sociological Review, 24 (December, 1959), pp. 849-852. Several excellent studies have been undertaken which attempt to measure work alienation objectively in structural terms. These are not reviewed here, however, primarily because the subjective measures and concepts of work alienation correspond more closely to that aspect of work alienation to be dealt with in this study. To mention only a few: R. Hagedorn and S. Labovitz, "Participation in Community Associations by Occupation: A Test of Three Theories," American Sociological Review, 33 (April, 1968), pp. 272-283; J. Miller, "Isolation in Organizations: Alienation from Authority Control and Expressive Relations," Administrative Science Quarterly, 20 (June, 1975), pp. 260-270; J. Miller and S. Labovitz, "Individual Reactions to Organizational Conflict and Change," The Sociological Quarterly, 14 (Autumn, 1973), pp. 556-575; J. Miller and S. Labovitz, "Inequalities in the Organizational Experiences of Women and Men," Social Forces, 54 (December, 1975), pp. 365-381; J. Miller and L. Fry, "Social Relations in Organizations: Further Evidence for the Weberian Model," Social Forces, 51 (March, 1973), pp. 302-319; M. Fullan, "Industrial Technology and Worker Integration in the Organization," American Sociological Review, 35 (December, 1970), pp. 1028-1039; and L. Rice and T. Mitchell, "Structural Determinants of Individual Behavior in Organizations," Administrative Science Quarterly, 18 (March, 1973), pp. 50-70.

<sup>19</sup>Schacht, pp. 172-173.

<sup>20</sup>Aiken and Hage, pp. 497-507.

<sup>21</sup>Ibid., p. 497.

<sup>22</sup>Ibid.

<sup>23</sup>Ibid., p. 501.

<sup>24</sup>Schacht, p. 169.

<sup>25</sup>Schacht, p. 169, comments on exactly this type of situation: "Indeed, cases of this sort would seem to be quite common today. A chief postal clerk may be quite satisfied with the authority he has, with his position in relation to his fellow workers, and with the way in which his superiors regard him; and his position may satisfy his initial and career job expectations completely. Such a person would not be 'alienated from his work,' given the criteria employed by Aiken and Hage." George Miller, p. 759, and Finifter, p. 109, argue along the same lines as Schacht.

<sup>26</sup>Forsyth, p. 60.

<sup>27</sup>Robert Blauner, Alienation and Freedom (Chicago, 1964).

<sup>28</sup>Seeman, "On the Meaning of Alienation," pp. 783-791. Seeman's study falls into Schacht's third category and therefore is discussed extensively in the next section rather than at this point.

<sup>29</sup>Blauner, p. 15.

<sup>30</sup>Ibid., pp. 22-23 and p. 32.

<sup>31</sup>Seeman, "On the Meaning of Alienation," pp. 783-791; George Miller, pp. 755-767; and R. Middleton, "Alienation, Race, and Education," American Sociological Review, 28:6 (December, 1963), pp. 973-977.

<sup>32</sup>See for example, C. Browning, "On the Meaning of Alienation," American Sociological Review, 26:5 (1961), pp. 780-781; and D. G. Dean, "Alienation: Its Meaning and Measurement," American Sociological Review, 26:5 (October, 1961), pp. 753-758.

<sup>33</sup>Finifter, p. 8, remarks that although other typologies of alienation do indeed exist, none has had the impact of Seeman's and lists a number of researchers who not only follow Seeman's lead, but whose studies are included in Finifter's own anthology. Blauner's study, Alienation and Freedom, is only one example of such a study and there have been a particularly large number of studies that have investigated the first type of alienation designated by Seeman: powerlessness. In the field of education, for example, a recent study by Isherwood and Hoy, "Bureaucracy, Powerlessness, and Teacher Work, Values," utilizes

Seeman's notion of powerlessness. Seeman himself in subsequent research has investigated this type of alienation. See for example, M. Seeman, "Powerlessness and Knowledge: A Comparative Study of Alienation and Learning," *Sociometry*, 30:2 (June, 1967), pp. 105-123. Even his article, "On the Personal Consequences of Alienation in Work," *American Sociological Review*, 32:2 (April, 1967), pp. 273-285, focuses on an investigation of powerlessness as one of the consequences of alienation from work.

<sup>34</sup>Seeman, "On the Meaning of Alienation," p. 790. See also Finifter, p. 53, which includes a reprint of the Seeman article.

<sup>35</sup>Seeman, "On the Personal Consequences of Alienation in Work," p. 275.

<sup>36</sup>Middleton, pp. 973-977.

<sup>37</sup>*Ibid.*, p. 974.

<sup>38</sup>George Miller, pp. 755-767.

<sup>39</sup>*Ibid.*, p. 758.

<sup>40</sup>*Ibid.*, p. 759, note 25.

<sup>41</sup>*Ibid.*

<sup>42</sup>See Aiken and Hage, pp. 497-507, particularly p. 501.

<sup>43</sup>Marx, Early Writings, pp. 125-127.

<sup>44</sup>See, for example, A. Stinchcombe, Rebellion in High School (Chicago, 1964); K. Keniston, "The Sources of Student Dissent," Journal of Social Issues, 23:3 (1967), pp. 108-138; D. Epperson, "Some Interpersonal and Performance Correlates of Classroom Alienation," School Review, 71 (Autumn, 1963), pp. 360-376; W. Watts and D. Whittaker, "Profile of a Nonconformist Youth Culture: A Study of Berkeley Non-Students," Sociology of Education, 41:2 (Spring, 1968), pp. 178-200.

<sup>45</sup>G. Moeller, "Bureaucracy and Teacher's Sense of Power," School Review, 72 (Summer, 1964), pp. 137-157; and H. Barakat, "Alienation from the School System: The Dynamics and Structure" (unpub. Ph.D. dissertation, University of Michigan, 1966), both investigated the relationship between the control structure and degree or amount of alienation, with opposite conclusions being drawn.

<sup>46</sup>Isherwood and Hoy, pp. 124-138.

<sup>47</sup>Forsyth and Hoy, for example, investigated work alienation as part of a study on Isolation and Alienation in Educational Organizations per se, but did not emphasize or focus upon institutions of higher education.



<sup>48</sup>J. Pulliam, "Alienation and the College Profession," Journal of Thought, 9:2, pp. 84-90, is an excellent example of this type of article. Other studies of a non-empirical nature which have dealt with alienation at the university or college level are: G. Abcarian, "Ideology and Alienation: Conservative Images of the Liberal Academic Establishment," Educational Thought, 19:2 (Spring, 1969), pp. 111-128; L. Kampf, "The Radical Faculty--What are Its Goals?" (Paper presented at 55th Annual Meeting of Association of American Colleges, Pittsburgh, Pennsylvania, January 15, 1969), ED 026 012, pp. 109; and P. Feuille and P. Blandin, "University Faculty and Attitudinal Militancy Toward the Employment Relationships," Sociology of Education, 49 (April, 1976), pp. 139-145.

<sup>49</sup>See for example, C. Perrow, Complex Organizations: A Critical Essay (Glenview, 1972), p. 55.

<sup>50</sup>Numerous studies have been undertaken examining the various modes of conflict. To cite only a few here: M. Dalton, Men Who Manage Change (New York, 1969); R. G. Corwin, "The Professional Employee: A Study of Conflict in Nursing Roles," American Journal of Sociology, 66 (May), pp. 604-615; J. W. Getzels and E. G. Guba, "Roles, Role Conflict and Effectiveness: An Empirical Study," American Sociological Review, 19 (February), pp. 164-175; Gouldner, "Cosmopolitans and Locals;" Blau and Scott, Formal Organizations; and Aiken and Hage, "Organizational Alienation."

<sup>51</sup>Blau and Scott, pp. 60-64, and Hall, pp. 92-95, provide good examples of this type of approach.

<sup>52</sup>M. E. W. Goss, "Influence and Authority Among Physicians in an Outpatient Clinic," American Sociological Review, 26 (February), pp. 39-50; Blau and Scott, pp. 60-64; and Hall, p. 95, argue and agree that certain dimensions of the professional-bureaucratic model are more prone to conflict than others. Blau and Scott, pp. 60-64, for instance, do not see conflicts as inevitable as a matter of principle of five of the six dimensions of the professional-bureaucratic model specified by them.

<sup>53</sup>Morrissey and Gillespie.

<sup>54</sup>Perrow, pp. 52-58.

<sup>55</sup>Hall, pp. 92-104, incorporates and considers the models advanced by Harold Wilensky, "The Professionalization of Everyone?," American Journal of Sociology, 70 (September, 1964), pp. 137-158; T. Caplow, "Sequential Steps in Professionalization," in H. Vollmer and D. Mills (eds.), Professionalization (Englewood Cliffs, 1966), pp. 20-21; and Blau and Scott, pp. 60-64. Other models of interest are those of T. Parsons, Essays in Sociological Theory (2nd ed., Glencoe, 1954), pp. 34-39; and Hughes, Men and Their Work, pp. 78-87. These models are similar with one exception: the notion of self-determination. Parsons hardly deals with the topic, whereas Hughes focuses on it.

<sup>56</sup>Hall, p. 92.

<sup>57</sup>Wilensky, "The Professionalization of Everyone?," pp. 137-138.

<sup>58</sup>Hall, p. 92, note 3, notes that the variables of Wilensky's and Caplow's models are the same, but that Wilensky's model has been followed because his formulations are more descriptively accurate.

<sup>59</sup>Here, Hall, p. 93, draws upon the work of W. Goode, "Community Within a Community: The Professions," American Sociological Review, 22 (April, 1957), p. 194.

<sup>60</sup>Hall, p. 93, draws upon the work of E. Gross, Work and Society (New York, 1958), pp. 77-82; T. Parsons, Essays in Sociological Theory, pp. 34-49; and T. Parsons, The Social System (Glencoe, 1951), pp. 433-436, 454-465.

<sup>61</sup>Hall, p. 93, follows Goode, p. 194, on this point.

<sup>62</sup>Here, Hall, p. 93, again substantially follows Gross's formulation, pp. 77-82.

<sup>63</sup>Hall, p. 93, note 8, comments that even in W. R. Scott's work, "Reactions to Supervision in a Heteronomous Professional Organization," Administrative Science Quarterly, 10 (June, 1965), pp. 65-81, on heteronomous and autonomous professional organizations the importance of autonomy is still stressed.

<sup>64</sup>Hall's attributes are based, of course, on Weber's original discussion of bureaucracy in Max Weber, The Theory of Economic and Social Organization, trans. A. M. Henderson and T. Parsons (New York, 1947).

<sup>65</sup>Blau and Scott, pp. 27-45.

<sup>66</sup>Ibid., p. 32.

<sup>67</sup>Although based on Weber's original discussion of bureaucracy, Hall, p. 94, follows the subsequent discussion of Weber's original work by H. Udy, Jr., "Bureaucracy and Rationality in Weber's Theory," American Sociological Review, 24 (December, 1959), pp. 791-795.

<sup>68</sup>Blau and Scott, p. 32.

<sup>69</sup>See, for example, the work of Dalton, Corwin, Getzels and Guba, Gouldner, Aiken and Hage, and Blau and Scott.

<sup>70</sup>Blau and Scott, pp. 62-63, for instance, state that the professional control structure ". . . is fundamentally different from the hierarchical control exercised in bureaucratic organizations."

<sup>71</sup>Etzioni, p. 76.

<sup>72</sup>Weber, p. 339.

<sup>73</sup>Blau and Scott, p. 63.

<sup>74</sup>Blau and Scott, p. 63, and Morrissey and Gillespie, p. 320, both make this point.

<sup>75</sup>Parsons, "Introduction," to Max Weber, pp. 58-60.

<sup>76</sup>Scott, "Professionals in Organizations," p. 273.

<sup>77</sup>For example, C. M. Arensburg and D. McGregor, "Determination of Morale in an Industrial Company," Applied Anthropology, 1 (January-March, 1942), pp. 12-34, found that a small group of design engineers were unhappy with supervisory arrangements; D. G. Moore and R. Renck, "The Professional Employee in Industry," Journal of Business, 28 (January, 1955), pp. 58-66, found that both engineers and scientists had a low opinion of the technical competence of their supervisors. Additional studies reporting conflicts between scientists and managers are Kornhauser, pp. 56-73, and S. Marcson, The Scientist in American Industry: Some Organizational Determinants in Manpower Utilization (Princeton, 1960), pp. 12-20, 73-85, and 121-151. Other professional fields exhibit similar discomfort as evidenced in the studies by H. S. Becker, "The Teacher in the Authority System of the Public School," Journal of Educational Sociology, 27 (November, 1953), p. 137, who reported that ". . . conflict arises when the principal ignores his teachers' needs for professional independence," p. 29; and J. Ben-David, "The Professional Role of the Physician in Bureaucratized Medicine," Human Relations, 11 (August, 1958), pp. 255-274, who demonstrated that physicians showed high dissatisfaction with administrators.

<sup>78</sup>For a discussion on the importance of autonomy see Kornhauser and Marcson.

<sup>79</sup>Hall, p. 92.

<sup>80</sup>Scott, "Professionals in Organizations--Areas of Conflict," p. 270.

<sup>81</sup>Ibid.; Hall, p. 93; and Baldrige, p. 536, all make this point.

<sup>82</sup>Hall, p. 102.

<sup>83</sup>Ibid., p. 92.

<sup>84</sup>Ibid., p. 103.

<sup>85</sup>L. H. Orsack, "Work as a Central Life Interest of Professionals," Social Problems, 7 (1969), pp. 125-132.

<sup>86</sup>Hughes, p. 136; Reissman, p. 308; Caplow and McGee, p. 85; Wilensky, pp. 129-144; and Gouldner, pp. 281-306.

<sup>87</sup>Hughes, p. 136, says that the ". . . itinerant professional, who being more fully committed and more alert to the new development, will move from place to place seeking even more interesting, prestigeful, and perhaps more profitable positions." Reissman, p. 308, confirmed this observation in his study of 40 professionals. He found that the professional is ". . . oriented toward and seeks his recognition from a given professional group outside of rather than within the bureaucracy." Caplow and McGee, p. 85, in the university context, conclude that a scholar's orientation to his discipline will disorient him to his institution, "which he will regard as a temporary shelter where he can pursue his career as a member of the discipline." Wilensky, pp. 129-144, stated that the professional service type has the distinguishing characteristic in that he is oriented to a colleague group outside the union. Gouldner, pp. 281-306 and 444-480, examined professionals in a private liberal arts college and found that ". . . high commitment to professional skills and an orientation to outside reference groups were associated with low loyalty to the college." This type of orientation is called cosmopolitan as opposed to local by Gouldner, following the terms used originally by R. K. Merton, Social Theory and Social Structure (2nd ed., Glencoe, 1957), pp. 387-420.

<sup>88</sup>Thornton, p. 417; B. Barber, "Some Problems in the Sociology of the Professions," in K. S. Lynn (ed.), The Professions in America (Boston, 1965), pp. 15-34; B. Clark, "Organizational Adaptation to Professionals," in M. Vollmer and D. Mills (eds.), Professionalization (Englewood Cliffs, 1966), pp. 283-291; B. Glaser, "The Local-Cosmopolitan Scientist," Journal of Sociology, 69, pp. 249-259; D. Pelz and F. Andrews, Scientist in Organizations (New York, 1966); and studies already cited by Kornhauser, Marcson, and Wilensky.

<sup>89</sup>Scott, "Professionals in Organizations," p. 273.

<sup>90</sup>Blau and Scott, p. 66.

<sup>91</sup>Ibid., pp. 22-45.

<sup>92</sup>See Orzack, pp. 125-132.

<sup>93</sup>This is supported by Hall in his 1968 study, p. 95.

<sup>94</sup>Hall, p. 103.

<sup>95</sup>C. D. Orth, "The Optimum Climate for Industrial Research," in N. Kaplan (ed.), Science and Society (Chicago, 1965), p. 141.

<sup>96</sup>Kornhauser, p. 138.

<sup>97</sup>H. S. Becker and J. Carper, "The Elements of Identification with an Occupation," American Sociological Review, 21 (June, 1956), pp. 341-348.

<sup>98</sup> See for example, C. Shepherd, "Orientations of Scientists and Engineers," Pacific Sociological Review, 4 (Fall, 1961), pp. 79-83; and F. H. Goldner and R. R. Ritti, "Professionalization as Career Immobility," The American Journal of Sociology, 72 (March, 1967), pp. 491-494.

<sup>99</sup> See the work of both Orth and Shepherd.

<sup>100</sup> See Scott, "Professionals in Organizations," p. 271.

<sup>101</sup> E. Kuhlman and W. Hoy, "The Socialization of Professionals into Bureaucracies: The Beginning Teacher in the School," The Journal of Educational Administration, 7:2 (October, 1976), pp. 18-27.

<sup>102</sup> Blau, On the Nature of Organizations (New York, 1974), p. 277.

<sup>103</sup> Thorton, p. 418; H. Becker, "The Nature of a Profession," in N. Henry (ed.), Education for the Professionals (Chicago, 1962), pp. 27-42; M. L. Cogan, "Toward a Definition of a Profession," Harvard Educational Review, 23, pp. 33-50 and E. Greenwood, "Attributes of a Profession," Social Work, 2, pp. 44-55.

<sup>104</sup> Scott, "Professionals in Organizations," p. 274.

<sup>105</sup> George Miller, p. 767, maintains that "the conditioning effects of length and type of professional training on the above relationships were only partially supported by these data." It must be noted that Miller's rationale for his predictions on the conditioning effects of length and type of training are different from Scott's and Thorton's. He arrives at the same conclusion but starts with an organization's support of professionals.

<sup>106</sup> Blau, pp. 276-277.

<sup>107</sup> *Ibid.*, p. 263.

<sup>108</sup> *Ibid.*, p. 269 and p. 276.

<sup>109</sup> *Ibid.*, p. 277.

<sup>110</sup> Marx, pp. 125-127.

<sup>111</sup> Seeman, "On the Personal Consequences," p. 275.

<sup>112</sup> See the attributes of the professional model as delineated by Hall, pp. 92-93.

<sup>113</sup> Max Weber, From Max Weber: Essays in Sociology, Hans Gerth and C. Mills (eds.) (New York, 1946), p. 135. For more of Weber's views on professionals see Ritzer, "Professionalization, Bureaucratization, and Rationalization," pp. 627-636.

<sup>114</sup> Clark, "The Role of Faculty Authority," p. 11.

- 115 Baldridge, p. 536.
- 116 Etzioni, p. 76.
- 117 See Hall, p. 94, and Blau and Scott, p. 32, for essential components and characteristics of bureaucracy as originally delineated by Weber.
- 118 See for example, studies by Morrissey and Gillespie, p. 320 and p. 330; Blau and Scott, pp. 63-65; and Scott, "Professionals in Organizations," p. 264. Even Morrissey and Gillespie who demonstrate that when professional and organizational technologies are compatible only the autonomy variable is severely threatened, concede that when professionals and organizational technologies are not compatible more problems and conflicts are likely to occur (p. 330).
- 119 Arensburg and Macgregor, pp. 12-34; Moore and Renck, pp. 558-560; Kornhauser, pp. 56-73; Marcson, pp. 12-20 and pp. 121-151; Becker, p. 137; and Ben-David, pp. 255-274.
- 120 Hall, p. 102.
- 121 Hughes, p. 136; Reismann, p. 308; Caplow and McGee, p. 85; Wilensky, pp. 129-144; and Gouldner, pp. 281-306.
- 122 George Miller, pp. 755-767.
- 123 See both George Miller, p. 750, and Etzioni, p. 78.
- 124 Thorton, p. 418; Becker, pp. 27-42; Cogan, pp. 33-50; Greenwood, pp. 44-55; Kornhauser, p. 138; Becker and Carper, pp. 341-348; Kuhlman and Hoy, pp. 18-27; and Blau, On the Nature of Organizations, p. 277.

## CHAPTER III

### METHODOLOGY

#### Introduction

The purpose of this research was to examine work alienation as one major consequence of the professional-bureaucratic dilemma for faculty in a university context. It focused on the relationship between specific variables of organizational control and work alienation for faculty with different levels of education and different discipline orientations.

This chapter sets out the research questions and hypotheses, defines the major terms, identifies and describes selection of the population, describes the instrument, data collection and statistical procedures used in data analysis.

#### Research Questions and Hypotheses

##### Research Questions

The following research questions guided this study:

- I. Is work alienation among faculty related to perceptions of selected factors of organizational control?
- II. Does work alienation, when measured as a function of these perceived organizational control variables, vary according to discipline orientation?

III. Does work alienation, when measured as a function of these perceived organizational controls, vary according to level of education?

### Research Hypotheses

The following sets of hypotheses were tested in order to examine the relationships between the variables posed by the research questions.

#### Set I

Hypothesis I: Work alienation will be positively related to perceived organizational control.

Hypothesis IA: Work alienation will be negatively related to perceived influence and participation in decision-making pertaining to the immediate work environment.

Hypothesis IB: Work alienation will be positively related to perceived closeness of supervision.

Hypothesis IC: Work alienation will be negatively related to perceived freedom of teaching choice.

Hypothesis ID: Work alienation will be negatively related to perceived freedom of research choice.

Hypothesis IE: Work alienation will be negatively related to perceived freedom of extension choice.

Hypothesis IF: Work alienation will be negatively related to perceived university support of teaching.

Hypothesis IG: Work alienation will be negatively related to perceived university support of research.

Hypothesis IH: Work alienation will be negatively related to perceived university support of extension.

#### Set II

Hypothesis II: Work alienation will be positively related to perceived organizational control, and this relationship will vary



according to discipline orientation with a pure discipline orientation having a greater work alienation than an applied.

Hypothesis IIA: The above relationship between work alienation and perceived influence and participation in decision-making pertaining to the immediate work environment will vary according to discipline orientation with work alienation being greater for a pure discipline orientation than for an applied discipline orientation.

Hypothesis IIB: The above relationship between work alienation and perceived closeness of supervision will vary according to discipline orientation with work alienation being greater for a pure discipline orientation than for an applied discipline orientation.

Hypothesis IIC: The above relationship between work alienation and perceived freedom of teaching choice will vary according to discipline orientation with work alienation being greater for a pure discipline orientation than for an applied discipline orientation.

Hypothesis IID: The above relationship between work alienation and perceived freedom of research choice will vary according to discipline orientation with work alienation being greater for a pure discipline orientation than for an applied discipline orientation.

Hypothesis IIE: The above relationship between work alienation and perceived freedom of extension choice will vary according to discipline orientation with work alienation being greater for a pure discipline orientation than for an applied orientation.

Hypothesis IIF: The above relationship between work alienation and perceived university support of teaching will vary according to discipline orientation with work alienation being greater for a pure discipline orientation than for an applied discipline orientation.

Hypothesis IIG: The above relationship between work alienation and perceived university support of research will vary according to discipline orientation with work alienation being greater for a pure discipline orientation than for an applied discipline orientation.

Hypothesis IIH: The above relationship between work alienation and perceived university support of extension will vary according to discipline orientation with work alienation being greater for a pure discipline orientation than for an applied discipline orientation.

Set III

Hypothesis III: Work alienation will be positively related to perceived organizational control, and this relationship will vary according to the level of education, with the higher level of education having the greater work alienation.

Hypothesis IIIA: The above relationship between work alienation and perceived influence and participation in decision-making pertaining to the immediate work environment will vary according to level of education with work alienation being greater the higher the level of education.

Hypothesis IIIB: The above relationship between work alienation and perceived closeness of supervision will vary according to level of education, with work alienation being greater for the higher level of education.

Hypothesis IIIC: The above relationship between work alienation and perceived freedom of teaching choice will vary according to level of education, with work alienation being greater the higher the level of education.

Hypothesis IIID: The above relationship between work alienation and perceived freedom of research choice will vary according to level of education, with work alienation being greater the higher the level of education.

Hypothesis IIIE: The above relationship between work alienation and perceived freedom of extension choice will vary according to level of education, with work alienation being greater the higher the level of education.

Hypothesis IIIF: The above relationship between work alienation and perceived university support of teaching will vary according to level of education, with work alienation being greater the higher the level of education.

Hypothesis IIIG: The above relationship between work alienation and perceived university support of research will vary according to level of education, with work alienation being greater the higher the level of education.

Hypothesis IIIH: The above relationship between work alienation and perceived university support of extension will vary according to level of education, with work alienation being greater the higher the level of education.

### Definition of Terms

The following terms are defined to provide clarity in conjunction with their use in this study.

Faculty: For the purposes of this study, faculty are defined as all persons having at least a 75% appointment for 1977 and 1978 in an academic department with the rank of instructor, assistant professor, associate professor, professor. All faculty holding adjunct, visiting, emeritus, or administrative appointments (including department chairmen), and those faculty on sabbatical or leave of absence were excluded.

Organizational Control: For this study the dependent variable of perceiving organizational control is nominally defined as any process in which a person or groups of persons or organization of persons determines, that is, intentionally affects, the behavior of another person, group, or organization.<sup>1</sup> In this study organizational control is operationally defined as the perceived extent to which the organization rather than the professional determines or makes decisions concerning the professional's work as measured by specific designated variables.

Laissez-faire Supervisory Style: For this study a Laissez-faire supervisory style exists when there is a low rate of interaction between the supervisor and the faculty member and when the faculty member makes most of the decisions pertaining to his work.<sup>2</sup>

Participatory Supervisory Style: For this study a participatory supervisory style exists when there is a high rate of interaction and a joint decision making.<sup>3</sup>

Directive Supervisory Style: For this study a directive supervisory

style exists when there is little interaction and unilateral decision-making by the supervisor.<sup>4</sup>

Alienation from Work: For this study the independent variable of work alienation is defined as lack of intrinsic pride in work and lack of intrinsic meaning of work.<sup>5</sup>

Level of Education: For this study level of education is defined as the length of the educational program of the professional beyond the Bachelors Degree as reflected in the type of graduate degree awarded.

#### Identification of Population

This study is limited to a population of faculty associated with the Oklahoma State University. Oklahoma State University is a large, state-supported, land-grant institution in the southwest with an enrollment of approximately 22,000 students. Therefore, no attempt should be made to generalize the results of this study to a population at another campus that differs significantly from Oklahoma State University.

#### Selection Process

The Oklahoma State University Statistics List for Salaried Personnel of 9/30/77 supplied by the Office of Institutional Research was used to identify those faculty as defined above. The Oklahoma State University Statistics List for Salaried Personnel contains a job code classification system. The job codes 1762, 1772, 1771 and 1773 corresponded to the academic ranks in this study. Use of these job codes automatically excluded from consideration all those faculty with administrative, emeritus, visiting and adjunct appointments. The Oklahoma State University Statistics List for Salaried Personnel also contains a home

department code classification system. This enabled isolation of those faculty who were clearly associated with an academic department. Percent employment and employment date were also provided.

Those faculty on sabbatical, leave of absence, or who had resigned during the preceding year were eliminated using information available from the Office of the Vice President for Academic Affairs and Research at Oklahoma State University.

The final number of the faculty meeting the specified criteria and thus comprising the population was 620.

#### Demographic Data

Demographic data are presented in Table I. Figures for the population and the respondents are both given. In general, the characteristics of the respondents satisfactorily mirrored the characteristics of the population as a whole.

Of the 432 faculty who responded, 86 percent were male and 14 percent female. The Ph.D. degree was held by 67 percent, the Ed.D. by 10 percent and the Masters or Bachelors degree by 23 percent. Respondents were classified into four age groups. Seven percent of the faculty were below 30 years of age, 36 percent were between 31 and 40 years of age, 29 percent were between 41 and 50 years of age, 18 percent were between 51 and 60 years of age, and 9 percent were over 60 years of age. A study of Table I also reveals what academic ranks were held by the respondents. Seven percent held the rank of instructor, 30 percent held the rank of assistant professor, 34 percent held the rank of associate professor, and 30 percent held the rank of professor.

TABLE I  
DEMOGRAPHIC DATA

	Population (620)					Respondents (432)					
Sex		<u>Male</u>		<u>Female</u>			<u>Male</u>		<u>Female</u>		
	N	533		87		371	61				
	%	86.0		14.0		85.9	14.1				
Age		<u>&lt;30</u>	<u>31-40</u>	<u>41-50</u>	<u>51-60</u>	<u>&gt;60</u>	<u>&lt;30</u>	<u>31-40</u>	<u>41-50</u>	<u>51-60</u>	<u>&gt;60</u>
	N	39	234	179	115	53	29	156	127	80	40
	%	6.3	37.7	28.9	18.5	8.5	6.7	36.1	29.4	18.5	9.2
Degree		<u>Ph.D.</u>	<u>Ed.D.</u>	<u>M.A. or Less</u>		<u>Ph.D.</u>	<u>Ed.D.</u>	<u>M.A. or Less</u>			
	N	406	57	157		288	45	99			
	%	65.5	9.2	25.3		66.7	10.4	23.0			
Rank		<u>Instr.</u>	<u>Asst.</u>	<u>Assoc.</u>	<u>Prof.</u>	<u>Instr.</u>	<u>Asst.</u>	<u>Assoc.</u>	<u>Prof.</u>		
	N	43	230	203	187	29	130	148	125		
	%	6.9	32.7	30.2	30.2	6.7	30.1	34.3	30.0		

TABLE I (Continued)

		Population (620)			Respondents (432)		
Discipline Orientation		<u>Applied</u>	<u>Pure</u>	<u>Creative</u>	<u>Applied</u>	<u>Pure</u>	<u>Creative</u>
		N %	376 60.6	221 35.6	23 3.7	268 62.0	153 35.4
<u>College</u>							
Agriculture	N %		165 28.0			119 27.5	
Arts and Science	N %		251 40.5			165 38.2	
Biological Sciences	N %		27 4.6			22 4.6	
HPELS	N %		15 2.2			8 1.9	
Journalism and Broadcasting	N %		13 2.2			8 1.9	
Mathematical Sciences	N %		28 4.7			16 3.7	
Physical Sciences	N %		38 6.4			21 4.7	

TABLE I (Continued)

	Population (620)		Respondents (432)	
Social Sciences	N	41	31	
	%	6.9	7.2	
Languages and Literature	N	49	36	
	%	8.3	8.3	
Fine Arts and Humanistic Studies	N	40	27	
	%	6.8	5.3	
Business	N	26	20	
	%	6.9	4.6	
Education	N	41	33	
	%	6.9	7.6	
Engineering	N	78	51	
	%	13.2	11.8	
Home Economics	N	29	22	
	%	4.9	5.1	



The population and sample were also classified according to discipline orientation. Of the respondents, 62 percent had an applied discipline orientation, 35 percent had a pure discipline orientation, and 3 percent had a creative discipline orientation. Table I also contains data on the college and/or school affiliation. The eight schools constituting the College of Arts and Sciences were individually considered because many of the schools were similar in size to other colleges as a whole (e.g., Home Economics, Education, and Business).

#### Procedures for Data Collection

Data were collected in two ways: (1) from The Oklahoma State University Statistics List for Salaried Personnel, and (2) by means of a self-administered questionnaire.

The following data were obtainable from The Oklahoma State University Statistics List for Salaried Personnel: social security number, name, sex, degree held, race, marital status, job code, home department code, birth date, employment date, percent employment, academic rank, and date rank obtained.

The following data were obtained using the self-administered questionnaire: alienation from work, perceived influence and participation in decision making pertaining to the immediate work environment, perceived closeness of supervision, perceived freedom of teaching choice, perceived freedom of research choice, perceived freedom of extension choice, perceived university support of teaching, perceived university support of research, and perceived university support of extension.

On September 2, 1978, 620 questionnaires<sup>6</sup> and explanatory cover letters<sup>7</sup> were mailed to all faculty using the Central Mailing Service of

Oklahoma State University. Questionnaires were pre-return-addressed in order to be dropped easily by the respondents in the Campus Mail upon completion. The questionnaire was coded for the purpose of following-up on non-respondents. Individual names were kept confidential. Within two weeks 48 percent of the questionnaires had been completed and returned. On September 15, 1978, a follow-up letter and another questionnaire were mailed to each participant who had not yet responded.<sup>8</sup> By September 29, 1978, 432 usable questionnaires, or 70 percent, had been completed and returned.

## Instrumentation

### The Questionnaire

The questionnaire used in this study was a 25 item, three page questionnaire constructed to gather the following data: demographics; alienation from work; perceived influence and participation in decision-making pertaining to the immediate work environment; perceived closeness of supervision; perceived freedom of choice in teaching, research and extension activities; and perceived university support of teaching, research and extension activities.<sup>9</sup>

### The Operational Measures of the Variables

#### Alienation from Work

The Index of Work Alienation, developed by Forsyth, was used to measure work alienation.<sup>10</sup> Forsyth developed an 11 item alienation index taking four items from George Miller, one from Seeman, and

constructing the remainder himself. The four items taken from Miller had a Coefficient of Reproducibility (Goodenough Technique) = .91, a Minimum Marginal Reproducibility of .70, a Coefficient of Scalability of .69, and a .69 Coefficient of Sharpness.<sup>11</sup> Furthermore, the validity of Miller's index has been evaluated by Price, who noted that of the three sets of predictions made by Miller, two were fully supported and one partially.<sup>12</sup> Forsyth rearranged some of the items in his index. However, his rearrangement of this Likert-type index of eight choice items was pre-tested and has a Cronbach's Coefficient Alpha of .91, suggesting a high degree of reliability.<sup>13</sup>

#### Organizational Control Measures

Perceived Closeness of Supervision. One specific measure of the degree of organizational control is manifest in the type of supervision, that is, whether supervisory control is extensive or not. Baumgartel empirically identifies three types of supervisory styles to be used as variables in research administration.<sup>14</sup> These are, in order from the least to the most organizational control, laissez-faire (low rate of interaction with the professional making most of the decisions), participatory (high rate of interaction with joint decision making), and directive (low rate of interaction with unilateral decision making by the supervisor). The following is an extensive listing of the characteristics specific to each of these three styles, all statistically significant at the .05 or .10 level with the exception of one which approaches the .10 level.<sup>15</sup>

##### LAISSEZ-FAIRE:

Director's decisions have little influence.

Many subordinates feel that they are on their own.

Few report joint discussion and decision.

Infrequent contact with director is reported.

Subordinates have little influence on director.

Very few report that the director decides things.

**PARTICIPATORY:**

Director's decisions have moderate influence.

Some subordinates feel that they are on their own.

Many report joint discussion and decision.

Most frequent contact with director is reported.

Subordinates have much influence on director.

Few report that the director decides things.

**DIRECTIVE:**

Director's decisions have much influence.

Few subordinate feel that they are on their own.

Some joint discussion and decisions occur.

Frequent contact with director is reported.

Subordinates have little influence on director.

Many report that the director decides things.

Data used in Baumgartel's study were derived from questionnaire responses of scientists in 20 research laboratories and analyzed as follows:

- (1) A mean score was computed for each laboratory on each relevant questionnaire item. Likert-type responses were designed to permit group comparison.
- (2) The laboratory mean scores on each item were converted into rank-order scores from 1 to 20, with 1 representing the first of 'best' score. These rank-ordered scores then became the basic measures for the laboratory analysis.
- (3) The analysis itself consisted of establishing the relationships among the rank orderings of the laboratories on

one measure with their rank orderings on another. Rank-order correlations of laboratories were used to establish the empirical findings.

- (4) Tests of statistical significance were used throughout to reduce the possibility of attaching meaning to chance relationships.<sup>16</sup>

In the present study perceived closeness of supervision was determined by asking the participants to check the statement most nearly representing the type of work relationship that existed between them and their immediate supervisor.<sup>17</sup>

Participants were classified according to their response as working for a directive type of supervisor and thus subject to the most organizational control; as working for a laissez-faire type of superior and thus subject to the least organizational control; or as working for a participatory type of supervisor and thus subject to moderate organizational control.<sup>18</sup>

Perceived Influence and Participation in Decision-Making Pertaining to the Immediate Work Environment. Another measure of organizational control is manifest in the amount of influence and participation in decision-making professionals perceive they have over their immediate work environment. A modified version of a four item scale developed by Vroom was used to measure this variable.<sup>19</sup> This scale of eight choice items<sup>20</sup> had an internal consistency computed to be .80 in the study by Hollom and Gemmill.<sup>21</sup>

Perceived Freedom of Choice Over Teaching, Research and Extension Activities. Freedom of choice was operationalized by asking how much choice faculty perceived they had regarding the specific activities of teaching, research and extension.<sup>22</sup> Again, a Likert-type scale was used for responses.

Perceived Organizational Support of Teaching, Research and Extension Activities. This was operationalized in a similar fashion by asking for perceptions of university support for the specific work activities of teaching, research and extension.<sup>23</sup>

#### Intervening Variables

Discipline Orientation. Individual faculty member's disciplines were identified using their home department code as listed in The Oklahoma State University Statistics List for Salaried Personnel. Discipline orientation was operationalized using Biglan's Clustering of Academic Departments (see Table II).<sup>24</sup> Biglan's Clustering of Academic Departments is based on scholars' judgments about the similarity of the subject matter in different disciplines. In order to categorize the disciplines Biglan used a multidimensional scaling technique. The reliability of Biglan's cluster framework has subsequently been supported by Smart and Elton in a study of administrative roles of department chairmen.<sup>25</sup>

Biglan clustered the academic areas according to the characteristics of the following three dimensions:

- (1) Concern with a single paradigm. Hard or scientific departments are characterized by a paradigm or agreed upon set of problems and methods, while soft departments do not have a clearly delineated program.
- (2) Concern with life systems. Life systems departments place greater emphasis on the study of living systems, while nonlife systems departments are characterized by a relative lack of emphasis on organic objects.

TABLE II  
BIGLAN'S CLUSTERING OF ACADEMIC DEPARTMENTS  
IN THREE DIMENSIONS

	Hard <sup>a</sup>		Soft <sup>a</sup>	
	Nonlife System <sup>c</sup>	Life System <sup>c</sup>	Nonlife System <sup>c</sup>	Life System <sup>c</sup>
Pure <sup>b</sup>	Astronomy	Botany	English	Anthropology
	Chemistry	Entomology	History	Political science
	Geology	Microbiology	Philosophy	Psychology
	Math	Physiology	Communications	Sociology
	Physics	Zoology		
Applied <sup>b</sup>	Ceramic engineering	Agronomy	Accounting	Educational administration and supervision
	Civil engineering	Dairy science	Finance	
	Computer science	Horticulture	Economics	Secondary and continuing education
	Mechanical engineering	Agricultural economics		Special education
			Vocational and technical education	

<sup>a</sup>"Hard" or scientific departments are characterized by a paradigm or agreed upon set of problems and methods; "soft" departments do not have a clearly delineated paradigm.

<sup>b</sup>"Pure" departments are not particularly concerned with practical applications, while "applied" departments are concerned with practical applications.

<sup>c</sup>"Life systems" departments place greater emphasis on the study of living systems, while "nonlife systems" departments are characterized by a relative lack of emphasis on organic objects.

- (3) Concern with application. Pure departments are not particularly concerned with practical applications, while applied departments are concerned with practical applications.

Using Biglan's Clustering of Academic Departments, the departments at Oklahoma State University were categorized into two major groups-- pure and applied. Each of these groups was subdivided into four groups following Biglan's typology. The groupings are as follows:

I. PURE

- A. Pure, hard, nonlife.
- B. Pure, hard, life.
- C. Pure, soft, nonlife.
- D. Pure, soft, life.

II. APPLIED

- A. Applied, hard, nonlife.
- B. Applied, hard, life.
- C. Applied, soft, nonlife.
- D. Applied, soft, life.

This research dealt with the differences between the two major categories of pure and applied.

Level of Education. This variable was operationalized by indicating whether the faculty member held the Doctor of Philosophy, the Doctor of Education, or the Masters or Bachelors Degree. This information was obtained from The Oklahoma State University Statistics List for Salaried Personnel.



## Data Analysis

The returned questionnaires were coded; data were then keypunched and verified. Procedures from the manual, A User's Guide to Statistical Analysis System,<sup>26</sup> were used to process the data on an IBM 370 model 58 computer at the Oklahoma State University Computer Center.

The data were analyzed by using the following statistical techniques. A one way analysis of variance statistical technique was used to determine whether a significant relationship existed between work alienation and all the organizational control variables except one. For the variable of perceived influence and participation in decision making pertaining to the immediate work environment, a coefficient of correlation technique was used.

The impact of the intervening variables of discipline orientation and level of education on the above relationship between alienation from work and perceived organizational control was examined using a factorial analysis of variance technique.

#### FOOTNOTES

<sup>1</sup>Arnold Tannenbaum and Basis Georgopoulos, "The Distribution of Control in Formal Organizations," Social Forces, 36 (October, 1957), pp. 44-55.

<sup>2</sup>Howard Baumgartel, "Leadership Style as a Variable in Research Administration," Administrative Science Quarterly, 2 (June, 1957), pp. 344-360.

<sup>3</sup>Ibid.

<sup>4</sup>Ibid.

<sup>5</sup>Seeman, "On the Personal Consequences of Alienation in Work," p. 273, and George Miller, p. 759.

<sup>6</sup>See Appendix A for a copy of the questionnaire.

<sup>7</sup>See Appendix B for a copy of the cover letter.

<sup>8</sup>See Appendix B for a copy of the follow-up letter.

<sup>9</sup>See Appendix A for a copy of the questionnaire.

<sup>10</sup>See Bruce Tuckman, Conducting Educational Research (2nd ed., New York, 1972, 1978), pp. 219-222, and Appendix A, items 5 through 14 for this index.

<sup>11</sup>George Miller, p. 759.

<sup>12</sup>James Price, Handbook of Organizational Measurement (Lexington, 1972), pp. 31-32.

<sup>13</sup>Forsyth, p. 60.

<sup>14</sup>Baumgartel, pp. 344-360.

<sup>15</sup>Ibid., p. 351.

<sup>16</sup>Ibid., p. 350.

<sup>17</sup>See Appendix A, item 25 of the questionnaire.

<sup>18</sup>George Miller, p. 760, using this measure of Baumgartel's obtained a Gamma of  $-.30$  for his hypotheses, suggesting a high degree of reliability for the measure.

<sup>19</sup>Victor Vroom, Some Personality Determinants of the Effects of Participation (Englewood Cliffs, 1967), p. 24.

<sup>20</sup>See Appendix A, items 15 through 18 of the questionnaire for this index.

<sup>21</sup>Charles Hollom and Gary Gemmill, "A Comparison of Female and Male Professors on Participation in Decision-Making, Job-Related Tension, Job Involvement, and Job Satisfaction," Educational Administration Quarterly, 12:1 (Winter, 1976), p. 83.

<sup>22</sup>See Appendix A, items 19, 21 and 23 of the questionnaire.

<sup>23</sup>See Appendix A, items 20, 22 and 24 of the questionnaire.

<sup>24</sup>Anthony Biglan, "Relationships Between Subject Matter Characteristics and the Structure and Output of University Departments," Journal of Applied Psychology, 7:3 (1973), pp. 204-213; and "The Characteristics of Subject Matter in Different Academic Areas," Journal of Applied Psychology, 57:2 (1973), pp. 195-203.

<sup>25</sup>John Smart and Charles Elton, "Administrative Roles of Department Chairmen," New Directions for Institutional Research (Summer, 1976), pp. 39-60.

<sup>26</sup>Anthony Barr et al., A User's Guide to Statistical Analysis System (Raleigh, 1976).

## CHAPTER IV

### PRESENTATION AND ANALYSIS OF DATA

#### Introduction

Of the 620 faculty surveyed, 432 or 73 percent responded. Three percent of the questionnaires were discarded because they were incomplete. Thus, 452 observations (70 percent of the population) were used in the analysis.

#### Testing the Hypotheses

Since it is common statistical practice to accept hypotheses supported at the .05 level of significance, that level of confidence was adopted for this study. For the correlation coefficients, only those correlations of .40 or above at the .05 level of significance were used.

#### Set I

The first set of hypotheses predicted the relationship between faculty perception of organizational control and work alienation.

Hypothesis IA was tested using a correlational technique and Hypotheses IB through IH were tested using a one way analysis of variance treatment.

Hypothesis IA: Perception of perceived influence and participation in decision making pertaining to the immediate work environment will be negatively related to work alienation.

A coefficient of correlation was calculated to determine the relationship between perceived influence and participation in decision-making pertaining to the immediate work environment and work alienation. The statistical computation produced a correlation coefficient of .45 which was significant at the .0001 level. The relationship was in the predicted direction; as perceived influence and participation in decision-making pertaining to the immediate work environment decreased as work alienation increased.

TABLE III

ANALYSIS OF CORRELATION COEFFICIENTS FOR THE RELATIONSHIP  
BETWEEN PERCEIVED INFLUENCE AND PARTICIPATION IN  
DECISION MAKING PERTAINING TO THE IMMEDIATE  
WORK ENVIRONMENT AND WORK ALIENATION

	Number	Influence	Level of Significance
Alienation	431	.45	.0001

Hypothesis IB: Perceived closeness of supervision will be positively related to work alienation.

A one way analysis of variance was used to test this hypothesis. The variable of perceived closeness of supervision was tricotomized based on responses to the operational measure (i.e., laissez-faire, participatory, and directive). Perceived closeness of supervision was found to be significantly related to work alienation. In Table IV it is clearly demonstrated that as perceived closeness of supervision

increased, work alienation did also. The F ratio of 8.26 is significant at a level of .0006.

TABLE IV  
ONE WAY ANALYSIS OF VARIANCE BETWEEN PERCEIVED CLOSENESS OF  
SUPERVISION AND ALIENATION FROM WORK

	Laissez-faire	Participatory	Directive
Number	52	305	75
Means of Work Alienation	23.29	24.25	29.29

  

Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Between Groups	2	1706.68	853.34	8.26	.0006
Within Groups	429	44317.28	103.30		
Total	431	46023.96			

Hypothesis IC: Perceived freedom of teaching choice will be negatively related to work alienation.

A one way analysis of variance was used to test this hypothesis.

The response categories for the operational measure of perceived freedom of teaching choice (i.e., almost none, some, very little, and a great deal) formed the groups for the analysis of variance. Freedom of teaching choice was found to be significantly related to work alienation. In Table V it is clearly demonstrated that as perceived freedom of teaching

choice decreased, alienation from work increased. The F ratio of 11.93 was significant at the .0001 level.

TABLE V  
ONE WAY ANALYSIS OF VARIANCE BETWEEN PERCEIVED FREEDOM OF  
TEACHING CHOICE AND ALIENATION FROM WORK

	A Great Deal	Some	Very Little	Almost None
Number	201	138	35	28
Means of Work Alienation	22.48	26.01	28.54	32.54

  

Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Between Groups	3	3460.57	1153.52	11.93	.0001
Within Groups	398	38485.11	96.70		
Total	401	41945.69			

Hypothesis ID: Perceived freedom of research choice will be negatively related to work alienation.

A one way analysis of variance was used to test this hypothesis.

The response categories for the measure of perceived freedom of research choice (i.e., almost none, some, very little, and a great deal) formed the groups for the analysis of variance. Freedom of research choice was found to be significantly related to work alienation. In Table VI it is clearly demonstrated that as perceived freedom of research choice

decreased, alienation from work increased. The F ratio of 4.87 was significant at the .0029 level.

TABLE VI  
ONE WAY ANALYSIS OF VARIANCE BETWEEN PERCEIVED FREEDOM OF  
RESEARCH CHOICE AND ALIENATION FROM WORK

	A Great Deal	Some	Very Little	Almost None	
Number	285	51	12	6	
Means of Work Alienation	24.30	27.57	32.83	31.83	
Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Between Groups	3	1481.04	493.68	4.87	.0029
Within Groups	350	35500.66	101.43		
Total	353	36981.70			

Hypothesis IE: Perceived freedom of extension choice will be negatively related to work alienation.

A one way analysis of variance was used to test this hypothesis.

The response categories for the measure of perceived freedom of extension choice (i.e., almost none, some, very little, and a great deal) formed the groups for the analysis of variance. Freedom of extension choice was found to be significantly related to work alienation. In Table VII it is clearly demonstrated that as perceived freedom of extension choice



decreased, alienation from work increased. The F ratio of 4.85 was significant at the .0031 level.

TABLE VII  
ONE WAY ANALYSIS OF VARIANCE BETWEEN PERCEIVED FREEDOM OF  
EXTENSION CHOICE AND ALIENATION FROM WORK

	A Great Deal	Some	Very Little	Almost None
Number	180	64	11	7
Means of Work Alienation	23.69	27.26	24.82	35.14

  

Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Between Groups	3	1354.14	451.38	4.85	.0031
Within Groups	258	24023.17	93.11		
Total	261	25377.32			

Hypothesis IF: Perceived university support of teaching will be negatively related to work alienation.

A one way analysis of variance was used to test this hypothesis. The response categories for the measure of perceived university support of teaching (i.e., almost none, very little, some and a great deal) formed the groups for the analysis of variance. Perceived university support of teaching was found to be significantly related to work alienation. In Table VIII it is clearly demonstrated that as perceived

university support of teaching decreased alienation from work increased. The F ratio of 13.66 was significant at the .0001 level.

TABLE VIII  
ONE WAY ANALYSIS OF VARIANCE BETWEEN PERCEIVED UNIVERSITY  
SUPPORT OF TEACHING AND ALIENATION FROM WORK

	A Great Deal	Some	Very Little	Almost None
Number	159	159	55	26
Means of Work Alienation	21.81	25.72	30.44	29.92

  

Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Between Groups	3	3958.95	1319.65	13.36	.0001
Within Groups	395	39028.15	98.81		
Total	398	42987.10			

Hypothesis IG: Perceived university support of research will be negatively related to work alienation.

A one way analysis of variance was used to test this hypothesis. The response categories for the measure of perceived university support of research (i.e., almost none, very little, some, a great deal) formed the groups for the analysis of variance. Perceived university support of research was found to be significantly related to work alienation. In Table IX it is clearly demonstrated that as perceived university

support of research decreased, alienation from work increased. The F ratio of 8.24 was significant at the .0001 level.

TABLE IX

ONE WAY ANALYSIS OF VARIANCE BETWEEN PERCEIVED UNIVERSITY  
SUPPORT OF RESEARCH AND ALIENATION FROM WORK

	A Great Deal	Some	Very Little	Almost None
Number	109	107	74	63
Means of Work Alienation	22.31	24.36	28.04	28.94

  

Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Between Groups	3	2455.66	818.55	8.24	.0001
Within Groups	349	34686.80	99.39		
Total	352	37142.46			

Hypothesis IH: Perceived university support of extension will be negatively related to work alienation.

A one way analysis of variance was used to test this hypothesis. The response categories for the measure of perceived university support of extension (i.e., almost none, very little, some, and a great deal) formed the groups for the analysis of variance. Perceived university support of extension was found to be significantly related to work alienation. In Table X it is clearly demonstrated that as perceived

university support of extension decreased, alienation from work increased. The F ratio of 3.41 is significant at the .0181 level.

TABLE X

ONE WAY ANALYSIS OF VARIANCE BETWEEN PERCEIVED UNIVERSITY  
SUPPORT OF EXTENSION AND ALIENATION FROM WORK

	A Great Deal	Some	Very Little	Almost None
Number	94	96	25	31
Means of Work Alienation	23.73	26.39	21.96	28.77

  

Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Between Groups	3	995.23	331.74	3.40	.0181
Within Groups	242	23583.47	97.45		
Total	245	24598.70			

Summary: Set I

The first set of hypotheses addressed the first research question posed in this study by examining the relationship between perceived organizational control and work alienation for all faculty. These hypotheses predicted that for each of the eight organizational control variables examined, work alienation would increase as organizational control was perceived to increase.

All eight hypotheses were confirmed at the .05 level or better. Thus, the prediction of a positive relationship between perception of organizational control and work alienation is supported.

### Set II

The second set of hypotheses predicted that the above relationship between faculty perceptions of organizational control and work alienation would also vary according to discipline orientation. In addition it was predicted that a pure discipline orientation would be associated with greater work alienation. Those faculty having a creative discipline orientation were excluded from the analysis due to insufficient number.

Hypotheses IIA through IIH were tested using a factorial analysis of variance in order to determine if there was a significant variation in the relationship according to discipline orientation. Work alienation was considered to vary by discipline if the interaction was significant at the .05 level or better.

The work alienation means were then compared for the two discipline orientations (i.e., pure and applied) in order to determine whether a pure discipline orientation consistently resulted in greater work alienation.

Hypothesis IIA: The above relationship between perceived influence and participation in decision-making pertaining to the immediate work environment and work alienation will vary according to discipline orientation. Furthermore, a pure discipline orientation will result in a greater work alienation.

A factorial analysis of variance was used to test this hypothesis. The response categories of the eight choice item Likert-type scale formed four groups for the analysis of variance (i.e., almost none, very little, some and a great deal). Perceived influence and participation in

decision-making pertaining to the immediate work environment was found to be significantly related to discipline orientation. In Table XI it is clearly demonstrated that work alienation did vary according to discipline orientation for perceived influence and participation in decision-making pertaining to the immediate work environment. The F ratio of 7.77 for the interaction is significant at a level better than .005.

However, the work alienation means for the two discipline orientations did not behave as predicted. When perceived influence was the lowest an applied orientation was more alienated than a pure orientation; which is the opposite of the prediction. Therefore, the behavior of the discipline orientation variables (i.e., pure and applied) was not consistent with the expectations of the second part of the hypothesis.

Hypothesis IIB: The above relationship between perceived closeness of supervision and work alienation will vary according to discipline orientation. Furthermore, a pure discipline orientation will result in greater work alienation.

A factorial analysis of variance was used to test this hypothesis. The response categories for the measure of perceived closeness of supervision (i.e., laissez-faire, participatory, and directive) formed the groups for the analysis of variance. Perceived closeness of supervision was not found to be significantly related to discipline orientation and work alienation. In Table XII it is clearly demonstrated that work alienation did not vary according to discipline orientation for perceived closeness of supervision. The F ratio of .43 for the interaction was not significant at a level better than .05.

However, the work alienation means for the two discipline orientations did behave as predicted. A pure discipline orientation resulted

TABLE XI

FACTORIAL ANALYSIS OF VARIANCE BETWEEN PERCEIVED INFLUENCE AND PARTICIPATION IN DECISION MAKING PERTAINING TO THE IMMEDIATE WORK ENVIRONMENT AND ALIENATION FROM WORK AND DISCIPLINE ORIENTATION

	A Great Deal	Some	Very Little	Almost None
Number	78	141	32	17
Means of Work Alienation Applied	18.06	24.41	29.53	36.82
Number	37	70	28	18
Means of Work Alienation Pure	18.43	28.19	31.61	29.39

  

Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Discipline Orientation	1	808.73	404.37	4.87	< .005
Influence	3	13378.08	4459.43	53.65	< .005
Interaction	3	1936.63	645.55	7.77	< .005
Residual	422	35073.22	83.11		
Total	429				

TABLE XII  
 FACTORIAL ANALYSIS OF VARIANCE BETWEEN PERCEIVED CLOSENESS  
 OF SUPERVISION AND ALIENATION FROM WORK  
 AND DISCIPLINE ORIENTATION

	Laissez-faire	Participatory	Directive
Number	39	193	36
Means of Work Alienation Applied	22.41	23.39	28.72
Number	13	103	37
Means of Work Alienation Pure	25.92	25.46	30.00

  

Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Discipline Orientation	1	550.06	550.06	5.25	< .025
Supervision	2	2406.14	1203.07	11.50	< .005
Interaction	2	90.14	45.07	0.43	> .250*
Residual	426	44570.10	104.62		
Total	431				

\*Not significant.



consistently in greater work alienation for perceived closeness of supervision.

Hypothesis IIC: The above relationship between perceived freedom of teaching choice and work alienation will vary according to discipline orientation. Furthermore, a pure discipline orientation will result in greater alienation.

A factorial analysis of variance was used to test this hypothesis. The response categories for the perceived freedom of teaching choice (i.e., almost none, very little, some and a great deal) formed the groups for the analysis of variance. Perceived freedom of teaching choice was found to be significantly related to work alienation for discipline orientation. In Table XIII it is clearly demonstrated that work alienation did vary according to discipline orientation for the variable of perceived freedom of teaching choice. The F ratio of 2.28 for the interaction was significant at a level better than .025.

However, the work alienation means for the two discipline orientations (i.e., pure and applied) did not behave in the predicted manner. When teaching choice is the least, the applied discipline orientation has the greater work alienation. This contradicted the prediction.

The small cell size for a pure discipline orientation in this particular instance may, however, mitigate against a total rejection of the latter part of the hypothesis, because the reliability of the mean for such a small "N" is questionable. When this small cell was omitted from the analysis, on these grounds, then the second part of the hypothesis was supported; that is, a pure discipline orientation was consistently observed to have a greater work alienation for the variables under discussion.

TABLE XIII  
 FACTORIAL ANALYSIS OF VARIANCE BETWEEN PERCEIVED FREEDOM OF  
 TEACHING CHOICE AND ALIENATION FROM WORK  
 AND DISCIPLINE ORIENTATION

	A Great Deal	Some	Very Little	Almost None
Number	132	73	20	17
Means of Work Alienation Applied	21.68	24.63	26.80	33.12
Number	67	59	15	8
Means of Work Alienation Pure	24.00	27.81	30.87	30.38

  

Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Discipline Orientation	1	808.73	404.37	4.06	< .05
Teaching Choice	3	4214.30	1404.78	14.10	< .005
Interaction	3	682.22	227.41	2.28	< .025
Residual	419	41724.67	99.60		
Total	426				

Hypothesis IID: The above relationship between perceived freedom of research choice and work alienation will vary according to discipline orientation. Furthermore, a pure discipline orientation will result in greater work alienation.

A factorial analysis of variance was used to test this hypothesis. The response categories for the measure of perceived freedom of research choice (i.e., almost none, very little, some and a great deal) formed the groups for the analysis of variance. Perceived freedom of research choice was found to be significantly related to work alienation for discipline orientation. In Table IV it is clearly demonstrated that work alienation did vary according to discipline orientation for the variable of perceived freedom of research choice. The F ratio of 45.02 for the interaction is significant at a level better than .005.

Furthermore, the work alienation means for the two discipline orientations (i.e., pure and applied) behaved in the predicted manner. That is, a pure discipline orientation consistently evidenced greater work alienation than an applied orientation. This was true even when the cells of small size are omitted.

Hypothesis IIE: The above relationship between perceived freedom of extension choice and work alienation will vary according to discipline orientation. Furthermore, a pure discipline orientation will result in greater alienation.

A factorial analysis of variance was used to test this hypothesis. The response categories for the measure of perceived freedom of extension choice (i.e., almost none, very little, some and a great deal) formed the groups for the analysis of variance. Perceived freedom of extension choice was found to be significantly related to work alienation for discipline orientation. In Table XV it is clearly shown that work alienation did vary according to discipline orientation for the variable of

TABLE XIV  
 FACTORIAL ANALYSIS OF VARIANCE BETWEEN PERCEIVED FREEDOM  
 OF RESEARCH CHOICE AND ALIENATION FROM WORK  
 AND DISCIPLINE ORIENTATION

	A Great Deal	Some	Very Little	Almost None
Number	170	35	4	1
Means of Work Alienation Applied	23.06	27.31	32.75	10.00
Number	107	16	7	4
Means of Work Alienation Pure	26.05	28.13	33.29	40.50

  

Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Discipline Orientation	1	808.73	404.37	3.98	< .05
Research Choice	3	3798.68	1266.22	12.49	< .005
Interaction	3	13690.43	4563.48	45.02	< .005
Residual	418	42362.24	101.35		
Total	425				

TABLE XV  
 FACTORIAL ANALYSIS OF VARIANCE BETWEEN PERCEIVED FREEDOM  
 OF EXTENSION CHOICE AND ALIENATION FROM WORK  
 AND DISCIPLINE ORIENTATION

	A Great Deal	Some	Very Little	Almost None
Number	119	44	9	3
Means of Work Alienation Applied	23.18	27.00	21.22	31.67
Number	58	16	2	3
Means of Work Alienation Pure	24.84	27.19	41.00	36.00

  

Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Discipline Orientation	1	808.73	404.37	3.91	< .05
Extension Choice	3	3577.89	1192.63	11.30	< .005
Interaction	3	3876.45	1292.15	12.49	< .005
Residual	418	43236.92	103.44		
Total	425				

perceived freedom of extension choice. The F ratio of 12.49 for the interaction was significant at a level of better than .005.

Furthermore, the work alienation means for the two discipline orientations behaved in the predicted manner. That is, a pure discipline orientation consistently evidenced greater work alienation than an applied orientation. This was true even when the cells of smaller size were omitted due to likely unreliability of the means.

Hypothesis IIE: The above relationship between perceived university support of teaching and work alienation will vary according to discipline orientation. Furthermore, a pure discipline orientation will result in greater alienation.

A factorial analysis of variance was used to test this hypothesis. The response categories for the measure of perceived university support of teaching (i.e., almost none, very little, some and a great deal) formed the groups for the analysis of variance. Perceived university support of teaching was found to be significantly related to work alienation for discipline orientation. In Table XVI it is clearly shown that work alienation did vary according to discipline orientation for the variable of perceived university support of teaching. The F ratio of 3.63 for the interaction was significant at a level better than .025.

However, the work alienation means for the two discipline orientations did not behave as predicted. An applied orientation was more alienated from work than a pure orientation, except when perceived university support of teaching was the lowest. This was the opposite of the prediction. Therefore, the behavior of the discipline orientation variable (i.e., pure and applied) was not consistent with the expectations of the second part of the hypothesis.

TABLE XVI

FACTORIAL ANALYSIS OF VARIANCE BETWEEN PERCEIVED UNIVERSITY  
SUPPORT OF TEACHING AND ALIENATION FROM WORK  
AND DISCIPLINE ORIENTATION

	A Great Deal	Some	Very Little	Almost None	
Number	88	27	10	30	
Means of Work Alienation Applied	24.32	28.41	33.70	23.67	
Number	43	68	24	15	
Means of Work Alienation Pure	21.49	27.69	31.63	27.87	
Source	df	Sum of Squares	Mean Square	F Value	Level Significance
Discipline Orientation	1	808.73	404.37	4.13	< .005
Teaching Support	3	2685.04	1342.52	13.72	< .005
Interaction	3	1064.59	354.83	3.63	< .025
Residual	418	40897.46	97.84		
Total	425				

Hypothesis IIG: The above relationship between perceived university support of research and work alienation will vary according to discipline orientation. Furthermore, a pure discipline orientation will result in greater alienation.

A factorial analysis of variance was used to test this hypothesis.

The response categories for the measure of the variable (i.e., almost none, very little, some and a great deal) formed the groups for the analysis of variance. Perceived university support of research was found to be significantly related to work alienation for discipline orientation. In Table XVII it is demonstrated that work alienation did vary according to discipline orientation. The F ratio of 4.63 for the interaction was significant at a level better than .05.

However, the work alienation means for the two discipline orientations did not behave in the predicted manner. There were unanticipated reversals of the prediction; that is, applied orientation resulted in greater work alienation than a pure orientation. Therefore, the behavior of the discipline orientation variables (i.e., pure and applied) was not consistent with the expectations of the second part of the hypothesis.

Hypothesis IIH: The above relationship between perceived university support of extension and work alienation will vary according to discipline orientation. Furthermore, a pure discipline orientation will result in greater alienation.

A factorial analysis of variance was used to test this hypothesis.

The response categories for the measure of perceived university support of extension (i.e., almost none, very little, some and a great deal) formed the groups for the analysis of variance. Perceived university support of extension was not found to be significantly related to work alienation for discipline orientation. In Table XVIII it is shown that work alienation did not vary according to discipline orientation for



TABLE XVII

FACTORIAL ANALYSIS OF VARIANCE BETWEEN PERCEIVED UNIVERSITY  
SUPPORT OF RESEARCH AND ALIENATION FROM WORK  
AND DISCIPLINE ORIENTATION

	A Great Deal	Some	Very Little	Almost None
Number	88	67	33	18
Means of Work Alienation Applied	22.52	23.82	28.79	23.11
Number	20	37	39	42
Means of Work Alienation Pure	21.85	24.81	27.38	31.79

  

Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Discipline Orientation	1	808.73	404.37	4.07	< .05
Research Support	3	1966.57	5665.52	6.59	< .005
Interaction	3	1381.46	460.49	4.63	< .005
Residual	417	41469.45	99.45		
Total	424				

TABLE XVIII

FACTORIAL ANALYSIS OF VARIANCE BETWEEN PERCEIVED UNIVERSITY  
SUPPORT OF EXTENSION AND ALIENATION FROM WORK  
AND DISCIPLINE ORIENTATION

	A Great Deal	Some	Very Little	Almost None
Number	69	14	11	103
Means of Work Alienation Applied	25.91	18.79	25.27	23.50
Number	19	22	11	19
Means of Work Alienation Pure	24.47	26.95	26.00	30.05

  

Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Discipline Orientation	1	808.73	404.37	3.86	< .05
Extension Support	3	1129.44	376.48	3.59	< .05
Interaction	3	470.87	156.96	1.50	< .100*
Residual	418	43848.29	104.90		
Total	425				

\*Not significant.

the variable under discussion. The F ratio of 1.50 for the interaction was not significant at the .05 level.

Furthermore, the work alienation means did not behave in the predicted manner for the two discipline orientations. When perceived university support of extension was very high, an applied orientation resulted in greater alienation. This contradicted the prediction. Therefore, the behavior of the discipline orientation variables of pure and applied was not consistent with the expectations of the second part of the hypothesis.

#### Summary: Set II

The second set of hypotheses addressed the second research question posed in this study by examining the above relationship between perceived organizational control and work alienation in relation to discipline orientation. These hypotheses predicted that for each of the organizational control variables examined, work alienation would vary according to discipline orientation.

Furthermore, for each of the variables, it was predicted that work alienation would be consistently greater for faculty having a pure discipline orientation than for faculty having an applied discipline orientation.

Six of the eight hypotheses were confirmed at the .05 level or better. The exceptions were the organizational control variables of perceived closeness of supervision and perceived university support of extension. In general, then, it may be said that work alienation tends to vary with discipline orientation.

Three of the eight hypotheses supported the prediction that faculty

having a pure discipline orientation would be more alienated from work than faculty with an applied discipline orientation. These were perceived closeness of supervision, perceived freedom of research choice, and perceived freedom of extension choice. One hypothesis (freedom of teaching choice) gave qualified support for this prediction only when small cells were omitted from the analysis. Four of the hypotheses did not confirm the prediction. These dealt with the variable of perceived influence and participation in decision-making pertaining to the immediate work environment, perceived university support of teaching, of research, and of extension.

### Set III

The third set of hypotheses predicted that the above relationship between perceived organizational control and work alienation would also vary according to level of education, with the higher level of education resulting in greater work alienation.

Hypotheses IIIA through IIIH were tested using a factorial analysis of variance statistical technique in order to determine if there was a significant variation in the relationship according to level of education. Level of education was divided into three groups based on highest degree awarded (i.e., Ph.D., Ed.D., M.A. or B.A.).

The means of work alienation for the three educational levels were then compared for each variable in order to ascertain whether the higher educational levels evidenced greater work alienation in the predicted manner.

Hypothesis IIIA: The above relationship between perceived influence and participation in decision-making pertaining to the immediate work environment and work alienation will vary according to level of

education. Furthermore, the higher level of education will result in greater work alienation.

A factorial analysis of variance was used to test this hypothesis. The response categories of the eight choice item Likert-type scale were formed into four groups for the analysis of variance (i.e., almost none, very little, some, and a great deal). Perceived influence and participation in decision-making pertaining to the immediate work environment was found to be significantly related to level of education. In Table XIX it is shown that work alienation does vary according to level of education for perceived influence and participation in decision-making pertaining to immediate work environment. The F ratio of 7.09 for the interaction was significant at a level better than .005.

However, the work alienation means for the three educational levels did not behave as predicted. Three unexpected interchanges occurred. Even when the cells of smaller size were omitted from consideration in the analysis, the expected relationship was only partially observed. That is, the Ph.D. level consistently has a greater work alienation than the Ed.D. level or the M.A. level, but the relationship between the Ed.D. and M.A. levels is the opposite of the prediction. Therefore, the second part of this hypothesis is only partially confirmed.

Hypothesis IIIB: The above relationship between perceived closeness of supervision and work alienation will vary according to level of education. Furthermore, the higher educational level will result in greater work alienation.

A factorial analysis of variance was used to test this hypothesis. The response categories for the measure of perceived closeness of supervision (i.e., Laissez-faire, participatory, and directive) formed the groups for the analysis of variance. Perceived closeness of supervision was found to be significantly related to level of education. In Table

TABLE XIX

FACTORIAL ANALYSIS OF VARIANCE FOR THE RELATIONSHIP BETWEEN  
PERCEIVED INFLUENCE AND PARTICIPATION IN DECISION MAKING  
PERTAINING TO THE IMMEDIATE WORK ENVIRONMENT AND  
ALIENATION FROM WORK AND LEVEL OF EDUCATION

	A Great Deal	Some	Very Little	Almost None	
Number	25	43	147	73	
Means of Work Alienation Ph.D.	29.56	30.91	26.15	18.99	
Number	3	5	23	14	
Means of Work Alienation Ed.D.	40.67	30.20	23.43	16.64	
Number	7	17	47	28	
Means of Work Alienation M.A. or B.A.	42.00	27.94	25.96	16.86	
Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Level of Education	2	248.92	124.46	1.48	> .05*
Influence	3	22507.99	7502.68	89.53	< .005
Interaction	6	3568.63	594.17	7.09	< .005
Residual	420	35194.10	83.80		
Total	431				

\*Not significant.

XX it is shown that work alienation does vary according to level of education for perceived closeness of supervision. The F ratio of 4.30 for the interaction was significant at a level better than .005.

However, when comparing the work alienation means for the three educational levels three unexpected interchanges occurred. Even when the smaller cells were omitted from consideration in the analysis, the higher educational level did not result in greater work alienation. Therefore, the second part of this hypothesis was not confirmed.

Hypothesis IIIC: The above relationship between perceived freedom of teaching choice and work alienation will vary according to educational level. Furthermore, the higher educational level will result in greater work alienation.

A factorial analysis of variance was used to test this hypothesis. The response categories for the measure of perceived freedom of teaching choice (i.e., almost none, very little, some, and a great deal) formed the groups for the analysis of variance. Perceived freedom of teaching choice was found to be significantly related to the level of education. In Table XXI it is clearly shown that work alienation did vary according to level of education. The F ratio of 5.15 for the interaction was significant at a level better than .005.

However, when the work alienation means for the three levels of education are compared, unexpected reversals occurred. Even when the smaller cells were omitted from the analysis, the higher educational level did not result in greater work alienation. Therefore the second part of the hypothesis was not confirmed.

Hypothesis IIID: The above relationship between perceived freedom of research choice and work alienation will vary according to level of education. Furthermore, the higher level of education will result in greater work alienation.

TABLE XX

FACTORIAL ANALYSIS OF VARIANCE FOR THE RELATIONSHIP BETWEEN  
PERCEIVED CLOSENESS OF SUPERVISION AND ALIENATION  
FROM WORK AND LEVEL OF EDUCATION

	Laissez-faire	Participatory	Directive
Number	42	192	54
Means of Work Alienation Ph.D.	24.38	24.85	27.83
Number	3	34	8
Means of Work Alienation Ed.D.	20.67	21.97	29.50
Number	7	79	13
Means of Work Alienation M.A. or B.A.	17.86	23.77	35.23

Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Level of Education	2	186.40	93.20	.88	> .25*
Supervision	2	5686.20	2843.10	26.89	< .005
Interaction	4	1820.92	455.23	4.30	< .005
Residual	426	45027.94	105.70		
Total	424				

\*Not significant.



TABLE XXI

FACTORIAL ANALYSIS OF VARIANCE FOR THE RELATIONSHIP BETWEEN  
PERCEIVED FREEDOM OF TEACHING CHOICE AND ALIENATION  
FROM WORK AND LEVEL OF EDUCATION

	A Great Deal	Some	Very Little	Almost None	
Number	138	93	22	17	
Means of Work Alienation Ph.D.	23.30	26.27	28.00	33.06	
Number	30	11	2	2	
Means of Work Alienation Ed.D.	20.90	26.09	38.50	27.00	
Number	33	34	11	9	
Means of Work Alienation M.A. or B.A.	20.52	25.53	27.82	32.78	
Source	df	Sum of Squares	Mean Square	F Value	Level Significance
Level of Education	2	149.58	74.79	.70	> .05*
Teaching Choice	3	6523.16	2174.39	20.36	< .005
Interaction	6	3301.83	550.30	5.15	< .005
Residual	418	46023.96	106.78		
Total	429				

\*Not significant.

A factorial analysis of variance was used to test this hypothesis. The response categories for the measure of perceived freedom of research choice (i.e., almost none, very little, some, and a great deal) formed the groups for the analysis of variance. Perceived freedom of research choice was not found to be significantly related to level of education. In Table XXII it is shown that work alienation did not vary according to level of education. The F ratio of 2.10 for the interaction was not significant at the .05 level.

When the work alienation means for the three educational levels are compared, unanticipated reversals occurred. Even when the small cells were omitted from the analysis, the higher educational level did not result in greater work alienation. Therefore, the second part of the hypothesis was not confirmed either.

Hypothesis III E: The above relationship between perceived freedom of extension choice and work alienation will vary according to level of education. Furthermore, the higher level of education will result in the greater work alienation.

A factorial analysis of variance was used to test this hypothesis. The response categories for the measure of perceived freedom of extension choice (i.e., almost none, very little, some, and a great deal) formed the groups for the analysis of variance. Perceived freedom of extension choice was found to be significantly related to work alienation for the variable under discussion. In Table XXIII it is demonstrated that work alienation did vary according to level of education. The F ratio for the interaction of 2.44 was significant at a level better than .05.

However, when the work alienation means of the three educational levels were compared, unanticipated reversals occurred. Even when the

TABLE XXII

FACTORIAL ANALYSIS OF VARIANCE FOR THE RELATIONSHIP BETWEEN  
PERCEIVED FREEDOM OF RESEARCH CHOICE AND ALIENATION  
FROM WORK AND LEVEL OF EDUCATION

	A Great Deal	Some	Very Little	Almost None	
Number	244	37	7	2	
Means of Work Alienation Ph.D.	24.60	27.92	35.86	29.50	
Number	31	7	--	--	
Means of Work Alienation Ed.D.	22.58	28.71	--	--	
Number	30	7	5	4	
Means of Work Alienation M.A. or B.A.	23.83	24.57	28.60	33.00	
Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Level of Education	2	177.51	88.76	.84	> .05*
Research Choice	3	4325.31	1441.78	13.72	< .005
Interaction	4	881.78	220.45	2.10	> .05*
Residual	419	44014.58	105.05		
Total	428				

\*Not significant.

TABLE XXIII

FACTORIAL ANALYSIS OF VARIANCE FOR THE RELATIONSHIP BETWEEN  
PERCEIVED FREEDOM OF EXTENSION CHOICE AND ALIENATION  
FROM WORK AND LEVEL OF EDUCATION

	A Great Deal	Some	Very Little	Almost None	
Number	120	38	4	5	
Means of Work Alienation Ph.D.	24.22	26.45	27.75	30.40	
Number	23	12	3	--	
Means of Work Alienation Ed.D.	22.48	26.25	17.00	--	
Number	37	14	4	2	
Means of Work Alienation M.A. or B.A.	22.76	30.36	27.75	47.00	
Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Level of Education	2	177.51	88.76	.85	> .05*
Extension Choice	3	8120.69	2706.94	25.98	< .005
Interaction	5	1271.50	254.29	2.44	< .05
Residual	418	43557.74	104.21		
Total	428				

\*Not significant.

smaller cells were omitted from the analysis, the higher educational level did not result in greater work alienation. Therefore, the second part of the hypothesis was not confirmed.

Hypothesis IIIF: The above relationship between perceived university support of teaching and work alienation will vary according to level of education. Furthermore, the higher educational level will result in greater work alienation.

A factorial analysis of variance was used to test this hypothesis. The response categories for the measure of perceived university support of teaching (i.e., almost none, very little, some, and a great deal) formed the groups for the analysis of variance. Perceived university support of teaching was found to be significantly related to work alienation for the variable under discussion. In Table XXIV it is shown that work alienation did vary according to level of education. The F ratio of 8.99 for the interaction was significant at a level better than .005.

However, when the work alienation means of the three educational levels were compared, unanticipated reversals occurred. Even when the smaller cells were omitted from the analysis, the higher educational level did not result in greater work alienation.

Hypothesis IIIG: The above relationship between perceived university support of research and work alienation will vary according to level of education. Furthermore, the higher educational level will result in greater work alienation.

A factorial analysis of variance was used to test this hypothesis. The response categories for the measure of perceived university support of research (i.e., almost none, very little, some, and a great deal) formed the groups for the analysis of variance. Perceived university support of research was not found to be significantly related to work alienation for the variable under discussion. In Table XXV it is shown

TABLE XXIV

FACTORIAL ANALYSIS OF VARIANCE FOR THE RELATIONSHIP BETWEEN  
PERCEIVED UNIVERSITY SUPPORT OF TEACHING AND  
ALIENATION FROM WORK AND  
LEVEL OF EDUCATION

	A Great Deal	Some	Very Little	Almost None	
Number	101	115	35	18	
Means of Work Alienation Ph.D.	22.76	25.70	32.00	25.61	
Number	24	14	4	1	
Means of Work Alienation Ed.D.	19.50	26.43	31.75	28.00	
Number	34	30	16	7	
Means of Work Alienation M.A. or B.A.	20.59	25.40	26.69	41.29	
Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Level of Education	2	353.06	176.53	1.83	> .05*
Teaching Support	3	6886.08	2295.36	23.81	< .005
Interaction	6	5198.64	866.44	8.99	< .005
Residual	417	40185.03	96.37		
Total	428				

\*Not significant.

TABLE XXV

FACTORIAL ANALYSIS OF VARIANCE FOR THE RELATIONSHIP BETWEEN  
PERCEIVED UNIVERSITY SUPPORT OF RESEARCH AND ALIENATION  
FROM WORK AND LEVEL OF EDUCATION

	A Great Deal	Some	Very Little	Almost None	
Number	92	77	56	47	
Means of Work Alienation Ph.D.	22.60	24.08	28.45	29.56	
Number	9	15	7	7	
Means of Work Alienation Ed.D.	20.89	24.13	24.43	25.00	
Number	8	15	11	9	
Means of Work Alienation M.A. or B.A.	20.63	26.07	28.28	28.78	
Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Level of Education	2	177.51	88.76	.86	> .05*
Research Support	3	2200.17	732.82	7.10	< .005
Interaction	6	325.49	54.25	.53	> .05*
Residual	417	43015.91	103.16		
Total	428				

\*Not significant.

that work alienation did not vary according to educational level. The F ratio of .53 for the interaction was not significant at the .05 level.

Furthermore, when the work alienation means for the three educational levels were compared, unanticipated reversals occurred even when cells of smaller size were omitted from the analysis. Therefore, the second part of the hypothesis, that the higher level of education would result in greater work alienation, was not confirmed.

Hypothesis IIIH: The above relationship between perceived university support of extension and work alienation will vary according to level of education. Furthermore, the higher level of education will result in greater work alienation.

A factorial analysis of variance was used to test this hypothesis. The response categories for the measure of perceived university support of extension (i.e., almost none, very little, some, and a great deal) formed the groups for the analysis of variance. Perceived university support of extension was found to be significantly related to work alienation for the variable under discussion. In Table XXVI it is shown that work alienation did vary according to level of education. The F ratio of 3.31 for the interaction was significant at a level better than .05.

However, when comparing the work alienation means for the three educational levels, unanticipated reversals occurred even when the smaller cells were omitted from the analysis. Therefore, the second part of the hypothesis was not confirmed, and the higher educational level did not result in greater work alienation.

#### Summary: Set III

The third set of hypotheses addressed the third research question posed in this study by examining the impact that level of education had



TABLE XXVI

FACTORIAL ANALYSIS OF VARIANCE FOR THE RELATIONSHIP BETWEEN  
PERCEIVED UNIVERSITY SUPPORT OF EXTENSION AND  
ALIENATION FROM WORK AND  
LEVEL OF EDUCATION

	A Great Deal	Some	Very Little	Almost None
Number	55	57	17	25
Means of Work Alienation Ph.D.	24.76	25.61	22.94	27.60
Number	10	18	6	2
Means of Work Alienation Ed.D.	17.80	26.17	19.33	36.00
Number	29	21	2	4
Means of Work Alienation M.A. or B.A.	23.83	28.67	21.50	32.50

  

Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Level of Education	2	491.36	245.69	2.30	> .05*
Extension Support	3	6803.33	2267.78	21.24	< .005
Interaction	6	2119.84	353.31	3.31	< .05
Residual	417	46023.96	106.78		
Total	428				

\*Not significant.

on the above relationship between perceived organizational control and work alienation. These hypotheses predicted that for each of the eight organizational control variables examined, work alienation would vary according to level of education. Furthermore, it was also predicted that work alienation would be greater as the level of education increased.

Six of the hypotheses had a significant interaction at the .05 level or better when tested using a factorial analysis of variance. The exceptions were for the variables of perceived freedom of research choice and perceived university support of research. Therefore, it may in general be said that the first part of the prediction that work alienation does indeed vary according to level of education was confirmed.

When the work alienation means of the three educational levels were compared, only one hypothesis was found to support the second part of the prediction that higher educational level would result in greater work alienation. This one hypothesis dealt with the variable of perceived closeness of supervision. Even when cells of small size were omitted, the remaining hypotheses were not confirmed. Therefore, work alienation does not increase with educational level.

## CHAPTER V

### SUMMARY AND DISCUSSION

#### Introduction

This research examined work alienation as one of the consequences of the professional-bureaucratic dilemma for faculty in a university context. Specifically, the study focused upon the relationship between perceived organizational control and work alienation. How this relationship was related to the mediating variables of discipline orientation and level of education was also investigated.

A review of the literature on work alienation and the professional-bureaucratic dilemma led to the development of a conceptual framework and rationale for three research questions. In the conceptual framework it was indicated that when a professional is employed in a bureaucratic organization certain conflicts centering around the work of the professional may arise. It was argued that when successful attempts are made to exert increased organizational control over the professional's work activity, the relationship of the professional to that work activity will tend to be undermined. When the professional's autonomy over his work decreases; when his work comes under the control and guidance of another, rather than himself; and when it becomes a means rather than an end, then the professional will become alienated from his work in terms of the traditional Marxian formulation of this concept. This rationale

formed the framework for the investigation of the phenomenon of work alienation within the context of higher education.

The methodological procedures for data collection and for data analysis were presented in previous chapters (i.e., Chapter III and Chapter IV respectively). The purpose of this chapter is to summarize the findings, to discuss their implications, and to make recommendations concerning avenues for further research.

### Summary of Findings

The first set of hypotheses addressed the first research question by examining the relationship between perceived organizational control and faculty work alienation. This set of hypotheses predicted that work alienation would be positively related to perceived organizational control. The data on the organizational control variables considered supported this predicted relationship.

1. It was found that as perceived influence and participation in decision making pertaining to the immediate work environment decreased, work alienation increased.

2. It was found that with greater perceived closeness of supervision work alienation increased. While there was not a significant difference between the means of work alienation for faculty working under the laissez-faire and participatory styles of supervision, the mean for faculty under a directive style of supervision was significantly higher. The lack of difference between the first two styles will be addressed in the discussion section.

3. It was found that as perceived freedom of teaching choice, of research choice, and of extension choice decreased, work alienation

increased.

4. It was found that as perceived university support of teaching, of research, and of extension decreased, work alienation increased.

The first set of hypotheses was supported.

The second set of hypotheses examined the effect of discipline orientation upon the relationship between perceived organizational control and work alienation. These hypotheses predicted that for each of the organizational control variables examined, degree of work alienation would vary with discipline orientation. It was also predicted that for each variable the degree of work alienation of those faculty with a pure discipline orientation would be greater than for those faculty with an applied discipline orientation.

Analysis of the data for seven of the eight hypotheses confirmed the prediction that the relationship between perceived organizational control and work alienation did indeed vary according to discipline orientation. The analysis of the data for three of the hypotheses supported the prediction that work alienation would be greater for a pure rather than an applied discipline orientation, while the data analysis for one other hypothesis provided only partial support. The data analysis for four hypotheses contradicted this prediction.

1. It was found that the relationship between the variable of perceived influence and participation in decision-making pertaining to the immediate work environment and the variable of work alienation varied according to discipline orientation. Work alienation of faculty with a pure discipline orientation was not found to be consistently greater than for faculty with an applied discipline orientation.

2. It was found that the relationship between perceived closeness of supervision and work alienation did not vary according to discipline. This means that both a pure and an applied discipline orientation reacted in the same way to the three supervisory styles. It was found that faculty with a pure discipline orientation evidenced a consistently greater alienation from work for all supervisory styles.

3. It was found that the relationship between perceived freedom of teaching choice and work alienation did vary according to discipline orientation. It was also established that faculty with a pure discipline orientation manifested greater alienation from work than faculty with an applied discipline orientation when small cells were omitted from the analysis.

4. It was found that the relationship between perceived university support for teaching, for research and for extension and work alienation did vary with discipline orientation, but that work alienation was not consistently greater for faculty with a pure discipline orientation.

The first part of this set of hypotheses, dealing with the relationship between perceived organizational control and work alienation, did indeed vary according to discipline orientation. The second part of this set of hypotheses only partially confirmed the notion that faculty with a pure discipline orientation would consistently manifest a greater alienation from work than faculty with an applied discipline orientation. Four of the eight hypotheses were found not to support this prediction.

The third set of hypotheses addressed the third research question posed in this study by examining the effect of level of education upon the relationship between perceived organizational control and work alienation. These hypotheses predicted that for each variable of

organizational control, work alienation would vary with level of education. Furthermore, it was also predicted that for each variable the higher educational level would be associated with the greater work alienation.

The data analysis of six of the eight hypotheses supported the first part of the prediction, while the analysis of only one hypothesis supported the second part. That is, the relationship between work alienation and perceived organizational control did indeed vary according to level of education. Work alienation, however, was not consistently greater for the higher educational level.

1. It was found that work alienation did vary according to level of education for the variables of perceived influence and participation in decision-making pertaining to the immediate work environment, for perceived closeness of supervision, for perceived freedom of teaching choice, for perceived freedom of extension choice, for perceived university support of teaching, and for perceived university support of extension. The relationship between work alienation and the variables of perceived freedom of research choice and of perceived university support of research did not vary according to level of education.

2. It was found that work alienation increased with educational level only for the variable of perceived closeness of supervision.

Thus, it may be concluded that although the relationship between work alienation and perceived organizational control does tend to vary with level of education it does not increase with educational level.

#### Discussion

According to my lights, a last chapter should resemble a primitive orgy after harvest. The work may have come to an

end, but the worker cannot let go all at once. He is still full of energy that will fester if it cannot find an outlet. Accordingly he is allowed a time of license, when he may say all sorts of things he would think twice before saying in more sober moments, when he is no longer bound by logic and evidence but free to speculate about what he has done.<sup>1</sup>

Encouraged by Mr. Homan's lights, each of the three research questions and respective hypotheses which guided this study will be considered separately.

### Set I

The analysis of the first set of hypotheses clearly supported the idea that when higher degrees of organizational control over their work are perceived by faculty, higher degrees of alienation are found. When faculty perceive themselves to have less influence over and participation in the decision making processes pertaining to their work (e.g., as department heads make authoritarian decisions affecting the faculty), as freedom of choice in teaching, research and extension activities is perceived to be circumscribed, and as university support in terms of money, time and encouragement is perceived to wane, the degree of work alienation reported by the faculty increases. This increase in work alienation means that the faculty members gradually take decreasing pride in what they do, and no longer considering their work to be as intrinsically interesting and satisfying in and of itself.

The professional-bureaucratic dilemma, then, is a viable concept and poses problems for some professionals, despite recent protestations and arguments to the contrary.<sup>2</sup> Some authors have asserted that the professional-bureaucratic models are more compatible than antithetical and that few dilemmas are posed for professionals who are employed in bureaucratic organizations because of the intimate relationship which



exists between these models. Clearly, in this instance, this is not the case.

The present investigation which dealt with professionals considered to be almost an ideal professional type<sup>3</sup> found that perception of increased organizational controls, particularly as regards the work activity, does indeed promote work alienation. Perhaps this research will provoke a resurgence of interest in and reconsideration of the professional-bureaucratic dilemma and of the impact of increased bureaucratization upon professionals and their work.

Autonomy with regard to one's work seems to be of paramount importance for faculty. This autonomy, however, does not appear to necessitate or demand a total separation and isolation from the organization. In fact, the findings regarding the variable of perceived closeness of supervision reveal that a participatory management style is not different in the degree of work alienation from a laissez-faire supervisory style. It is only when supervisors were perceived to be authoritarian that work alienation increased, and significantly so. While it could be argued that no one relishes being told what to do, this investigation shows that being told what to do has serious consequences for a specific professional type--university faculty. They become alienated from their work.

Practicing administrators in higher education, then, must take into account work alienation as one of the possible consequences of increased organizational controls for faculty, primarily because the viability and effectiveness of higher education depends upon faculty commitment to work. Should faculty become increasingly alienated from their work because administrators (whatever the good intentions) attempt to exert

more organizational control than it is likely that all of higher education may suffer.

This study lends credence to the idea that academic man may indeed be an extreme and rather special case of the professional in an organizational context. He not only wants control over the core tasks of teaching, research and extension, but he needs to be able to determine the means by which these tasks are accomplished.<sup>4</sup> When these needs are not met, work alienation may result.

Sensitivity to and respect for the professional needs of faculty, forgotten as they often are by some administrators, ought always to be in the forefront when management decisions in higher education are made. The urge to systematize everything, for the purposes of management control, accountability, and planning, so prevalent in higher education, ought to be held in check and balanced against the potential of significantly impinging upon the domain of the faculty.

## Set II

The second set of hypotheses offered support for the idea that the relationship between perceived organizational control and work alienation would be moderated by discipline orientation. The contention that faculty with a pure discipline orientation would consistently be more alienated than those with an applied discipline orientation was not fully supported. Half of the hypotheses supported this contention and half did not.

Several explanations and/or further interpretations of these results are possible.

1. Perhaps there is no consistent difference in discipline orientation despite the literature to the contrary.<sup>5</sup>

2. Perhaps a land-grant university attracts and retains a certain type of faculty member, such that the discipline distinctions between pure and applied become blurred.

3. Perhaps other variables such as age, sex, academic rank, length of employment, and college affiliation, not taken into consideration in this study, had a combined effect and caused unexpected reversals.

4. Perhaps the methodology used to operationally measure orientation was faulty. Biglan's Clustering of Academic Departments<sup>6</sup> may not have been the best operational measure of discipline orientation for a land-grant institution. Many disciplines falling in the pure category of Biglan's typology have a tendency to have a stronger applied character at a land-grant institution than at a typical comprehensive university. This proposition is even more likely in this particular instance, because the land-grant institution which was the focus of this study only recently changed from an A and M college to a comprehensive university. Furthermore, mean scores are insensitive to the diversity of orientations found within a single department.

This last possible explanation of the results appears likely and is also the easiest to remedy and verify in subsequent research. A scale measuring the character of each individual faculty member's discipline orientation, regardless of the apparent departmental orientation, would correct the above mentioned errors (e.g., then faculty in education, classified as applied by Biglan, but who are really doing work in sociology, classified as pure, could be assigned the proper discipline orientation).

The most obvious conclusion drawn from these mixed results is that the research design for ascertaining the character of various discipline orientations among faculty needs to be improved. It should be revised and the hypotheses tested again before any concrete conclusions are drawn concerning discipline orientation and work alienation based on the data presented in this study.

A tentative qualitative judgment may however be advanced in favor of the prediction regarding the different behavior of pure and applied discipline orientations. When the relationship between work alienation and the different discipline orientations<sup>7</sup> (excluding organizational control variables) is examined, there is no doubt that greater work alienation is manifested by faculty with a pure discipline orientation. Therefore, it might be predicted that when other variables are taken into account and when the discipline orientation methodology is revised, faculty with a pure discipline orientation will indeed consistently be more alienated from work than those with an applied one, in agreement with the literature and prior research.

### Set III

The third set of hypotheses generally supported the prediction that the relationship between perceived organizational control and work alienation would vary according to level of education. However, the contention that the greater work alienation would be associated with the higher level of education was not confirmed. These findings appear to cast doubt upon the viability of the concept that differing educational levels reflect degree of commitment to professional norms and hence the

potential for work alienation when these professionals are employed in a bureaucratic organization.

Several factors, which were not taken into consideration by the research design of this study, as well as a reinterpretation of some of the results, mitigate against a wholehearted rejection of this concept, however.

1. Initially, the surprising indication that faculty at the lowest educational level often times exhibited the most work alienation in relationship to specific variables of organizational control appeared to offer sound evidence that the idea of educational level impacting upon work alienation should be discarded. The conceptual framework regarding level of education was primarily derived from research undertaken in the industrial setting. Several characteristics, peculiar to the university setting, however, probably intervened to produce these unanticipated results. Professionals employed in the industrial setting typically have a terminal masters degree; that is, they have no intention of pursuing their education beyond the masters level. In the university context, however, a number of faculty with the masters degree are working toward a doctorate degree. These faculty, then, may be considered as striving for the same degree of professionalism as those already possessing the doctorate.

In addition, most of the faculty members having a creative discipline orientation possess an M.F.A., the terminal degree for these particular disciplines. Faculty having a creative discipline orientation were found to have the highest work alienation mean of the three orientations considered.<sup>8</sup> Their inclusion in the master's educational level would tend to influence the results in an unexpected manner.

Furthermore, in the particular institution studied the creative disciplines are at the bottom of the priority, budget and prestige list of the university. Undoubtedly this is also a contributing factor in influencing the results.

Moreover, the academic pecking order, which relegates instructors with the masters degree to the bottom of the status, prestige, and opportunity ladder, is also a factor not present in the industrial sector and undoubtedly has an additional impact on the amount of work alienation experienced by holder of the masters degree.

Therefore, rather than conclude that the high work alienation exhibited by those faculty with the masters degree necessitates the discarding of level of education as a significant variable in the study of the relationship between work alienation and organizational control, the educational level should be omitted from the data analysis when drawing conclusions.

When the data on the masters level of education and the cells of small size are omitted from the analysis, the following re-interpretation is possible regarding the differing degree of work alienation for the Ph.D. and Ed.D. levels of educational attainment.

1. Faculty with the Ph.D. are more alienated from their work than faculty with the Ed.D. as perceived influence and participation in decision-making pertaining to the immediate work environment decreases.

2. Neither faculty with the Ph.D. nor faculty with the Ed.D. evidence a consistently greater work alienation for perceived closeness of supervision.

3. Faculty with the Ph.D. are found to be more alienated than faculty with the Ed.D. as perceived freedom of teaching choice, of

research choice, and of extension choice decrease.

4. Neither faculty with the Ph.D. nor faculty with the Ed.D. evidence consistently greater work alienation for perceived university support of teaching and extension.

5. Faculty with the Ph.D. are more alienated than faculty with the Ed.D. as perceived university support of research decreases.

When re-interpreting the results in light of the above, the initial rejection of the idea that the higher the educational level, the greater the work alienation, is not warranted. Five of the hypotheses are now supported, while only two are rejected.

Therefore, the qualitative evaluation and re-interpretation does not permit us to categorically exclude level of education as a significant variable reflecting the degree of commitment to professional norms and consequently work alienation for the professional employed in an organizational context. The relationship of the variables must be more fully explored and in a way that is more precisely tailored to the particular type of organization under consideration.

More attention, then, ought to be placed on the study of individual institutions before cross-organizational studies are done on a national level. Too many factors appear to be endemic to one institution and not another. These variations, and the significance of them, tend to be obscured in large scale studies which cannot possibly account for such individual variation.

#### Recommendations for Further Study

1. Arising immediately out of this particular study is the recommendation that alternative measures for the determination of discipline

orientation and level of education be devised which are applicable to the university setting and can more easily deal with the specific natures of institutions being studied. The measure of discipline orientation used in this study may be more suited for use in a university setting which is more comprehensive and less A and M in character.<sup>9</sup> Moreover, the measure of level of education, primarily used in the industrial setting, was woefully insufficient when applied unaltered in the university setting.

2. The potential sources of conflicts arising from the professional-bureaucratic dilemma have been shown to exist, despite recent literature and research to the contrary. Therefore, the professional-bureaucratic dilemma, as such, needs to be reconsidered and investigated.

3. Furthermore, the probable institutional variation, even within the sphere of higher education, leads to the recommendation that further study of the professional-bureaucratic dilemma in specific institutions and not on a national scale be undertaken. It is additionally recommended that any empirical study of these institutions be coupled with more qualitative research into the question of work alienation.

4. The current concept of what constitutes a "professional" obviously needs serious revamping. While this particular study dealt with an almost "ideal" professional type, too many of the more recent studies have considered all types and varieties of professionals, such that the consequent results are highly suspect. Many of the professionals included in these more recent studies were considered to work at "occupations" and not "professions" as little as a decade ago. Clearly, at least a typology of professions is in order and might be of more value when integrated with such theories as the theory of differing



organizational technologies of Morrissey and Gillespie. The definition of a professional, as it now stands, is patently too broad, such that studies dealing with the professional are actually comparing apples and oranges.

5. Other areas for further investigation suggest themselves. If discipline orientation is a valid concept when examining degree of work alienation in an organizational context, can it reach a point when it no longer has a significant impact, and what is that point? That is, for example, at what point and for which disciplines does the possibility of making much more money (a la Perrow<sup>10</sup>) supercede the effect of discipline orientation?

6. The distinction between authoritarian and authoritative, particularly in the academic sphere, needs more attention; especially when considering the differing expertises of administrators and faculty and how they can come into conflict. The problematical position and role of the department chairman in higher education today is a part of this problem.

7. To the degree to which specific examples of organizational interference with the work of faculty have an effect on work alienation is also fertile ground for investigation. For example, what impact do student evaluations of teaching forms, annual appraisals, uniform book ordering policies, vacation and annual leave regulations, etc., have on faculty work alienation?

8. Those practices, which are considered to be normal and accepted practices in the industrial setting, ought to be investigated regarding their application in the educational sphere where they might neither be as effective, nor receive universal acceptance and acclaim.

9. Another area for further research might be a study of how work

alienation actually affects faculty's research and teaching efforts. In other words, at which point do organizational controls start having a negative pay-off?

10. Needless to say, a whole host of other variables need to be considered when examining work alienation (e.g., sex, age, ethnic group, academic rank, tenured and non-tenured, salary, structural peculiarities, work alienation, supervisors, marital status, etc.).<sup>11</sup>

#### Concluding Remarks

It is hoped that this study has shed some light on the professional-bureaucratic dilemma in general and within the context of higher education specifically by examining those conflicts between the two modes of organizing the work activity which contributes to increased work alienation.

While the results of this particular study which dealt with the relationship between perceptions of organizational control and work alienation are not meant to be generalized to other institutions of vastly differing character, they have indicated that there is still fertile ground for further research into the causes and origins of work alienation among faculty in higher education.

The potential for work alienation among faculty as a result of increased bureaucratization, not only requires further investigation, but must in the mean time be considered when management decisions are made if the vitality of higher education is to continue in the future. No matter how jaded our view of education and the professional involved in higher education, this study has shown that the work of faculty (i.e., teaching, research, and extension) is indeed of paramount importance.

Although faculty do not readily ascribe and conform to organizational norms (and probably never will do so willingly), the relative unimportance of this non-compliance when considering the attainment and continuation of a viable education and research institution must never be totally lost sight of.

#### FOOTNOTES

<sup>1</sup>George Casper Homans, Social Behavior: Its Elementary Forms (New York, 1961, 1974), p. 356.

<sup>2</sup>See Morrissey and Gillespie, as well as Perrow, for illustrations of this approach to the professional-bureaucratic dilemma.

<sup>3</sup>Etzioni, p. 76.

<sup>4</sup>See Clark, p. 11, and Baldrige, p. 536.

<sup>5</sup>See Appendix C.

<sup>6</sup>Biglan, "The Characteristics of Subject Matter in Different Academic Areas," pp. 195-203.

<sup>7</sup>See Appendix C for this additional data.

<sup>8</sup>See Appendix C for additional data.

<sup>9</sup>See Baumgartel, whose research was undertaken at two institutions, neither of which was a land-grant university.

<sup>10</sup>Perrow, pp. 52-58.

<sup>11</sup>See Appendix C for additional data.

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**APPENDIXES**

APPENDIX A

RESEARCH INSTRUMENT

Please CHECK the appropriate answer.

1. How many years have you been employed by Oklahoma State University?

0 - 3 years  
 4 - 6 years  
 7 - 10 years  
 11 - 15 years  
 15 plus years

2. What is the most recent degree you have earned?

B.A. or B.S.  
 M.A. or M.S.  
 Ed.D.  
 Ph.D.  
 D.V.M.  
 Other

3. Check the statement that best describes your discipline.

(1) Primarily concerned with practical applications  
 (2) Not particularly concerned with practical applications

4. The following are discipline clusters. Please check the cluster in which your discipline falls or to which it is most closely allied.

(1) _____	(2) _____	(3) _____	(4) _____
Astronomy	Botany	English	Anthropology
Chemistry	Entomology	History	Political Science
Geology	Microbiology	Languages	Psychology
Math	Physiology	Philosophy	Sociology
Physics	Zoology	Communications	
(5) _____	(6) _____		
Computer Science	Agronomy		
Civil Engineering	Horticulture		
Mechanical Engineering	Dairy Science		
Architecture	Agricultural Economics		
(7) _____	(8) _____		
Accounting	Educational Administration		
Finance	Special Education		
Economics	Secondary & Continuing Education		
	Vocational & Technical Education		

The following series of questions contains a set of alternative answers for each question. These alternative answers form a continuum from one extreme at the left end to the other extreme at the right. A series of descriptive terms is used to define, broadly, four positions along the continuum. Two numbers under each position give eight choices for each question. Please indicate your choice by CIRCLING ONE number in the category that best describes your view of that question.

	AGREE STRONGLY		AGREE		DISAGREE		DISAGREE STRONGLY	
5. My work is interesting nearly all the time.	1	2	3	4	5	6	7	8
6. My work gives me a feeling of pride in having done the job well.	1	2	3	4	5	6	7	8
7. My work does little in the way of tapping my expertise and know-how.	1	2	3	4	5	6	7	8
8. I really don't feel a sense of pride or accomplishment as a result of the type of work that I do.	1	2	3	4	5	6	7	8
9. If I had it to do again, I would choose the same work.	1	2	3	4	5	6	7	8
10. I very much like the type of work that I am doing.	1	2	3	4	5	6	7	8
11. My work is almost always challenging.	1	2	3	4	5	6	7	8
12. My work rarely gives me a chance to do the things that I do best.	1	2	3	4	5	6	7	8
13. My work is my most rewarding experience.	1	2	3	4	5	6	7	8
14. My work never gives me a sense of accomplishment.	1	2	3	4	5	6	7	8
15. In general, I feel that I have a lot of say or influence on what goes on in my job situation.	1	2	3	4	5	6	7	8
16. In general, I feel I can influence the decisions of my immediate superior regarding things about which I am concerned.	1	2	3	4	5	6	7	8
17. In general, my immediate superior asks my opinion when a problem comes up that involves what I do.	1	2	3	4	5	6	7	8
18. In general, if I have a suggestion for improving or changing part of my work situation in some way, it is easy for me to get my ideas across to my immediate superior.	1	2	3	4	5	6	7	8



The next series of items consists of a series of questions about research, teaching and extension with a set of alternative answers for each question. Please indicate your choice by CIRCLING ONE number in the category that best describes your situation. When the question is not applicable, please circle N/A.

	ALMOST NONE	VERY LITTLE	SOME	A GREAT DEAL	N/A
19. In general, how much choice do you have concerning the courses you teach?	1	2	3	4	5
20. In general, how much support (broadly defined) are you provided by the university to teach the courses you wish to teach?	1	2	3	4	5
21. In general, how much choice do you have concerning the research projects you work on?	1	2	3	4	5
22. In general, how much support (broadly defined) are you provided by the university to pursue the research of your choice?	1	2	3	4	5
23. In general, how much choice do you have concerning the extension activities you are involved in?	1	2	3	4	5
24. In general, how much support (broadly defined) are you provided by the university to pursue the extension activities of your choice?	1	2	3	4	5
25. The next question contains a list of statements. Which of the following statements <u>most</u> <u>nearly</u> represents the type of work relationship that exists between you and your immediate superior? (CHECK <u>ONE</u> ONLY)					

- \_\_\_\_\_ (1) We discuss things a great deal and come to a mutual decision regarding the task at hand.
- \_\_\_\_\_ (2) We discuss things a great deal and his decision is usually adopted.
- \_\_\_\_\_ (3) We discuss things a great deal and my decision is usually adopted.
- \_\_\_\_\_ (4) We don't discuss things very much and his decision is usually adopted.
- \_\_\_\_\_ (5) We don't discuss things very much and I make most of the decisions.

THANK YOU VERY MUCH FOR YOUR ASSISTANCE!

APPENDIX B

LETTERS



*Oklahoma State University*

DEPARTMENT OF ADMINISTRATION AND HIGHER EDUCATION

STILLWATER, OKLAHOMA 74074  
GUNDERSSEN HALL

Dear Faculty Member:

You are keenly aware that as higher education has undergone substantial changes during the last decade, so has the role of the faculty member as a "professional" within the organizational framework of the institution. The Department of Educational Administration and Higher Education is concerned with the impact of this changing educational context upon the faculty member as a "professional" and is conducting a study directed at delineating the changing relationship between faculty members and their employing institution. You are being asked to participate in your capacity as a professional.

Please take the time now (approximately 3-5 minutes) to complete the enclosed questionnaire. PLEASE ANSWER ALL ITEMS IN THE QUESTIONNAIRE. When you complete the questionnaire, please fold it in half, and drop it in the campus mail. The return address is already printed on the back of the questionnaire for your convenience.

Please be assured that complete anonymity and confidentiality will be preserved. The code number is for the purpose of following up on non-respondents only. Once received your response is translated into symbols and destroyed. No names or other means of identification will appear in any report of this research, nor be shared with any other person.

We are aware of the value of your time. Yet, your participation is essential to the success of this study and may provide knowledge as to how universities can become better places to work.

Thank you in advance for your contribution and assistance in this project.

Sincerely,

Patrick B. Forsyth  
Assistant Professor  
Department of Educational  
Administration and Higher  
Education  
Oklahoma State University

Sue A. Levine  
Department of Educational  
Administration and Higher  
Education  
Oklahoma State University

PFB:SAL:bab



Oklahoma State University

VICE PRESIDENT FOR ACADEMIC AFFAIRS

STILLWATER, OKLAHOMA 74074  
WHITEHURST HALL  
(405) 624-5627

July 27, 1978

MEMORANDUM

TO: Dr. James H. Boggs

FROM: Sue Levine *Sue*

SUBJECT: Request to Mail Questionnaire to Faculty

RECEIVED

AUG 21 1978

VICE PRESIDENT FOR  
ACADEMIC AFFAIRS

The attached questionnaire (and cover letter) is designed to gather some of the data for my dissertation which deals with the effect of various facets of organizational control on faculty members.

I would like to request your permission to distribute the questionnaire to the faculty at Oklahoma State University using the services of the Central Mailing Service. Thomas Karman, chairman of my doctoral committee, suggested that you might consider this request because the information gathered from the questionnaire may be of value to your office in that it is designed to identify some of the variables that lead to frustration or discomfort on the part of specified faculty groups or types. For example, how length of employment, age, type of unit administrator, and discipline orientation impact upon faculty members' satisfaction with their work. It may also identify those academic units seeing problems, or are having more than the usual number of difficulties, with the demands that the university organization places upon them.

Finally, John Baird has also indicated that this study could provide information for him to use in planning and organizing faculty development activities by more clearly identifying those faculty for whom such activities are most needed.

Thank you for your consideration of my request.

SL:bb

Attachments

*Approved*  
*JHB*  
*Aug. 22, 1978*



*Oklahoma State University*

DEPARTMENT OF ADMINISTRATION AND HIGHER EDUCATION

Dear Respondent:

This questionnaire was developed as part of a study on the impact the changing context of higher education has had on the faculty member. Each questionnaire and all responses will be treated confidentially, and the anonymity of each individual is assured. The questionnaire is coded for purposes of following up on non-respondents only. Your name will not be entered on the questionnaire and no one will ever know how you have responded individually to these questions.

PLEASE ANSWER ALL ITEMS IN THE QUESTIONNAIRE. Incomplete questionnaires will have to be discarded. The questionnaire is short and should only take approximately 5 minutes of your time to complete.

When you are finished, simply fold the questionnaire in half, staple or tape, and drop in the campus mail. The questionnaire already has a return address printed on the back for your convenience.

Your participation in this study is greatly appreciated.

Sincerely,

Patrick B. Forsyth  
Assistant Professor  
Department of Educational  
Administration and Higher  
Education  
Oklahoma State University

Sue A. Levine  
Department of Educational  
Administration and  
Higher Education  
Oklahoma State University

PFB:SAL:bab



*Oklahoma State University*

DEPARTMENT OF ADMINISTRATION AND HIGHER EDUCATION

STILLWATER, OKLAHOMA 74074  
GUNDERSEN HALL  
(405) 624-7244

September 15, 1978

Dear Faculty Member:

A few weeks ago a questionnaire was mailed to you in conjunction with a dissertation study on the impact of the changing educational context upon the faculty member as a "professional" in an "institutional" setting. Your participation is of value and can make a difference in the outcome of this research.

Please take the few minutes required to complete the questionnaire and drop it in the campus mail. I am aware how valuable your time is and thus have enclosed another copy of the questionnaire. The return address is also already printed on the back for your convenience.

Should you have any questions about confidentiality, be assured that once your response is received it is translated into symbols and destroyed. No names or other means of identification will appear in any report of this study, nor be shared with any other person.

If you would like to speak with me personally about the questionnaire or the study itself before completing the questionnaire, I would be happy to speak with you and answer or discuss any questions that you might have. Any other comments will also be appreciated.

Thank you in advance for your contribution and assistance.

Sincerely,

Sue A. Levine

P.S. The discipline clusters on the first page are taken from an already established typology. If you cannot find your discipline, ignore the question, comment or create another cluster.

APPENDIX C

ADDITIONAL DATA

A one way analysis of variance statistical treatment was used to examine the relationship between work alienation and the following variables: discipline orientation, level of education, academic rank, sex, age, and college and/or school affiliation. The results of these analyses are summarized below and in the following tables.

#### Work Alienation and Discipline

##### Orientation

Discipline orientation was found to be significantly related to alienation from work. In Table XXVII it is demonstrated that as discipline orientation changed from applied to pure to creative, alienation from work increased. The F ratio of 3.84 for this relationship was significant at the .0217 level.

#### Work Alienation and Level of Education

Level of education was not found to be significantly related to work alienation. In Table XXVIII it is shown that there was no relationship between increased work alienation and higher level of education. The F ratio of .83 was not significant at the .05 level.

#### Work Alienation and Academic Rank

Academic rank was found to be significantly related to work alienation. When comparing the work alienation means of the four ranks, and taking levels of significant difference into account, associate professors were observed to be the least alienated, while the other three ranks were more alienated but indistinguishably so. In Table XXIX it is shown



TABLE XXVII  
 ONE WAY ANALYSIS OF VARIANCE BETWEEN DISCIPLINE  
 ORIENTATION AND ALIENATION FROM WORK

	Applied	Pure	Creative
Number	268	153	11
Means of Work Alienation	23.96	26.59	28.45

  

Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Between Groups	2	808.73	404.37	3.84	.0217
Within Groups	429	45215.23	105.40		
Total	431	46023.96			

TABLE XXVIII  
 ONE WAY ANALYSIS OF VARIANCE BETWEEN LEVEL OF EDUCATION  
 AND ALIENATION FROM WORK

		M.A. or B.A.	Ed.D.	Ph.D.
Number		99	45	288
Means of Work Alienation		24.86	23.22	25.34

  

Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Between Groups	2	177.51	88.76	.831	.5600*
Within Groups	429	45846.45	106.87		
Total	431				

\*Not significant.

TABLE XXIX  
ONE WAY ANALYSIS OF VARIANCE BETWEEN RANK  
AND ALIENATION FROM WORK

	Instructor	Assistant	Associate	Professor	
Number	29	130	148	125	
Means of Work Alienation	28.83	26.72	22.55	26.42	
Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Between Groups	3	1558.42	519.47	5.00	.0024
Within Groups	428	44465.54	103.89		
Total	431				

that a significant relationship existed between these two variables. The F ratio of 5.00 was significant at the .0024 level.

#### Work Alienation and Sex

Sex was found to be significantly related to work alienation. In Table XXX it is shown that work alienation was greater for males than for females. The F ratio of this relationship of 6.79 was significant at the .0093 level.

#### Work Alienation and Age

Age was found to be significantly related to work alienation. The F ratio of 4.51 was significant at the .0018 level. In Table XXXI it is shown that in general there was a decrease in work alienation as one gets older.

#### Work Alienation and College or School Affiliation

Work alienation was found to vary according to college or school affiliation. The F ratio of 2.30 for this relationship was significant at the .0078 level. In Table XXXII it is indicated that five of the eight schools comprising the College of Arts and Sciences evidenced more work alienation than any of the other remaining colleges.

TABLE XXX  
 ONE WAY ANALYSIS OF VARIANCE BETWEEN SEX  
 AND ALIENATION FROM WORK

		Male	Female		
Number		371	61		
Means of Work Alienation		25.53	21.84		
Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Between Groups	1	715.2088	715.21	6.79	.0093
Within Groups	430	45308.15	105.37		
Total	431				

TABLE XXXI  
 ONE WAY ANALYSIS OF VARIANCE BETWEEN AGE  
 AND ALIENATION FROM WORK

	Years				
	Under 30	31-40	41-50	51-60	60 and Above
Number	29	156	127	80	40
Means of Work Alienation	26.21	26.69	25.72	21.26	22.80
Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Between Groups	4	1866.73	466.68	4.51	.0018
Within Groups	427	44157.23	103.41		
Total	431	46023.96			

TABLE XXXII

ONE WAY ANALYSIS OF VARIANCE BETWEEN COLLEGES AND/OR  
SCHOOLS AND ALIENATION FROM WORK

College or School	Number	Means of Work Alienation			
Fine Arts and Humanistic Studies	23	30.61			
Journalism and Broadcasting	8	29.50			
Biological Sciences	22	29.45			
Mathematical Sciences	16	27.94			
Social Sciences	31	26.42			
Education	33	25.70			
Languages and Literature	36	24.78			
Engineering	51	24.63			
Agriculture	119	23.60			
HPELS	8	23.00			
Physical Sciences	21	22.76			
Business	20	21.15			
Home Economics	22	19.73			

  

Source	df	Sum of Squares	Mean Square	F Value	Level of Significance
Between Groups	12	2814.11	234.51	2.30	.0078
Within Groups	397	40469.89	101.94		
Total	409	43284.00			

VITA 2

Sue Ann Levine

Candidate for the Degree of

Doctor of Education

Thesis: THE PROFESSIONAL-BUREAUCRATIC DILEMMA: ALIENATION FROM WORK  
AMONG UNIVERSITY FACULTY

Major Field: Higher Education

Biographical:

Personal Data: Born in Butte, Montana, August 8, 1946; the daughter of Kurt and Audrey Hinsch; married to David Lawrence Levine, 1968; daughter, Nicole Alexandra, born September 27, 1973.

Education: Attended public schools in Nennah, Wisconsin, and Haworth, New Jersey; graduated from Northern Valley Regional High School at Demarest in June, 1964; received the Bachelor of Arts degree from Saint John's College, Annapolis, Maryland (The Great Books Program), in June, 1968; received the Master of Arts degree from Pennsylvania State University with a major in Art History in December, 1972; completed requirements for the Doctor of Education degree at Oklahoma State University, with a major in Higher Education in December, 1978.

Professional Experience: Administrative Coordinator of the Commonwealth Campus Art History Program at Pennsylvania State University, 1972-75; Instructor in Art History, Department of Continuing Education, Pennsylvania State University, 1971-75; Graduate Administrative Assistant to the Director of Academic Programs and Services and to the Director of Educational Development, Office of the Vice President for Academic Affairs and Research, Oklahoma State University, 1976 to the present. Administrative Internship with Dr. Barbara S. Uehling in the Office of the Provost, University of Oklahoma, Spring Semester, 1977.