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THE COLLECTIVE GOOD: THE RELATIONSHIP AMONG UNIONIZATION, PERCEIVED CONTROL, AND OVERALL JOB SATISFACTION FOR FACULTY IN TWO YEAR COLLEGES

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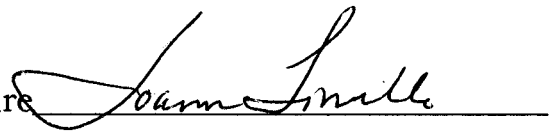
Signature 

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Abstract

The Collective Good: The Relationship Among Unionization, Perceived Control, and Overall Job Satisfaction for Faculty in Two Year Colleges

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The purpose of this study was to examine what role working in a union or nonunion college has in influencing faculty perceptions of control over their work and overall job satisfaction. Using data from the 1993 National Study of Postsecondary Faculty, this study explored the relative importance of variables in influencing perceived control and overall job satisfaction among 3,636 full-time teaching faculty in two-year unionized and nonunionized colleges. A conceptual framework was adapted for this study from the situational model of job satisfaction (Locke, 1976) to select and organize variables according to background characteristics, characteristics of the job task, and financial reward variables. Results of correlational analyses confirm a positive relationship between perceived control and overall job satisfaction for two-year college teaching faculty in both union and nonunion colleges. For both perceived control and overall job satisfaction, multiple regression analyses reveal few differences in the predictive value of independent variables among faculty

in union and nonunion colleges. Job task variables and financial reward variables, not including salary and benefits, were found to be predictive of perceived control for faculty in both union and nonunion colleges. Perceived control was found to be predictive of overall job satisfaction irrespective of union status. Satisfaction with workload and financial reward variables were found predictive of overall job satisfaction for faculty irrespective of union status. Gender (female) was found to be a predictor of job satisfaction for union faculty. A significant interaction among some variables and union status was found suggesting some variables predictive of perceived control and overall job satisfaction carry a greater importance for faculty at nonunion colleges. This study's findings have theoretical implications for support of the situational model of job satisfaction and the importance of perceived control or autonomy in influencing overall job satisfaction. The findings further have practical implications for two-year colleges concerned with improving the work environment for teaching faculty.

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Acknowledgements

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Dedication

To my Mother
Mary Elizabeth Clifton

You were always with me and inspired me to see no limits

CHAPTER ONE

INTRODUCTION

Statement of Problem

The external and internal conditions of higher education in the decade of the 70s were fertile ground for the growth of faculty unions (Kemerer & Baldridge, 1975, p.38). As enrollments leveled off, faculty salaries failed to keep pace with inflation and job security was unsure. Contributing to this climate was faculty dissatisfaction over the perceived lack of influence over governance, deteriorating collegial relationships between faculty and administration, and concerns about recognition and support from administration (Hill, 1982). These conditions were particularly prevalent in two-year colleges whose faculty members looked to unions for help (Ormsby & Ormsby, 1988). It is suggested that collective bargaining became a variant of governance as "an extreme form of shared governance wherein the rules are legally rather than collegially established" (Drummond & Reitsch, 1995, p.57).

After nearly 30 years experience with unionization in higher education, how have the work lives of two-year college faculty improved under collective bargaining? Unionization was perceived to be a solution to job dissatisfaction, and collective negotiations offered a promise of improved conditions.

Although faculty in two-year colleges realized initial economic gains following unionization, their salaries have not increased over those salaries of faculty in nonunion institutions (Birnbaum, 1974; Leslie & Hu, 1977; Marshall, 1979; Borjas, 1979). In fact, faculties in nonunion institutions have realized higher salary gains than their unionized colleagues (Finley, 1990). Despite the fact that these findings indicate no significant salary gains, studies of unionized faculty indicate increased satisfaction with the economic outcomes of bargaining (Ormsby & Ormsby, 1988; Hill, 1982; Finley, 1990).

The literature on faculty satisfaction in union versus nonunion settings is contradictory and fragmented. Faculty report increased satisfaction (Ormsby & Ormsby, 1988; Benoit & Smith, 1980; Hill, 1982; Finley, 1990), decreased satisfaction (Borjas, 1979; Ladd & Lipset, 1973), or no significant difference in satisfaction (Ormsby & Watts, 1991).

In an attempt to account for these unclear findings, scholars (Herzberg, Mausner, & Snyderman, 1959; Maslow, 1954;Vroom, 1964, Ladd & Lipset, 1973; Ormsby & Watts, 1991; Hill, 1982, Hagedorn, 1994); Hagedorn, 1996; Hagedorn, 1998; Hagedorn & Sax, 1999, Hagedorn, 2000) have sought to identify specific facets of the faculty job that predict or influence satisfaction or dissatisfaction. Utilizing conceptual frameworks borrowed from the social sciences (Herzberg,

Mausner, & Snyderman, 1959; Maslow, 1954; Vroom, 1964), studies have tested theories that group factors in support of particular models of job satisfaction. Factors specific to the individual, the work environment, and the job have been linked to faculty satisfaction and dissatisfaction with their work. Demographic variables such as age, sex, rank, discipline, and degree level have been reported to influence both faculty satisfaction and dissatisfaction with often contradictory findings (Ladd & Lipset, 1973; Ormsby & Watts, 1991; Hill, 1982). No single model has emerged that fully explains the influences on faculty job satisfaction.

Increasingly, faculty contracts in both two and four-year institutions include academic governance content in addition to purely economic issues (Chandler & Julius, 1985; Williams & Zirkel, 1988). With each negotiation of the contract, faculties assert a more significant role in decisions that affect their work. Drummond & Reitsch (1995) suggest that collective bargaining became a variant of governance wherein the rules are legally rather than collegially established (p.57). Rhoades (1998) suggests that this change reflects an effort on behalf of faculty to balance managerial discretion with faculty professional autonomy and self-governance. This further suggests that autonomy and control over academic matters may play a more significant role in satisfaction for unionized faculty then previously indicated.

It is suggested that current conditions in community colleges represents a challenge to job security and satisfaction (Castro, 2000). These conditions represent changes to include decrease in full-time tenured faculty and increasing reliance on part-time faculty. Additionally, community colleges are seeing increasing numbers of nontraditional and underprepared students. Coupled with heavy teaching loads and larger classes, these factors suggest an environment of increasing stress for community college faculty. As has been the case over the past 30 years, the study of faculty satisfaction in higher education is warranted, appropriate, and necessary (Hagedorn, 2000).

The purpose of this study is to understand the variables that influence individual faculty members' perception of control over their work (i.e. autonomy) and its role in overall job satisfaction. This study is aimed at improving our understanding of the variables that contribute to faculty satisfaction with their work and at helping institutions develop policies and practices that create and support a more positive and productive work environment for faculty.

Background

Since the appearance of collective bargaining nearly three decades ago, a voluminous body of literature has been developed in an attempt to better understand the effect collective bargaining has had on

higher education. Both the impact of collective bargaining and the outcomes of bargaining on faculty and administrators who carry out their respective academic work within the unionized environment have been the focus of considerable study. In conducting this research, scholars have sought to explain the factors influencing faculty members' decision to unionize, the effect of collective bargaining on salary and other economic indicators, and the evolving nature of the content of faculty collective bargaining contracts.

A stream of research on collective bargaining in higher education spanning over thirty years has focused on the impact of unionization on faculty job satisfaction (Hill, 1982; Ladd & Lipset, 1973; Carr & Van Eyck, 1973; Kemerer & Baldridge, 1975; Gomez-Majia & Balkin, 1984; Vander Putten, McLendon, & Peterson, 1997; Ormsby & Watts, 1991; Butler, 1982; Ormsby & Ormsby, 1988; Borjas, 1979; Finley, 1990; Garbarino, 1975). This research drew its conceptual roots from job satisfaction research that arose from the behavioral and social sciences beginning in 1935 (Hoy & Miskel, 1996). Faculty satisfaction has been linked to both intrinsic and extrinsic, but there remains a lack of empirical evidence regarding the ways in which individual factors influence job satisfaction among specific faculty and institutional contexts.

While data from these studies have informed professionals about some of the outcomes of collective bargaining on faculty job satisfaction, many of these studies focused on one group of institutions in a state or region or on a single institution. Additionally, the majority of these studies have been conducted at four-year institutions. Few studies of the impact of unionization on individual faculty members' perception of control over their work and job satisfaction have been conducted with two-year college faculty even though this group represents the greatest number of unionized faculty.

Purpose of Study

Considerable research has been conducted demonstrating an increase in the presence of academic governance content in faculty collective bargaining agreements over the past thirty years (Chandler & Julius, 1985; Williams & Zirkel, 1988; Beaulieu, 1995; Tangman, 1998; Temte, 1997). These studies begin to explain the increase in academic governance content in faculty contracts. We still have an incomplete picture of what influence this content has on academic decision-making that directly affects overall faculty job satisfaction.

It has been demonstrated that faculty feel they have significantly less influence over matters that are important to their work (Blackburn & Lawrence, 1995). This is true for academic governance decisions

such as control over curriculum, particularly among community college faculty. Is the experience of faculty perception of control and overall job satisfaction in union two-year college environments different than that of faculty in nonunion colleges? Does the presence or absence of the faculty union and collective bargaining agreement influence faculty perception of control over their work and satisfaction with their job?

The purpose of this study is to understand the factors that influence individual faculty members' perception of control over their work (i.e. autonomy) and overall job satisfaction and to determine the relationship between perceived control and overall job satisfaction. Additionally, how does working in a unionized or nonunionized community college influence faculty's perception of control over their work and overall job satisfaction.

Importance of Study

Gunne and Mortimer (1975) have suggested that perhaps one of the most critical issues of college governance is the proper distribution of power and authority among those campus constituents who seek access to decision making. As professionals, it is assumed that control over their work is assured for faculty within the parameters of academic freedom, but the lines between faculty autonomy and managerial

discretion in academic governance are often blurred (Rhoades, 1998; DeGeorge, 1997).

Notwithstanding that professional organizations representing faculty and college officials have developed policy statements addressing the balance of authority on campus, faculty have sought to assert their rights in academic decision making through the collective bargaining process. It is clear that faculty have increasingly utilized the collectively negotiated contract to codify assurances of autonomy in academic governance and decision-making (Rhoades, 1998; William & Zirkel, 1988). This assertion of control over academic decision-making is not surprising because faculty autonomy has been demonstrated as a key factor in the determination of faculty satisfaction with their role (Antony & Valadez, 1998; Finley, 1990; Kemerer & Baldridge, 1975; Ladd & Lipset, 1973; Perry, Menec, Struthers, Hechter, Schonwetter, and Menges, 1997).

What remains unclear is if the outcomes of collective bargaining have been successful in increasing faculty members' sense of perceived control over their work, and in turn, increasing their overall job satisfaction. Faculty job satisfaction has been linked to organizational performance, productivity, and commitment (Herzberg, et al., 1959; Vroom, 1964). Further, faculty reaction to their work environment can

carry over to the classroom and impact student learning (Blackburn & Lawrence, 1995).

There has been an ongoing interest in assessing the factors that contribute to faculty satisfaction, but few studies have attempted to determine the impact that a union work environment has on satisfaction for faculty, particularly in two-year colleges (Hill, 1982; Finley, 1990; Cornish, 1986; White, 1999; Rubiales, 1998; Rabban, 1992). The impact of unions in the two-year college setting is important to understand because 94 percent of public sector two-year college faculty are represented by collectively bargained agreements (Rhoades, 1998, p.12). The limitation of previous research lies in the ability to generalize the empirical findings of these studies when looking beyond these representative populations as they have focused primarily on review of single colleges, districts, states, or regional colleges.

From previous research, there exists considerable information about the factors that influence faculty satisfaction with their roles. The research on faculty job satisfaction identifies the significant role that autonomy plays in satisfaction. Additionally, the research on faculty contract content has provided evidence that faculty are increasingly including academic governance language as a mechanism to assure their role in decisions over academic matters that affect their work. However, few studies have focused specifically on the impact of

unionization on two-year college faculty satisfaction that can be generalized beyond specific institutions or groups of colleges. Therefore, this study explores how faculty at two-year colleges, as surveyed in 1991-92, report the importance of factors that are associated with perceptions of autonomy and overall job satisfaction are influenced by the presence or absence of a faculty union.

Overview of Study

Data from the 1992-1993 National Study of Postsecondary Faculty (NSOPF-93), sponsored by the National Center for Educational Statistics, are used to identify variables influencing faculty perception of control over their work and to examine the relationship of these variables to overall job satisfaction.

Critical to the foundation of this study is grounding in the relevant theoretical and empirical literature that informs this research. Chapter 2 provides such a review of these relevant literatures. The theoretical foundation utilizes concepts from the sociological and psychological frameworks of job satisfaction. This theoretical foundation is particularly suited to research of higher education faculty job satisfaction and has provided the conceptual rationale for many studies. Factors that are demonstrated to contribute to faculty job satisfaction are reviewed with specific emphasis on the relationship of

faculty autonomy to job satisfaction. The review of the empirical literature focuses on faculty job satisfaction and the outcomes of collective bargaining with an emphasis on the two-year college setting. The literature is further grounded in the small body of research on the impact of faculty unionization on faculty job satisfaction. Particular attention is paid to a review of literature pertaining to research on the impact of unionization on the faculty role in academic governance. The review of literature concludes with a discussion of how these foundations unite to formulate a conceptual rationale to guide this study.

Chapter 3 concentrates on elaboration of the specific research questions that are the focus of this study and a description of how the data will be utilized to address the questions. The chapter describes the rationale for each question that drives the design of the study and how each question is answered. Additionally, an overview of the NSOPF-93 sample design, data collection, and processing procedures that form the basis of the study are presented. Chapter 3 provides a detailed outline of the methodological approaches used in conducting the study.

Chapter 4 of this study is devoted to the presentation of results, including analyses used to determine the degree to which the presence or absence of a faculty union influences faculty perception of control

over their academic work and overall job satisfaction. In addition, Chapter 4 elaborates on the findings through a discussion of results of quantitative analyses intended to determine how the variables relating to the faculty role, characteristics of the college, and characteristics of the faculty member explain faculty autonomy and job satisfaction.

The final chapter provides a review of the study including approaches taken and results. Implications of the findings for both theory and practice are further discussed in this final chapter. Chapter 5 concludes with a discussion of the study's limitations and suggestions for further research and inquiry.

CHAPTER TWO

REVIEW OF THE LITERATURE

This study is guided and informed by three distinct fields of literature. The first field represents the perspectives found in the literature on faculty job satisfaction in higher education. Research on job satisfaction has been of great interest to social and behavioral scientists since its beginnings in the 1930s. It has been estimated that over 5,000 studies of job satisfaction have been published spanning some 30 years (Cranny, Smith, & Stone, 1992). This research has resulted in several job satisfaction theoretical frameworks, three of which are reviewed for their context and relevance in application to research in the educational setting and faculty job satisfaction. An attempt is made to view studies of job satisfaction generally within the context of higher education and in the two-year college setting specifically.

The second field of literature establishes a theoretical and empirical foundation in the psychological research literature on perceived personal control. An attempt is made to view perceived personal control as it relates to faculty autonomy. Although this construct has most often been utilized in studies of students, it can be

suggested that control is likely to be of equal or greater importance for faculty.

The third body of literature emphasizes empirical investigations of the impacts of unionization on higher education faculty. An historical perspective of the impact of unionization on faculty priorities is discussed to provide context for the focus of the impact of unionization on faculty satisfaction. Particular attention will be paid to the empirical literature on the impact of unionization on faculty reward systems and the smaller body of research literature on the impact of unionization on faculty satisfaction in two-year colleges.

Background

The two-year college system has its roots in the 1960s and 1970s when development of these colleges was rapid and often unhindered by time-consuming consensus building (Thaxter & Graham, 1999). College leadership during this period was marked by strong hierarchical control in order to rapidly develop the necessary managerial processes this emerging educational system required (Alfred & Carter, 1993). These newly developed colleges were often an outgrowth of the secondary educational system and management style and control over curriculum was very similar. Faculty in these new higher education institutions "...were controlled to the extent that their curricula and

even their lesson plans were pre-defined and the methods of evaluating student achievement and even teachers themselves were prescribed" (Franklin, Burgos-Sasscer, Kessel, & Mack, 1991, p.2).

Although faculty in two-year colleges no longer teach from prescribed curricula (Franklin et al, 1991), the principles of participative management have not taken root in the educational culture of the two-year colleges (Thaxter & Graham, 1999; Jackson & Moulton, 1993). Faculty continue to characterize two-year college administrations as autocratic and dictatorial (Thaxter & Graham, 1999; Commission on the Future of Community Colleges, 1988) regarding shared decision making in a variety of areas of college and academic governance.

Dissatisfaction and low morale reported by faculty has been linked to this autocratic and tightly controlled college environment (O'Hara, 1990; Harshbarger, 1989). Jackson and Moulton (1993) suggest that what results from faculty working in this type authoritarian environment is a lack of trust, a perception that their work is not valued, and a sense that creativity is neither encouraged or rewarded. Professionals who work as employees in bureaucratic organizations, such as institutions of higher education, are vulnerable to administrative direction and subsequent loss of autonomy. Faculty control over their work, demonstrated as autonomy, has been suggested

to have direct effect on faculty satisfaction for two-year college faculty (Finley, 1991). The loss of perceived autonomy has a negative impact on motivation and commitment and can result in alienation.

Influencing job satisfaction has been important in understanding what motivates employees. Motivation has been defined as the psychological process that gives behavior purpose and direction (Krietner, 1995). It is the force that drives individuals to accomplish personal and organizational goals (Lindner, 1998) and provides the will to achieve (Bedeian, 1993). Employees who are motivated are more productive and organizations survive (Lindner, 1998). Attempts to better understand how to decrease faculty alienation and increase motivation has driven much of the research on faculty perceived control over their work and job satisfaction.

Job Satisfaction

In an effort to explain the complexity of job satisfaction, scholars have identified and tested a number of relevant theoretical frameworks. These theories have their roots in the behavioral and social sciences and particularly in industrial psychology. They have in common the belief that there is a relationship between job satisfaction, behavior, and work. A review of the literature (Locke, 1976; Hoy & Miskel, 1996; Quarstein, McAfee, & Glassman, 1992; Thompson, McNamera, & Hoyle,

1997) identifies three job satisfaction frameworks into which most of the theories used to study job satisfaction in the educational setting can be placed.

Content Model of Job Satisfaction

The first theoretical framework is content theories of job satisfaction. Content theories attempt to explain job satisfaction in terms of needs that must be satisfied or values that must be attained (Locke, 1976). Examples of content theories include Maslow's Hierarchy of Needs (1954), Herzberg's Two-Factor Theory (Herzberg, Mausner, & Snyderman, 1959), and Schutz's Interpersonal Underworld (Schutz, 1966).

Maslow's needs theory proposes that rank and satisfaction of human needs and how persons pursue those needs is instrumental in motivation of behavior (Maslow, 1954). According to this theory, persons have needs that are on a continuum. Lower order physiological needs, such as food and safety, must be met before a person seeks satisfaction of higher order needs such as self-esteem or self-actualization. Research findings of the application of Maslow's theory of needs satisfaction and importance as the motivation for behavior have been mixed (Bellott & Tutor, 1990; Clay, 1977; Pardee, 1990). Application of this framework to the educational setting has been limited (Giandomenico, 1973) with little evidence of its utility in

explaining the relationship between needs importance and satisfaction among higher education faculty (Clay, 1977). It has been suggested that this conceptual framework might be useful in combination with other job satisfaction models in the study of motivation and satisfaction (Gawel, 1997).

Herzberg's (Herzberg, et al., 1959) Two Factor Theory of Job Satisfaction is perhaps the content theory most frequently used in studying job satisfaction among faculty in education. This theory proposes that job factors motivate employees. These factors fall across a two-dimensional paradigm with one group responsible for job satisfaction and another group responsible for dissatisfaction. Herzberg, et al (1959) propose that job satisfaction and dissatisfaction result from different causes. It is the presence or absence of these factors within each group that accounts for the relative satisfaction or dissatisfaction reported. "Hygiene" factors such as interpersonal relations, supervision, working conditions, company policies and administration, and wages and benefits, function as dissatisfiers. When they do not meet the expectations of the employee in the work setting, dissatisfaction results. Their presence, in the degree desired by the employee, although, does not create satisfaction.

"Motivators", such as achievement, promotion, recognition, responsibility, advancement, and the work itself are suggested to

influence job satisfaction. Hygiene factors are proposed as job context factors while motivators are job content factors. These two factors become a source of good or bad feelings about the workers' job (Herzberg, et al, 1959). This model has been useful in providing a conceptual rationale for explaining job satisfaction in some research studies (Nussel, Wiersma, & Rusche1988; Kaufman, 1984; Diener, 1984; Hill, 1983; Moxley, 1977, Hagedorn, 2000) but has not consistently accounted for the presence or absence of dissatisfaction. Locke (1976) suggests that the weakness of this theoretical model lies in findings that both motivators and hygienes' lead to satisfaction and dissatisfaction. This has been demonstrated in a number of studies utilizing Herzberg's model (Szura & Vermillion, 1975; Fiorentino, 1999). Fiorentino (1999), in a study of 6049 university faculty utilizing the 1993 National Survey of Postsecondary Faculty (NSOPF-93) found that both intrinsic and extrinsic factors were influential in overall faculty satisfaction indicating that the Herzberg Two Factor model could not be fully supported.

Schutz (1966) proposed that humans have three basic needs in common including the need for inclusion, need for control, and the need for affection. This theory further supposes that lack of motivation, expressed as non-task completion, doing the minimum on the job, tiredness, absenteeism, and lateness are all linked to poor interpersonal

relations. Specifically, workers withdraw from involvement to escape the situation and what is perceived as a threat. Results of Schutz (1966) studies indicate certain types of workers may rank these needs higher or lower compared to other professional indicating that characteristics of the profession and the worker may influence the needs for inclusion, control, and or affection.

Utilizing Herberg's theory of job satisfaction, Hagedorn (2000) suggested a conceptual framework model for further study of faculty job satisfaction based on two constructs working as triggers and mediators. Triggers function as a single life event that may be related or unrelated to the job. Mediators include motivators and hygienes, demographics, and environmental conditions. These factors function to move a faculty member along a satisfaction continuum from disengagement to active engagement and appreciation of the work.

Discrepancy Model of Job Satisfaction

The second theoretical framework of job satisfaction is the discrepancy model (Hoy & Miskel, 1996). This model "postulates that job satisfaction is best explained by a discrepancy between the work motivation of jobholders and the incentives offered by the organization" (Smith, Kendall, and Hulin, 1969 cited in Hoy & Miskel, 1996, p. 252). This process model proposes that job satisfaction is influenced by types or classes of variables (needs, values, perceptions) and that these

variables work together to determine overall job satisfaction (Locke, 1976). Hoy and Miskel (1996) suggest that it is the perceived difference between individual motivation (what is expected as fair or reasonable) and organizational incentives (what is actually experienced on the job) that accounts for job satisfaction.

Discrepancy theory has been utilized less frequently in studies of job satisfaction in education (Miskel, Glasnapp, Hatley, 1975; Pritchard & Peters, 1973), but has been found to be a predictor of job satisfaction of other types of employees in other studies (Kauppi, 1983; Niebrugge, 1994; Alesse, 1982).

Situational Model of Job Satisfaction

The third theoretical frame is the situational model of job satisfaction. This model suggests that it is the combination of job task characteristics, organizational characteristics, and individual characteristics that together relate to job satisfaction (Locke, 1976). Examples of characteristics associated with job tasks include degree of autonomy, wages and benefits, level of challenge, routinization or variety, and role tensions (Hoy & Miskel, 1996). Of these three characteristics, Glisson & Durick (1988) found that job task characteristics to be the most influential in predicting job satisfaction.

Organizational characteristics include factors such as degree of centralization, level of professionalism, type of supervision and

feedback, organizational culture, and the type of organization. These characteristics have been found to be moderately predictive of job satisfaction (Glisson & Durick, 1988). Individual characteristics of the employee such as gender, age, motivation, ability, and level of education are instrumental in influencing one's perceptions of current job experiences. In the situational model, employee characteristics are a poor predictor of job satisfaction (Glisson & Durick, 1988). Although this model has not been utilized to the degree that content models have been used in research on job satisfaction, this model hold promise for studies evaluating satisfaction as a function of multiple factors of job experiences (Glisson & Durick, 1988; Quarstein, McAfee, & Glassman, 1992).

Higher Education Faculty Job Satisfaction

It is not an exaggeration to characterize the literature on faculty job satisfaction as contradictory at best. Studies that have spanned nearly thirty years have attempted to identify those characteristics of the job and the faculty member that account for varying degrees of satisfaction and dissatisfaction.

A Carnegie Foundation survey (1985) of 5,000 faculty nationwide characterized the American professoriate as "deeply troubled" (p.31). Over half of the faculty surveyed reported they would seriously consider another academic job if one were offered and over 40 percent reported

their intention to leave the profession in the next five years. Faculty were found to be deeply concerned over salaries, job security, and the integrity of the institution. Reports of faculty perceptions of discontent led to increasing numbers of studies conducted at various types of institutions to identify the determinants of faculty job satisfaction. Questions were asked such as who is satisfied, what accounts for their satisfaction, and is faculty satisfaction different from one type of institution to another.

In contrast to the Carnegie (1984) findings, the literature on faculty satisfaction points to a relatively satisfied professoriate in both two and four-year institutions. Faculty report overall job satisfaction as well as satisfaction with other facet specific factors related to both the context and content of their work (Pearson & Seiler, 1983 Antony & Valadez, 1998; Deiner, 1985; Nussel, Wiersma, & Rusche, 1988; Finkelstein, 1984). As one researcher indicated, "so what's not to like?"

Although faculty report relatively high levels of global job satisfaction, individual facets of job satisfaction point to different experiences for different types of faculty (Diener, 1985; Olsen, Maple, & Stage, 1995; Olsen, 1993; Antony & Valadez, 1998, Hagedorn, 1994; Hagedorn, 1996; Hagedorn, 1998; Hagedorn & Sax, 1999), faculty working in different institutions (Antony & Valadez, 1998; Pearson & Seiler, 1983), and teaching in different types of disciplines (Robertson &

Bean, 1998; Robertson, 1995; Rockman, 1986;Carvelli, 1993; Nussel, Wiersma, & Rusche, 1988).

Olsen (1993) studied the degree to which certain factors influence faculty satisfaction changes overtime. In a longitudinal study of faculty in their first and third years, empirical findings indicate that faculty are more satisfied in their first year than in their third year. Faculty report dissatisfaction in salary levels and lack of support from colleagues as they advance in their career. This study also uncovers changes in faculty needs from the first to the third year in the role. First year faculty report satisfaction most related to their ability to balance work demands. Additionally, satisfaction of new faculty is gained through a perceived level of recognition and support from supervisors and colleagues. If the anticipated and needed level of support from colleagues is not forthcoming, this could account for the dissatisfaction relating to lack of support from colleagues identified by faculty in their third year. Conversely, satisfaction of faculty in their third year is tied to the degree of autonomy, challenge, and accomplishment they perceive. The high need for recognition and support felt by new faculty "gives way over time to the more lasting and profession-specific need for autonomy, challenge, and accomplishment" (p.465). These findings indicate that there may be a shift from extrinsic to intrinsic factors that

accounts for differences in source of satisfaction for faculty as they mature in their role.

Because male faculty generally report more satisfaction than females (Nussel, et al., 1988; Woodruff, 1992; Pollicino, 1996; Hill, 1982), the experiences of women and minorities in academia has increasingly been of interest. Women and minority faculty remain underrepresented in both two and four-year institutions giving rise to interest in factors that contribute to their satisfaction and retention.

Olsen, Maple, & Stage (1995) found that intrinsic rewards and the sense of personal control over career played a significant role in job satisfaction for women and minorities. Their study found that perceived control over ones career had a direct effect on job satisfaction. Robertson and Bean (1998) also found that socialization, institutional climate, and autonomy, as well as financial compensation were most effective in explaining the variance found in global job satisfaction among women faculty. In contrast, Hagedorn (2000) found that mediators of the work itself, salary, relationship with administration, quality and relationship with students, and institutional climate and culture were most predictive of faculty job satisfaction.

In a study of part-time faculty utilizing the National Survey of Postsecondary Faculty-93, Antony and Valadez (1998) found results that indicated that the experiences of these faculty are different than

previously reported. Although part-time faculty are less satisfied than full–time faculty with their level of autonomy and quality of students, they report higher levels of satisfaction with their jobs overall. Both full-time and part-time faculty were found to be equally satisfied with their demands and rewards, but part-time faculty were somewhat more likely to report that they would choose an academic career if they had the chance to do it over again. Simply phrased, part-time faculty like to teach.

Differences were found in this study between satisfaction of part-time faculty in two-year colleges when compared to four-year colleges. Part-time faculty in two-year institutions were found to be more likely to leave their current positions for positions offering tenure, higher salaries, better facilities, and greater opportunities to teach, and other opportunities. Part-time faculty at four-year institutions report higher satisfaction with their level of autonomy and the quality of the students. Clearly, institutional context and well as the faculty assignment contribute to the level of satisfaction experienced by faculty in different ways.

Studies conducted of faculty in the two-year college consistently report faculty with moderate to high levels of satisfaction (Benoit & Smith, 1980; Hutton & Jobe, 1985; Finley, 1990; Diener, 1985) Faculty in these institutions are committed to their teaching role and committed

to their work. This relatively high level of satisfaction is true for both full and part-time faculty (Benoit & Smith, 1980; Antony & Valadez, 1998; Bowman, 1995). In fact, commitment and involvement of faculty in the two-year college setting has emerged as significant in predicting overall job satisfaction for faculty (Bowman, 1995).

Hill (1983) studied the facet specific dimensions of job satisfaction of faculty in selected two-year colleges in Pennsylvania. This study stands alone in indicating that not all community college faculty are as satisfied with their work as other studies have indicated. This study found that most faculty reporting dissatisfaction were young, female, had lower academic rank, and were concentrated in specific disciplines. Rank, as expressed by tenure status, has been identified with higher levels of satisfaction in other studies (Nussel, et al., 1988).

In a similar study, Hutton and Jobe (1985) studied faculty from fourteen Texas community colleges. Collegiality among supervisors and colleagues surfaced as contributing to faculty satisfaction. Consistent with other studies of community college faculty, high satisfaction was reported in the areas of teaching and other work with students (Diener, 1985).

The role of faculty perceived control and autonomy are noticeably absent in studies of faculty satisfaction in two-year colleges. Benoit and Smith (1980) identify faculty freedom and independence in their work

as contributing to satisfaction with working condition of two-year faculty, but inquiry into perceived control is silent in other studies focusing exclusively on two-year colleges.

In the absence of research findings that would point conclusively to a definitive answer to the question of faculty satisfaction, interest and concern over the conditions of the professoriate remain high. Aside from economic compensation, an environment that is supportive, provides opportunities for professional growth and development, and affords faculty autonomy, challenge and opportunity to utilize their skills and abilities contributes to faculty satisfaction. Locke (1976) in reviewing 3,500 job satisfaction articles found that increased job satisfaction is associated with decreased turnover and higher levels of morale and productivity. Faculty job satisfaction is clearly important. It has important consequences for individual faculty members, for institutions, and for the quality of education offered to students.

Perceived Control

Perceived personal control and its impact on commitment and motivation has been the focus of psychological research literature for nearly forty years. Perceived personal control "refers to a person's perceived capacity to influence and predict events in his or her life..." (Perry, Menec, Struthers, Hechter, Schönwetter, & Menges, 1997,

p.520). Because the perception may not correspond to reality, some persons may believe they can have a greater influence than they actually have, while others may believe they possess less capacity than they actually have.

Bandura (1986) describes personal control as resulting from a person's beliefs that certain efforts will reliably produce specific outcomes. This belief is influenced by the person's conviction that he or she can enact those behaviors. Thus, self-efficacy is a measure of personal sense of control. Bandura's conception has been applied to studies of post secondary faculty perceived sense of personal control.

Perceived Control and Higher Education Faculty

In a longitudinal analysis, Perry, Menec, Struthers, Hechter, Schönwetter, and Menges (1997) utilized Bandura's framework to study the influence of perceived control on adjustment of newly hired faculty. The results of this research indicate that perceived control is a critical factor affecting faculty adjustment to their teaching positions, job satisfaction, and other variables related to well being. Faculty who perceived they had more control over their work were less likely to indicate they would leave their teaching position. These findings support similar finding of the importance of control to faculty satisfaction and job security (Pollicino, 1998; Diener, 1985).

Control over work and autonomy are often points of contention between professionals and administration. As salaried professionals, the experience of faculty in higher education and its impact on perceived control can be viewed from two perspective. The first arises from the discrepancy theory of job satisfaction (Hoy & Miskel, 1996). Based on this model, incompatibilities between expectations of professionals and the bureaucratic requirements of the organization lead to dissatisfaction and discontent. The basis of the discontent is the result of yielding of power to managers and administrators when professionals accept employment in the organization. In yielding the control of the content and context of their work, professionals become "proletarianized" and their work becomes more routine and mechanical (McKinlay, 1982).

The second perspective suggests that salaried professional working within professional bureaucracies function as the operating core and exercise authority and control over areas of jurisdiction unencumbered by bureaucratic controls (Mintzberg, 1979). In this organizational structure, not only do professionals control their own work, but they also seek collective control of the administrative decisions that affect them (Mintzberg, 1979). Attempts by managers or administrators to exert external control creates role conflicts and leads to job dissatisfaction. Within this context, professionals view their role

as autonomous controllers of the core content of the service they provide and "perceive their roles such that it allows them to participate, individually or collectively in making of decisions related to their jobs" (Copur, 1990, p. 116). Professional autonomy permits workers to exercise "discretion in their work, to assert their own judgment and responsibility as arbiters of their activities" (Friedson, 1994, p. 164).

Faculty control over their work has been studied to understand the role conflicts that arise from the faculty member working as a salaried professional in a large bureaucratic organization. Mintzberg (1979) suggests that role conflict and resultant job dissatisfaction is minimized when the organization takes on the characteristics of a professional bureaucracy. In this type of environment, professionals control their own work and seek collective control of administrative decisions that affect them. Authority over areas of jurisdiction is afforded the professional, with little bureaucratic intervention or control. In this type of work environment, the administrative structure of the organization handles resource management and coordinating functions and does not exert control over professional core functions.

Copur (1990), in studying university professors, tested the validity of Mitzberg's assertions as they applied to academic professionals. This research found that professors, as salaried professional in universities, (1) expected to make their own decisions

about the content of their jobs, (2) expected to make decisions about the context of core academic functions in their jobs collectively with their colleagues, (3) expected administrators to make decisions regarding support and coordinating functions, and (4) experienced resentment, when faced with incongruities between their expectations and experience.

Professionals who work as employees in bureaucratic organizations become vulnerable to administrative direction and subsequent loss of autonomy (Friedson, 1994). This loss of perceived autonomy has a negative impact on commitment and can result in alienation. This has been the foundation for much research on faculty perceived control over their work and job satisfaction.

Perceived Control and Two-year College Faculty

Two-year colleges have historically been marked by a strong top-down, hierarchical approach to management (Thaxter & Graham, 1999; Commission on the Future of Community Colleges, 1988). While this management style was effective during the years of rapid expansion of the two-year college system, a review of the literature and empirical findings confirm its impact on faculty perception of control and influence over decision-making in their work.

Although faculty in two-year colleges generally report high levels of satisfaction with their jobs overall (Antony & Valadez, 1998; Finley,

1991), they do not report high levels of satisfaction with the perceived level of control over important aspects of their work. A study of two-year colleges conducted by the American Association of Community Colleges (AACC) found that 66 percent of community college faculty perceived their administrations as "autocratic" (Commission on the Future of Community Colleges, 1988). In these colleges, over 60 percent of the faculty rated their administrations as "fair or poor".

Other studies have demonstrated the importance of faculty perception of involvement in decision-making on faculty well being (O'Hara, 1990; Thaxter & Graham, 1999). The common thread in these findings is that, irrespective of gender, age, union/nonunion status, or other demographic factors, two-year college faculty do not feel they are meaningfully involved in important decision-making that directly affects their work.

Unionization and Higher Education Faculty

Unionization in higher education has been the focus of interest as scholars attempt to understand its impact on faculty and institutions. The study of unionization has been approached from a variety of vantage points. Research has described variables influencing faculty vote to unionize (Brett, 1980; Carr & VanEyck, 1973; Bornheimer, 1985; Ladd & Lipsett, 1973, Garbarino & Aussieker, 1975) and faculty

attitudes toward collective bargaining and union instrumentality (Dayal, 1989; Wilson, 1992; Bigoness, 1978; Graff, Hemmasi, Newgren, & Nielsen, 1994). Research on individual and institutional outcomes of unionization in higher education have also been areas of interest. Studies in these areas have addressed unionization effects on compensation and promotion (Brown & Stone, 1977; Guthrie-Morse, Leslie, & Hu, 1981; Marshall, 1979; Gomez-Majia & Balkin, 1984; Balkin, 1989), student faculty ratios (Brown & Stone, 1979), bargaining goals of faculty (Ponak, Thompson, & Zerbe, 1992), institutional effectiveness (Cameron, 1985), union-management relations (Dayal, 1989), and impact on job satisfaction (Hill, 1983: Finley, 1991).

Factors Influencing Faculty Support For Unionization

Understanding the factors that have influenced college and university faculty to vote for unionization provides grounding for a study on the impact of unionization on faculty. Research on faculty unionization suggests that dissatisfaction with working conditions and a perceived lack of influence in changing those conditions has historically been a primary factor in faculty support to unionize (Brett, 1980; Bornheimer, 1985; Carr & Van Eyck, 1973; Baldridge & Kemerer, 1977). Although dissatisfaction with economic factors (salary and benefits, facilities, and equipment) have been identified as primary issues of faculty concern that lead to an affirmative vote to unionize,

Baldridge and Kememer (1977) found that the growth of collective bargaining was also a result of faculty dissatisfaction with collegial mechanisms. They suggest that "In institutions where academic collegiality was a myth, collective bargaining may promote faculty rights and collegial decision making (p. 262).

Wilson (1992), in studying why major research universities have abstained from unionization, suggests that AAU faculty do not need a union to achieve their goals. In these institutions, faculty autonomy provides the level of influence necessary for them to achieve their goals. Subsequently, the presence of faculty autonomy makes collective bargaining unnecessary and stabilizes the labor-management relationship. Ladd and Lipset (1973) further suggest that faculty power and professional independence varies with the type of institution such that in research institutions, faculty take on characteristics that more resemble a professional guild in lieu of collective negotiations.

Cameron (1985) suggests, "Unionization is more likely to occur in institutions where the disciplinary community is weak and where energies and loyalties are more closely associated with the campus community" (p. 405). This would suggest that faculty who receive recognition and sense of community from outside the organization, through external professional groups and organizations, and are less dependent on the college community and administrators for incentives

and rewards, are less likely to unionize. In the presence of a weak disciplinary community, when organizational effectiveness of the campus or community is threatened or decreases, the move toward collective action is reasonable (p.405). This may provide an explanation for the limited presence of unionism and collective bargaining among major research universities (Cameron, 1985) and it's prevalence in the two-year college setting.

Impact of Unionization on Faculty Economic Goals

The proliferation of collective bargaining in the 1970s and 1980s has been attributed to faculty dissatisfaction with various aspects of their work (Hill, 1982). Of critical importance has been faculty concern over compensation. With the economic constraints experienced by colleges and universities and the resulting decline in faculty wages and increase in retrenchment, faculty looked to collective bargaining to assure their economic status.

The focus of research on the impact of faculty unionization in higher education in the 1970s and 1980s was on changes in faculty compensation following the vote for collective bargaining. Of particular interest among scholars were the gains in salary and benefits that faculty in unionized institutions realized compared to their nonunion colleagues. In studies spanning these first two decades of the expansion of collective bargaining in higher education, findings

demonstrated different results for faculty in four-year and two-year institutions.

Birnbaum (1974) conducted one of the earliest studies of the impact of unionization on faculty compensation. Utilizing a methodology of matching pairs of two and four-year institutions, he studied faculty salaries over the five year period between 1968 and 1973. Faculty in unionized four-year universities realized a significant salary increase initially that continued during the period studied. Although unionized two-year college faculty realized some salary increases initially, this trend reversed. In the final years studied, nonunion faculty demonstrated greater gains in salary than their unionized counterparts in two-year colleges. In a subsequent study of four-year unionized faculty, unionization was found to be the strongest single predictor of faculty compensation during the first years following unionization (Morgan & Kearney, 1977).

The early years of collective bargaining through 1975 have been described as watershed years for gains in faculty compensation made by unions (Guthrie-Morse, Leslie, & Hu, 1981). Studies in subsequent years using the Birnbaum (1974) matched pairs methodology failed to demonstrate the continued trend of larger salary gains among four-year unionized faculty. In evaluating trends over a longer period of time (1970-71 through 1977-78), Guthrie-Morse, Leslie, and Hu (1981)

found that unionized faculty in four-year institutions continued to received moderately higher pay than nonunionized faculty, but this advantage decreased in the later years. A "peaking" (p.253) out of salary gains was found in the later years studied that had not seen in previous investigations.

Recent empirical findings suggest that faculty in unionized institutions demonstrate seven to fourteen percent higher salaries compared to faculty in nonunionized colleges and universities (Monks, 2000). These higher compensation levels appear irrespective of discipline but are affected by seniority. This is not surprising given that seniority, rather than merit, functions as the chief determinant of wage progression in the unionized work environment. This study looked at aggregate union premium and did not differentiate results across institution type.

The impact of unionization on compensation for faculty in two-year colleges demonstrates a very different picture. For faculty in these institutions, salary gains peaked very early in the period following unionization and then either leveled off or reversed when compared to their nonunion colleagues (Baker, 1984; Marshall, 1979; Leslie & Hu, 1977; Wiley, 1994). Results of studies further indicated that nonunionized two-year faculty experienced greater salary increases over time (Marshall, 1979; Wiley, 1993).

Overall, studies of the impact of unionization on faculty compensation have demonstrated mixed results. While collective bargaining provided two-year college faculty with a measure of improvement in compensation immediately following unionization these gains have not been sustained over time. Since faculty did not realize ongoing economic gains, faculty looked to other areas in which they could exert influence on factors affecting their work.

Impact of Unionization on Faculty Role in Academic Governance

Retinas (1982) identified a trend emerging that reflected a change in the bargaining priorities of faculty from a singular interest in economic issues toward asserting increasing control over academic and institutional governance. Kemerer and Baldridge (1975) report of the Stanford Project on Academic Governance (SPAG) concluded that faculty desire for control and influence in governance was a factor in unionization. With economic gains uncertain, it was predicted that faculty participation in governance issues would increasingly be a part of collective negotiations at both two and four-year institutions (Carr & VanEyck, 1973; Garbarino & Aussieker, 1975; Andes, 1982).

In an attempt to validate this trend, researchers looked to faculty contract content analysis to provide insight into the degree of extension of faculty roles in academic governance. These studies demonstrate that faculty are interested in utilizing the collective bargaining process

to assure their role in matters that effect their work particularly academic governance decisions.

Andes (1974) reports one of the earliest accounts of inclusion of permissive issues in contracts with increasing frequency. These permissive issues focus primarily on governance content. A number of scholars studied faculty contract content to determine the degree to which academic governance content had increased in contracts over time. These studies are most informative to this study on the impact of unionization on faculty control over academic decision-making.

Julius (1979) concluded that faculty bargaining content was an incorporation of existing governance mechanisms into the contract. He found a relationship between geographic region, institution size, bargaining agent, and type of institution (public/private and two/four year). Julius' contribution to the study of contract content analysis is significant in his development of an ordinal scale of selected contract content. This work established the foundation for studies that followed.

Chandler and Julius (1985) utilized the same instrument in their study of two-year institutions. They documented that faculty had made gains in several governance areas including faculty rights. In this study differences were reported in the contract outcomes based on the bargaining agent representing the institution. They concluded that

faculty were utilizing the contract to safeguard faculty rights in directing academic issues affecting their teaching role.

Williams and Zirkel (1988) adapted Julius (1979) instrument in their national research of two and four year institutions. Their focus was the penetration of faculty in academic governance items for institutions with a ten-year history of collective bargaining. Results of this study indicate that faculty achieved significant increases in contract language defining the faculty role in aspects of institutional decision-making. Williams and Zirkel (1988) found that the institution contracts in 1985 contained increased levels of faculty involvement over 1975 contracts in the same institutions.

Tangman (1998) conducted a replication of the Williams & Zirkel (1988) study to extend the longitudinal base of the findings. She supported Williams & Zirkel (1988) findings that faculty had extended their control over selected academic items in the collective bargaining agreements between 1975 and 1995. The empirical findings of this study indicate that the greatest increase in faculty involvement and control in academic governance issues was in items related to academic freedom and decision-making. Beaulieu (1995) found that "contractually, faculty have the most influence in decision making in the areas most likely to reflect significant faculty expertise" (p.104). This area represented the academic cluster relating teaching, grading,

load, office hours, admissions, committees, and curriculum. Additionally, she found that academic freedom language was present in 96% of the contracts studied and governance related issues were present in all of the contracts of the twenty-three institutions surveyed. Institution size was found to be a determinant in presence of governance contract content with larger institutions demonstrating stronger faculty governance language in the academic cluster. Governance language was independent of the bargaining agent in her study.

Temte (1997), in a longitudinal study of twenty-two community and technical colleges in Washington, reported similar results. This study found an increase in faculty influence over employment decisions, teaching load, non-teaching responsibilities, and academic functions. Institution size and bargaining agent were not influential in affecting change in the contract content, but contracts at urban institutions reported more faculty influence over academic items than those in rural two-year colleges.

Impact of Unionization on Faculty Job Satisfaction

The literature on the impact of unionization on other faculty variables has attempted to determine the degree to which collective bargaining has impacted faculty job satisfaction as well the increased faculty role in shaping the conditions of their employment. This smaller

body of literature, not unlike the general literature on job satisfaction among faculty in higher education, has looked at job satisfaction as a global outcome variable as well as one of a number of variables impacted by the presence or absence of unionization.

These studies are marked by contradictions in their findings and an inability to draw conclusions. This is in part due to the differences in methodology used in studying the effect of unionization on faculty job satisfaction as well as the variety of settings in which it has been studied.

Gomez-Majia and Balkin (1984) studied matched pairs of four-year institutions in Minnesota and Wisconsin to identify determinants of job satisfaction among unionized and non-unionized faculty. They describe the relationship between unionization and job satisfaction as tenuous at best. Only satisfaction with pay was found to be a significant contributor to job satisfaction among unionized faculty. Other factors, such as satisfaction with job content, job context, promotional opportunities, supervision, and resource adequacy did not appear to be different among unionized and nonunionized faculty.

In one of the earliest studies on the impact of unionization on higher education faculty, Hill (1982) found that unionization enhanced job satisfaction in a variety of areas among four-year university faculty in one state. This study demonstrated increased satisfaction of

unionized faculty with economic factors as well as relationship with administration, influence in governance, and satisfaction with teaching. Unionized faculty reported lower satisfaction with their recognition and support. Empirical findings of this study further found that perceived job satisfaction of unionized faculty was influenced by rank, degree level, and age. In contrast, this research further found faculty at nonunion colleges reporting greater overall job satisfaction than their union colleagues when looking at non-economic dimensions of their jobs. The findings of this study must be viewed in light of the potential confounding of results due to methodology. The researcher compared satisfaction of faculty at four unionized state colleges with non-unionized faculty at other universities, liberal arts colleges, and community colleges.

Ormsby and Ormsby (1988) conducted a longitudinal study of faculty at a single university to determine the effect of unionization on faculty satisfaction. The researchers hypothesized that pre-union job satisfaction would be higher than post-union satisfaction. Their findings supported their expectation only as it related to satisfaction with pay. These empirical findings supported those of other research demonstrating early gains in compensation immediately following unionization.

In a similar longitudinal study, Knox (1987) studied Canadian universities two years following unionization. Faculty in institutions that had been unionized reported either more or equal satisfaction, while faculty that had rejected unionization were either less or equally satisfied with various aspects of their job. Findings of this study confirmed that overall, unionization increased satisfaction among university faculty.

Ormbsby and Watts (1991) found total job satisfaction was not significantly greater after unionization than before unionization among faculty at the four-year, public institutions studied. In studying the effect of unionization on the gender/job satisfaction relationship, satisfaction with pay increased among male faculty, but not for females. Overall, this study demonstrated that unionization had no significant influence on summary means of job satisfaction.

Impact of Unionization on Faculty Satisfaction in Two-year Colleges

Far fewer studies have evaluated the impact of unionization on job satisfaction of faculty at two-year colleges. In all of these studies, job satisfaction was one of a number of variables that were studied to determine the differences in perceptions between unionized and non-unionized faculty.

Cornish (1986) found community college faculty perceive collective bargaining as a mechanism for increased participation in governance as well as a contributing factor in improving economic conditions. This study of public community colleges in Illinois is one of two studies that looked at the role of unionization in faculty perception of professional autonomy. Unionized community college faculty perceived collective bargaining to have a positive impact on professional autonomy and collegiality.

White (1999) found similar results in studying nineteen California multi-college two-year institutions. This study attempted to determine the extent to which collective bargaining had influenced collegiality, job satisfaction, trust, and cooperation as reported by college chief executive officers, board chairs, and faculty senate presidents. Faculty leaders reported an improvement in faculty autonomy, but no improvement in job satisfaction or quality of education. Additionally, empirical findings indicate a negative effect of collective bargaining on trust and labor relations. No change was seen in the faculty role in academic governance, faculty salaries, or teaching load.

Finley (1991) studied nineteen two-year public community colleges in the North Central Association of College and Schools to determine the relationship between the presence of collective bargaining and perceived satisfaction with selected job variables and

compensation. This regional study employed the matched pairs (unionized and non-unionized colleges) methodology utilized by several previous studies, controlling for size of full-time faculty, location, urban/rural setting, faculty salary, and college public/private status. Among full-time faculty at public two-year colleges, no significant difference in salary between unionized and non-unionized institutions was found. As might be expected from these results, there was no difference in faculty satisfaction with salary as a result of unionization. This study also looked at the relationship between union status and selected non-economic dimensions of job satisfaction. In contrast to findings of other studies, faculty perceived satisfaction with administration, recognition/support, and convenience variables was higher at nonunion colleges than at union institutions. These findings suggest that rapport with administration, sense of being appreciated, and physical support mechanisms may suffer under unionization. The impact of unionization on faculty autonomy or sense of control over their work is noticeably absent in this study.

Summary of the Impact of Unionization on College Faculty

To asses the impact of unionization on faculty, researchers have compared salaries at unionized and non-unionized colleges and universities. While empirical findings demonstrate higher salaries overall for faculty in unionized institutions, initial gains in salary among

unionized four-year universities and colleges level off or decline over time. The findings are very different for two-year college faculty. Generally, faculty in two-year colleges experience no difference in salary as a result of unionization. Collective bargaining has not produced the anticipated economic results sought by dissatisfied faculty seeking unionization as a means to improve their conditions.

In reviewing faculty satisfaction with non-economic dimensions of the work in unionized and non-unionized colleges and universities, empirical findings are less clear. Aside from satisfaction with pay, it is questionable whether unionized faculty experience more satisfaction with various other job variables than nonunion faculty in four-year institutions. Dayal (1989) suggests that once four-year university faculty are formally integrated into collective bargaining, other issues such as academic freedom, control over course content, teaching load, and determination of teaching methodology become equally important issues in faculty priorities of collective bargaining.

This extension of faculty bargaining interest into academic issues has been supported by other studies (Williams & Zirkel, 1988; Chandler & Julius, 1987). In the absence of realized salary gains, faculty seek an increased role in controlling or influencing academic decision making over factors that directly effect their role.

In two-year colleges, unionization may have cost faculty in the areas of collegiality, relationship with administration, and access to sufficient support and resources to effectively conduct their work. Faculty in nonunionized two-year institutions are more satisfied with various non-economic factors of their jobs than unionized faculty. It remains unclear what, if any relationship unionization has had on two-year college faculty control over their work. Few studies have looked at this relationship except in four-year institutions where it appears to have a positive impact.

Summary and Conclusions

Two-year college faculty generally report high levels of overall job satisfaction (Benoit & Smith, 1980; Hutton & Jobe, 1985; Finley, 1990; Diener, 1985, Hill, 1983). Faculty in these institutions are committed to their teaching role and committed to their work. This relatively high level of satisfaction is true for both full and part-time faculty (Benoit & Smith, 1980; Antony & Valadez, 1998; Bowman, 1995). In fact, commitment and involvement of faculty in the two-year college setting has emerged as significant in predicting overall job satisfaction for faculty (Bowman, 1995).

While the empirical literature appears to support high levels of satisfaction among two-year college faculty, the theoretical literature

suggests these perceptions may not be entirely accurate. The two-year college setting would appear to give rise to sources of lower level of job satisfaction. The literature on job satisfaction suggests that both psychological and sociological sources can be attributed to lower job satisfaction particularly among two-year college faculty.

The internal or contextual experiences of faculty are sources that give rise to faculty dissatisfaction. When there is a discrepancy between faculty expectations and the reality of the work experience, job conflict and resultant dissatisfaction result. For two-year college faculty new to the teaching role, they expect they will experience satisfaction in their jobs. Personal challenge and responsibility, quality significant interpersonal relationships, collegiality, and the perceived ability to influence various factors of the job are important to faculty satisfaction. They further expect and need support, recognition, and a sense of accomplishment. Although these expectations evolve with tenure in the role and are different for different types of faculty based on gender, minority status, assignment, age, academic rank, and discipline, many two-year college faculty experience dissatisfaction when these needs, values, or expectations are not met.

Faculty experiences relating to the job itself and characteristics or factors in the organizational environment of the two-year college give rise to additional sources of job dissatisfaction. The strong hierarchical

control and tightly controlled environment, which marks the developmental history of two-year colleges, are additional sources of job dissatisfaction. In this authoritarian environment, faculty dissatisfaction stems from a lack of trust, a perception that their work is not valued, and a sense that creativity is neither encouraged nor rewarded.

Regardless of how one considers the source, two-year college faculty satisfaction is dependent on an ownership in their work, a sense of belonging within the organization, and control over ones career and work environment. I believe this points to the critical role played by perception of autonomy or control over their work in two-year college faculty job satisfaction.

One method two-year college faculty have adopted to deal with these sources of dissatisfaction is unionization. Faculty turned to this academic governance mechanism in an effort to secure a degree of control over their work. Although this was perceived as a mechanism to address dissatisfaction with a variety of governance and economic issues, it is questionable whether any gains have been realized. What is clear is that faculty have increasingly looked to collective bargaining to assert a stronger role in governance particularly as it relates to academic matters.

Overall, the empirical findings on the impact of unionization on faculty autonomy and job satisfaction are confusing and contradictory. Given the variation in research design and methodology of previous studies, findings do not point conclusively to how effective this mechanism has been in improving the work lives of faculty. More specifically, we do not know how unionization mediates autonomy and indirectly job satisfaction.

This study proposes to examine whether working in a unionized work environment promotes faculty autonomy and its relative influence on overall job satisfaction. Is the experience of faculty different in unionized and nonunionized college settings? To what degree does perceived control explain job satisfaction, particularly among two-year college faculty?

CHAPTER THREE

METHODOLOGY

The overarching purpose of this study is to determine what role working in a unionized or nonunionized college environment has on faculty perceptions of control over their work and their job satisfaction. This chapter will outline the specific research questions that guide this study's inquiry and offer hypotheses or predictions based on the review of the literature presented in Chapter Two. A detailed rationale is presented in support of each hypothesis. Additionally, a detailed description of the data source and the analytical approaches to be used in answering the research questions is provided.

The general design of this study is as follows: A national sample of faculty at union and nonunion two-year colleges is examined first to identify personal and background variables associated with perceptions of control over work and job satisfaction. The data source is described in detail in this chapter following presentation of the hypotheses. The dependent and independent variables selected for this portion of the analysis are guided by theories of job satisfaction and empirical findings on faculty autonomy and job satisfaction particularly in the two-year college setting. These variables and their derivation are described in detail in this chapter following the description of the study sample. A

series of descriptive statistics are presented to provide a detailed picture of the study sample population. Next, selected personal background variables, faculty job task variables, financial reward variables are further studied to determine the relative influence they have on predicting perceptions of control over their work and overall job satisfaction among faculty in union and nonunion work environments.

Research Questions, Statistical Analyses, and Hypotheses

This study investigates the following questions:

Overall Research Question

Are there significant differences between perception of control over their work (i.e. autonomy) and overall job satisfaction among faculty working in union and nonunion colleges?

In addressing this overall research question, four underlying issues will need to be explained. Specifically, when comparing faculty in union and nonunion environments,

1. Is there a relationship between faculty members' perceived control over their work and overall job satisfaction?
2. To what extent are faculty perceived control over their work and overall job satisfaction correlated with:

Personal Background Variables

Gender

Age

Race

Education Background

Job Task Variables

Academic Rank

Tenure status

Facilities and Resources

Workload

Time available for keeping current

Financial Reward Variables

Job security

Opportunities for advancement in rank

Outside Professional Income

Salary

Benefits

3. When comparing full-time two-year college teaching faculty in union and nonunion environments, what is the predictive value of personal background variables, job task variables, and financial reward variables on faculty perceived control and overall job satisfaction?

4. After controlling for the effect of personal background, job task, and financial reward variables, how does working in a union or nonunion college environment predict faculty members' perceived control over their work and overall job satisfaction?

Statistical Analyses

The overall research question will be answered by addressing each of the four underlying research questions and, in turn, each of the predictions.

Questions one and two are exploratory questions and the statistical analyses attempted to get a sense of how the major outcome variables relate to one another and the predictor variables.

The analysis for the first research question looked at the relationship between the two outcomes variables utilizing a zero order correlation. In the spirit of exploratory analysis, a correlation matrix was developed to include the entire sample and then the union and nonunion subgroups. This analysis attempted to determine if a relationship exists between the outcome variables and if this relationship is greater or lesser for the subgroups.

To address the second research question, bivariate correlational analyses were used to examine the relationship between the two major outcome variables (faculty members' perceived control over their work and overall job satisfaction) and the predictor variables identified in

research question two above. A single correlation was conducted where the two outcomes are the dependent variables and the predictor variables are independent variables. The independent variables were grouped under the categories of personal background, job task, and financial reward variables. Correlations were conducted for the entire sample and for the union and nonunion subgroups. This analysis looked at each outcome variable independently and its relationship to the predictor variables.

The third and fourth questions were answered utilizing comparable set-ups of least squares regression analyses. What distinguish the analyses in these regressions are the outcome variables. In answering question number three, both faculty perceived control and overall job satisfaction were outcome variables in independent regressions. In the analysis of the fourth research question, overall job satisfaction was the outcome variable and perceived control functioned as an independent or predictor variable. In both analyses, the remaining predictor variables were identical. Separate regression analyses were conducted for union and nonunion faculty.

To address the third research question, separate multiple regression analyses for union and nonunion faculty were conducted to study the combined relationships between the groups of variables and perceived control over work and overall job satisfaction. These analyses

looked at the individual effect of each of the groups of variables, independent of any other variables, on each of the outcome variables. The first regression analysis looked at the predictive value of each of the variables on faculty perceived control irrespective of union status. The second regression looked at the predictive value of the variables on faculty overall job satisfaction irrespective of union status. In each analysis, the blocks of predictor variables were entered independently.

Block One-Personal Background Variables includes gender, age, race, and educational background. Block Two- Job Task Variables includes academic rank, tenure status, facilities and resources, workload, and time available for keeping current in the field. Block Three – Financial Rewards includes job security, opportunities for advancement in rank, freedom to do outside consulting, salary, and benefits. These analyses were conducted independently for union and nonunion faculty.

To answer the fourth research question, a duplicate least squares regression was conducted with overall job satisfaction as the outcome variable as in question three. The only difference was that perceived control over work functioned as a predictor variable and was entered into the regression as a fourth and final block. This analysis determined the relative influence of autonomy, independent of any other

variables, in predicting overall faculty job satisfaction. This final analysis was conducted independently for union and nonunion faculty.

In summary, four major analyses were conducted in this study. Two exploratory correlational analyses looking at how the major variables of perceived control over work and overall job satisfaction relate to each other and to the predictor variables grouped as personal background, job task, and financial reward variables. The third and fourth analyses looked at the relationship of each of the outcome variables independently to the predictor variables. In each case, separate analyses were conducted for union and nonunion faculty to determine if differences exist in the subgroups.

Hypotheses

In this section, the study hypotheses or predictions are presented. Each prediction is based on the review of the literature presented in Chapter Two and corresponds to the research questions guiding this study. For the purpose of this study, the hypotheses are stated as positive predictions rather than as null hypotheses. A detailed rationale is provided in support of each prediction.

Hypothesis 1

A significant relationship exists between two-year college teaching faculty perceived control over their work and overall job satisfaction for faculty working in both union and nonunion colleges.

Hypothesis 2

There is no difference in magnitude of the relationship between perceived control over work and overall job satisfaction among two-year college faculty working in union colleges and those working in nonunion colleges.

Rationale

The theoretical and empirical literature on job satisfaction supports the existence of a significant relationship between perceived control (referred to as autonomy) and overall job satisfaction (Perry, Menec, Struthers, Hechter, Schönwetter, & Menges, 1997; Locke, 1976; Pollicino, 1998; Diener, 1985; Copur, 1990; Friedson, 1994; O'Hara, 1990; Thaxter & Graham, 1999). This relationship has been demonstrated for faculty in institutions of higher education as well in fields outside of education and specifically for faculty at two-year colleges (Antony & Valadez, 1998; Finley, 1991). In many of these studies, control over aspects of the job tasks has been demonstrated to directly effect overall job satisfaction. More specifically, Hemmasi, Graf, and Lust (1992) found that faculty who perceived that they controlled the balancing of demands reported higher job satisfaction. Although this relationship is well documented, a common thread in these findings is that, irrespective of gender, age, union/nonunion status, or other demographic factors, two-year college faculty do not feel they are

meaningfully involved in important decision-making that directly affects their work.

Perceived control is an important variable in explaining faculty job satisfaction (Perry, et al., 1997; Pollicino, 1996; Diener, 1985). Specifically, faculty who report low to moderate control over their work also report low satisfaction with their job (Perry, et al., 1997). From a theoretical perspective, this concept proposes that in the professional bureaucracy, faculty working as salaried professionals experience less frustration with incongruities between their expectations and experiences (Copur, 1990; Mintzberg, 1979). Said differently, faculty working in a more professional environment expect and experience more control over their work.

Hypothesis 3

When comparing two-year college faculty working in union and nonunion college environments, there will be no difference in the degree to which background variables (gender, race, age, and educational background), job task variables (academic rank, tenure status, satisfaction with resources, workload, and time to keep current in field), and financial reward variables (job security, opportunities for advancement in rank, freedom to do consulting, salary, and benefits are correlated with perceptions of control over their work and overall job satisfaction.

Hypothesis 4

When comparing full-time two-year college teaching faculty at union and nonunion colleges, there will be no difference in the degree to which background variables, job task variables, and financial reward variables predict perceived control and overall job satisfaction

Rationale

Studies on faculty autonomy and job satisfaction in single institutions or groups of institutions demonstrate significant differences in the experiences of faculty based on specific background characteristics. Gender, race, age, and education background of faculty have an important relationship to faculty autonomy and job satisfaction. Specifically, the sense of control over career and work has been found to be significant for women and minority faculty (Robertson & Bean, 1998; Olsen, et al., 1995). Additionally, male faculty members report greater satisfaction with their academic work overall than do female faculty (Nussel, et al., 1988; Woodruff, 1992; Pollicino, 1996; Hill, 1982). Hill (1983) found that community college faculty reporting dissatisfaction were most often young and female.

These predictions assume differences in the degree of correlation and predictive value among the three groups of variables. Further they suggest the magnitude of these differences will be similar for faculty at

union and nonunion colleges. Among these variables, there should be significant relationships to perceived control and overall job satisfaction. There is although, no reason to believe that these characteristics will function differently based on the presence or absence of the faculty union. Additionally, empirical findings on the relationship of satisfaction with salary and benefits, particularly for faculty at union colleges are mixed. For this reason, I do not expect to find any difference between the magnitude of the influence of these groups of variables on faculty members' perceived control over their work or overall job satisfaction among union and nonunion faculty.

Hypothesis 5

When controlling for all other groups of variables, job task variables will be most predictive of perceived control over work for two-year college faculty irrespective of union status of the college work environment.

Rationale

The relatively small body of literature on perceived control points to the job task variables as important predictors of perceived control. Mintzberg (1979) suggests that role conflict results from incongruities between job expectations and the reality of the job context. Copur (1991) found evidence to support the role of job expectations on faculty perceived control. No other variables or groups of variables have been reported as significant predictors of faculty perceived control.

Hypothesis 6

When controlling for all other groups of variables, job task variables and financial reward variables (job security, satisfaction with opportunity for advancement in rank, opportunity for outside consulting, salary, and benefits) will be most predictive of overall job satisfaction for two-year college faculty irrespective of union status of the college environment.

Rationale

A synthesis of 25 years of empirical findings on faculty and administrator job satisfaction suggests that job task factors contribute more to overall job satisfaction or dissatisfaction than organization type or individual faculty characteristics (Thompson, McNamara, & Hoyle, 1997). These findings are consistent with empirical findings of job satisfaction for professionals outside the field of education (Quarstein, et al., 1991; Glisson & Durick, 1988).

Theoretical literature on job satisfaction supports that characteristics of the job task is the most significant predictor of overall job satisfaction (Locke, 1976). Specifically, the Situational Model of Job Satisfaction suggests that it is job task factors that are most influential in predicting job satisfaction (Locke, 1976). These factors include wages and benefits, level of challenge, routinization or variety, and role tensions. This foundation has been supported in studies of faculty job satisfaction.

Although it might be suggested that faculty perception of satisfaction with job task variables would be significantly influenced by the negotiated agreement, there is no evidence in the literature to support job task variables having greater importance in overall job satisfaction for faculty in union institutions. Collective bargaining provides the occasion for faculty to negotiate wages, hours, and other terms and conditions of employment that directly affect the faculty job task. Unionized faculty dissatisfaction with selected job variables, as well as economic rewards, has been suggested as rationale for the extension of faculty bargaining into academic issues (Brett, 1980; Bornheimer, 1985; Carr & Van Eyck, 1973; Baldridge & Kemerer, 1977).

The relationship of satisfaction with financial reward factors and overall faculty satisfaction is well documented (Gomez-Majia and Balkin, 1984; Hill, 1982; Ormsby and Ormsby, 1988). Herzbergs' dual factor theory of job satisfaction suggests that extrinsic job factors such as compensation do not function as satisfiers, but rather influence employees reports of dissatisfaction with their jobs (Herzberg, et al., 1959). Contrary to Herzbergs' theory, investigators have shown a positive correlation between compensation and job satisfaction. Kalleberg (1977) found that the financial dimension had the second greatest effect on overall job satisfaction. It is assumed that similar

results will be found in this research study that support the relationship between faculty satisfaction with financial rewards and overall job satisfaction.

Hypothesis 7

Financial reward variables (job security, opportunity for advancement in rank, opportunity for outside consulting, salary, and benefits) will be more predictive of overall job satisfaction for faculty at union institutions than for faculty at nonunion colleges.

Rationale

Given that faculty in unionized higher education environments have not consistently realized higher economic gains than their nonunion colleagues (Brown & Stone, 1977; Baker, 1984; Guthrie-Morse, Leslie, & Hu, 1981; Wiley, 1994), it is counterintuitive to suspect that unionized faculty will report equal or higher levels of satisfaction with compensation when compared to nonunion faculty. Nonetheless, this contradictory finding has been reported in a number of studies (Lillydahl & Singell, 1993; Gomez-Mejia & Balkin, 1984; Balkin, 1989; Ormsby & Ormsby, 1988). When compared with other facets of job satisfaction that are positively impacted by unionization, satisfaction with pay is reported most by college and university faculty. This perception of job satisfaction supports the implication that faculties may select unionization as a means of increasing their job satisfaction.

Hypothesis 8

Union status of the college will be predictive of two-year college faculty perceived control over work and overall job satisfaction.

Rationale

The body of literature on the impact of unionization on two-year college faculty job satisfaction is very limited. Aside from satisfaction with pay, it is questionable whether unionized faculty experience more satisfaction with various other job factors than non-union faculty. What has been suggested in the empirical findings is that faculty in nonunionized two-year institutions are more satisfied with various non-economic variables of their jobs than their unionized colleagues (Finley, 1990). Specifically, unionized faculty satisfaction with administration rapport, sense of recognition and support, workload, and resources is lower than for nonunionized faculty. These findings support those of Gilmore (1981) that reported a change from collegial to adversarial relation ships between faculty and administration following unionization. Lillydahl and Singell (1993) found global job satisfaction lower among unionized faculty when compared to nonunionized faculty. In contrast to these findings, Hill (1982) stands alone in reporting union status as a positive determinant of overall and selected facets of job satisfaction.

Further, Birnbaum (1980) suggest that because collective bargaining usually occurs under conflictive conditions, a unionized environment leads to defensive behavior and impaired communications. Among non-instruction staff in higher education, union affiliated staff view their work environment more negatively than their nonunion colleagues (Vander Putten, et al., 1997). While controlling for other variables, these findings would suggest that unionized faculty would report less overall job satisfaction then nonunion faculty.
No studies have been conducted to establish a relationship between faculty sense of perceived control and unionization.

Cohen and Brawer (1996) suggest that governance of two-year colleges is marked by hierarchical management that leaves faculty with the perception of little influence in institutional decision-making. Although unionization has been purported as arising from faculty perceived lack of influence in governance and dissatisfaction with collegial mechanisms of governance (Brett, 1980; Bornheimer, 1985; Carr & Van Eyck, 1973; Baldridge & Kemerer, 1975, 1977), few studies have demonstrated that unionization has been effective in increasing faculty autonomy or satisfaction. Empirical findings suggest that faculty seek to increase their influence over academic governance matters with each successive negotiation of the collective bargaining agreement (Andes, 1974; Julius, 1979; Chandler & Julius, 1985;

Williams & Zirkel, 1988; Temte, 1997; Tangman, 1998). Unionization may contribute to the erosion of working conditions at the price of gains in economic issues (Finley, 1990).

Given the lack of empirical evidence that the outcomes of unionization are an increase in faculty control over academic matters, I predict faculty working in nonunion colleges will report greater perceived control over their work then their colleagues at union colleges.

Data Source

This study used the National Study of Postsecondary Faculty (NSOPF-93) database to investigate the influence of unionization on faculty perception of control over their work and overall job satisfaction. This data set was selected due to convenience of availability and its validity in describing the reality of higher education faculty as demonstrated through numerous previous empirical studies. Additionally, analyses of these data provide a foundation for future comparison of results with the NSOPF-99 and later NSOPF survey data sets. The NSOPF-93 was the second cycle of NSOPF conducted in 1992-93 by the National Center for Educational Statistics (NCES) with support from the National Endowment for the Humanities (NEH) and the National Science Foundation (NSF). This survey was limited to

institutions and faculty but was an expanded sample of 31,354 faculty and other non-faculty personnel with instructional responsibilities from 974 public and private nonproprietary accredited institutions of higher education. The National Opinion Research Center (NORC) at the University of Chicago conducted the survey under contract to the NCES. The purpose was to provide a national profile of faculty including data on backgrounds, responsibilities, workloads, salaries, benefits, composition, turnover, recruitment, retention, tenure policies, attitudes, and future plans of both full and part-time faculty (NCES, 1997, p. 1).

The database includes information on faculty perception of satisfaction with control over various aspects of their jobs and overall job satisfaction. Included also are data about union status and faculty participation in the union.

NSOPF-93 Sample Design

The NSOPF-93 utilized a two-stage stratified random sample design. The first-stage sampling frame consisted of a subset of all nonproprietary accredited U.S. postsecondary institutions that grant a 2year (Associate of Arts) or higher degree drawn from the 1991-92 Integrated Postsecondary Education Data System (IPEDS) universe. This consisted of a total of 3,256 institutions stratified by a modified Carnegie classification system according to type and control. This

included nine types of institutions: research universities (public or private), other doctoral universities (public or private), comprehensive colleges and universities (public or private), liberal arts colleges (public or private), two-year colleges (public or private) independent medical schools (public or private), religious colleges (private only), other professional and other specialized degree granting colleges or universities institutions (public or private), and other unknown (public or private) institutions with unknown Carnegie classifications.

A total of 789 institutions were initially selected in the first stage with and additional 185 added for a total of 974 institutions. The second-stage sampling frame consisted of a subset of faculty and instructional staff drawn from lists of faculty and instructional staff provided by the institutions selected in the first stage of sampling. An average size of 41.5 faculty from each institution was selected, with each institution randomly assigned a target sample size of 41 or 42. Individuals were selected from five strata of faculty. If an institution had fewer than 42 faculty and instructional staff, all were selected. The strata included five groups: full-time females, Blacks or Hispanics, Asians or Pacific Islanders, faculty in four NEH disciplines (philosophy/religion, foreign languages, English language and literature, and history) and one group consisting of all other faculty to ensure adequate representation of all groups. Simple random sampling

was used in each group, with the sampling independent from one stratum to another. The NSOPF-93 included faculty and staff who taught at least one course for credit, or its equivalent, during the fall semester, as well as anyone else who had any type of instructional responsibility (e.g., supervising thesis or dissertation committees, individualized instruction, etc.). Teaching assistants and faculty who had no instructional responsibilities at all, such as researchers, administrators, etc. were not included in the sample population.

NSOPF-93 Data Collection and Response Rates

The 974 sampled institutions were contacted and requested to provide annotated lists of all faculty and instructional staff meeting the sampling criteria. Between October 1992 and June 1993 all 974 institutions were contacted to request agreement to participate. Not all institutions responded, so additional institutions were randomly selected. Twelve institutions were determined to be ineligible. The total number of institutions in the final sample was 817 eligible institutions for an overall participation rate of 84.9 percent.

The subset of faculty and instructional staff were surveyed by mail between January and December 1993 with computer-assisted telephone interviewing (CATI) non-response follow-up. Seventy percent of the responses to NSOPF-93 were completed by mail with an

additional 17 percent achieved by CATI for a total response rate of 87 percent.

NSOPF-93 Data Procedures

The reliability and validity of the instrument was field tested with a national probability sample consisting of 636 faculty from 136 institutions from (NCES, 1994). In order to minimize the potential for non-sampling errors, the sample design, data collection and processing procedures were also assessed in the field test. Utilizing the institutional and faculty sample, an extensive item non-response analysis was conducted followed by additional evaluation of the questionnaire and the survey procedures.

Description of the Study Sample Population

Drawing on the NSOPF_93, this study included only those faculty in public two-year colleges whose primary responsibilities were teaching to allow for comparisons across institutions. Applying these selection criteria, the total number of faculty available for inclusion in the study was 96,050. The study sample population final numbers and corresponding descriptive statistics will be discussed in detail in Chapter 4.

Primary Variables Explored in This Study

The primary outcome variables used in this study were faculty perceived control over their work and overall job satisfaction. Additionally, perceived control over work was utilized as a predictor or independent variable in determining its value in predicting faculty overall job satisfaction. The predictor variables were grouped into three categories: background variables, job task variables, and financial reward variables. In the first grouping of background variables, the variables included gender, age, race, and educational background. In the second grouping, job task variables included were academic rank, tenure status, facilities and resources, workload, and opportunity to keep current in the field. The last grouping of financial reward variables included job security, opportunity for advancement in rank, freedom to do outside consulting, salary, and benefits. In what follows, I present detailed conceptual and operational definitions for each of these outcome and predictor variables.

Definition and Measurement of Variables

In this section, the study variables are defined conceptually and operationally. The detailed description of the derivation and coding schema for the variables as well as the results of factor analyses are discussed in detail in Chapter 4.

Faculty Member

Conceptual Definition. An individual whose primary responsibilities including teaching, who holds a full-time faculty status position in a public two-year college, and whose title is professor, associate professor, assistant professor, instructor, or lecturer.

Operational Definition. The term "faculty member" was operationalized through the NSOPF-93 Faculty Questionnaire questions:

Instructional Responsibilities

Question 2. What was you principal activity at this institution during the 1992 Fall Term? If you have equal responsibilities, please select one.

1. **Teaching**
2. Research
3. Technical Activities (e.g., programmer, technician, chemist, engineer, etc.)
4. Clinical Service
5. Community/public service
6. Administration
7. On sabbatical form this institution
8. Other (subsidized performer, artist-in-residence, etc.)

Faculty Status

Question 3. During the 1992 Fall Term, did you have faculty status at this institution?

1. **Yes**
2. No, I did not have faculty status
3. No, no one has faculty status at this institution

Employment Status

Question 4. During the 1992 Fall Term, did this institution consider you to be employed part-time or full-time?

1. Part-time **2. Full-time (SKIP TO QUESTION 5)**

Union/nonunion Environment

Conceptual Definition.

Faculty are defined as working in a unionized college environment if there is a union present irrespective of the faculty decision to become a member or not or their eligibility to become a union member. More specifically, faculty work in an environment in which there is a collective bargaining agreement that establishes the "wages, hours, and other terms and conditions of employment" (29 U.S.C. § 158(d) as cited in Kaplan & Lee, 1995, p. 190).

Operational Definition.

Unionized status is operationalized from answer to the following:

> Question 38. Are you a member of the union (or other bargaining association) that represents faculty at this institution?
>
> **1. Union is available, but I am not eligible**
> **2. I am eligible, but not a member**
> **3. I am eligible, and a member**
> 4. Union is not available at this institution

Personal Background Variables

Conceptual Definition.

Individual characteristics of the employee are thought to be poor predictors of job satisfaction (Glisson & Durick, 1988). Even in light of

this, personal background variables have been included in most studies on faculty perceived control and overall job satisfaction. Given the empirical findings suggesting that the experience of faculty in higher education is different based on gender, age, race/ethnicity, and educational background, these variables will comprise the personal background variables.

Operational Definition.

Personal background variables are based on the following survey items:

Gender

Question 51. Are you...
1. male, or 2. female?

Age

Question 52. In what month and year were you born?
_____ _____ _____ _____ MONTH YEAR

Race/Ethnicity

Question 53. What is your race?
1. American Indian or Alaskan Native 2. Asian or Pacific Islander 3. African American/Black 4. White 5. Other _____

Educational Background

Question 16. Please list below the degrees or other formal awards that you hold, the year you received each one, the field code (from pages 5-6) that applies, name and location of the institution from which you received each degree or award. Do not list honorary degrees.

CODES FOR THE TYPE OF DEGREE

1. Professional degree (M.D., D.D.S., L.L.B., etc.
2. Doctoral degree (Ph.D., Ed.D., etc.)
3. Master's degree or equivalent
4. Bachelor's degree or equivalent
5. Certificate, diploma, or degree for completion of undergraduate program of more than 2 years but less than 4 years in length
6. Associate's degree or equivalent
7. Certificate, diploma, or degree for completion of undergraduate program of at least 1 year but less than 2 years in length

(1) Highest_____

Job Task Variables

Conceptual Definition.

Glisson and Durick (1988) propose that the category of job task variables has emerged as the strongest predictors of job satisfaction. These variables represent characteristics of the job itself and are differentiated from variables, which characterize the worker and characteristics of the people under whose authority the employee, must function. These variables include skill variety, workers experience in the job itself, and work tasks.

Operational Definition.

For the purposes of this study, job task variables include the following survey items:

Tenure Status

Question 7. What was your tenure status at this institution during the 1992 Fall Term?

1. Tenured
2. On tenure track but not tenured
3. Not on tenure track
4. No tenure system for my faculty status
5. No tenure system at this institution

Academic Rank

Question 9. Which of the following best describes your academic rank, title, or position at this institution during the 1992 Fall Term?

1. Professor
2. Associate professor
3. Assistant Professor
4. Instructor
5. Lecturer
6. Other _____

Facilities and Resources

Question 34. How would you rate each of the following facilities or resources at this institution that were available for your own use during the 1992 Fall Term?

a. Basic research equipment/instruments
b. Laboratory space and supplies
c. Personal computers
d. Centralized (main frame) computer facilities
e. Computer networks with other institutions
f. Audio-visual equipment
g. Classroom space
h. Office space
i. Studio/performance space
j. Secretarial support
k. Library holdings

Not available/ Not applicable	Very Poor	Poor	Good	Very Good
NA	1	2	3	4

Time Available For Students

Question 39. How satisfied or dissatisfied are you with each of the following aspects of your instructional duties at this institution?

d. Time available for working with students as an advisor, mentor, etc.

Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied
1	2	3	4

Workload

Question 40. How satisfied or dissatisfied are you with the following aspects of you job situation?

a. My workload
b. My job security
c. Time available for keeping current in my field

Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied
1	2	3	4

Financial Reward Variables

Conceptual Definition.

Faculty satisfaction with compensation is influenced by the presence or absence of a faculty union and collective bargaining agreement. Financial rewards are defined as monetary compensation from any sources that results from work as faculty. This includes salary and benefits derived directly from the teaching assignment and any outside remuneration faculty receive as a result of their faculty status.

Operational Definition.

For the purposes of this study, satisfaction with faculty financial reward variables are derived from the following:

Salary and Benefits and Promotion

Question 40. How satisfied or dissatisfied are you with the following aspects of your job at this institution?

e. Freedom to do outside consulting
f. My salary
g. My benefits, generally
h. Opportunity for advancement in rank at this institution

Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied
1	2	3	4

Perceived Control

Conceptual Definition.

Theorists, as it relates to work, have defined perceived control, as a sense of control over the external work environment (Finkelstein, 1984) or "a person's perceived capacity to influence and predict events in his or her life..." (Perry, Menec, Struthers, Hechter, Schönwetter, & Menges, 1997, p.520).

Operational Definition.

For the purposes of this study, faculty perceived control over their work is defined as a dependent variable composed of the following:

Question 39. How satisfied or dissatisfied are you with each of the following aspects of your instructional duties at this institution?

a. The authority I have to make decision about content and methods in the courses I teach.
b. The authority I have to make decisions about other (non-instructional) aspects of my job.
c. The authority I have to make decisions about what courses I teach.

Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied
1	2	3	4

Job Satisfaction

Conceptual Definition.

Locke, et al. (1959) defined job satisfaction as the positive emotional state resulting from the appraisal of one's job or job experiences.

Operational Definition.

Job satisfaction was identified as one of two dependent variables and was measured as a single global satisfaction measure. This variable was measured by:

Question 40. How satisfied or dissatisfied are you with the following aspects of your job at this institution?

i. My job here, overall

Very Dissatisfied Satisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very
1	2	3	4

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA

As discussed in Chapter Three, the overarching purpose of this study was to determine what role working in a union or nonunion community college environment has on faculty perceptions of control over their work and their overall job satisfaction. In Chapter Three, the specific research questions guiding this study's inquiry and hypotheses were offered based on review of the relevant theoretical and empirical literature. A detailed rationale was presented in support of each prediction. Additionally, a detailed description of the data source and the analytical approaches used in answering the research questions was provided.

This chapter presents and describes the results of data analyses used to answer the research questions posed in this study. Looking at the data from multiple perspectives provides the opportunity for a better understanding of the relationship among the variables and minimizes the potential of error in making inferences about the results (Gravetter & Wallnau, 1996). Hence, in attempting to suggest a model for understanding how working in a union or nonunion environment affects faculty, these data are first examined through description of the variables and the sample population, then by looking at the

relationships among the variables, and finally through multivariate techniques to explain in detail how these relationships exist and the more complex interaction among the variables.

This chapter is broken into three sections. In the first section, all variables used in the study are defined and the psychometric properties of derived variables and scales are provided. In the second section, the study population is presented through a series of simple descriptive and exploratory statistics. Additionally, section two includes simple bivariate correlations between the outcome variables and independent variables. In the third section, results of the final multiple regression analyses are described. These final analyses were conducted to determine the degree to which the independent variables predict perception of control over work and overall job satisfaction for two-year college faculty in union and nonunion colleges.

Section One:

Coding and Derivation of Variables

In Chapter 3 the study variables were conceptually and operationally defined. This section will be confined to a detailed description of the derivation and coding schema for the variables used

in this study. Specifically, all variables used in the exploratory and multiple regression analyses are described.

The operationalization and development of the variables for this study was based on items contained in the NSOPF-93. While some of the variables were taken in their original form from the NSOPF-93 data set, other variables were recoded enabling development of constructs of interest in this study. Items taken as is from the survey were selected because they contain components identified in the empirical literature as related to perceived control over work and/or job satisfaction. In the case of variables constructed for this study, I will fully describe the results of correlational analyses and present measurement properties of these derived variables.

Dependent Variables

The dependent or outcome variables of interest in this study are perceived control over work and overall job satisfaction for full time teaching faculty at two-year colleges. The construct of overall job satisfaction was operationalized from a single item on the NSOPF-93 data set that asked respondents to indicate how satisfied they were with their job overall. The use of this single item to represent global faculty satisfaction is consistent with other studies that have used this variable

as a stand-alone item (Antony & Valadez, 1998; Fiorentino, 1999; Valadez & Antony, 2001).

Overall Job Satisfaction
CODE:
1 = Very dissatisfied
2 = Somewhat dissatisfied
3 = Somewhat satisfied
4 = Very satisfied

Description of Variable
This variable is one of nine NSOPF-93 variables D40A – D40I that asked respondents "How satisfied or dissatisfied are you with the following aspects of your job at this institution? Satisfied with job overall ". This variable was taken as is from the NSOPF-93 for this study.

Perceived Control Over Work
CODE:
1 = Very dissatisfied
2 = Somewhat dissatisfied
3 = Somewhat satisfied
4 = Very satisfied

Description of Variable
This variable is a derived scale (mean) constructed from the combination of NSOPF-93 items D39a through D39c. The derivation of this constructed variable is described in detail in the following section.

Unfortunately, no single variable existed in the survey to represent faculty perceived control over work. This construct was assumed to be present in a number of items on the NSOPF-93 survey. To determine the relationship among these items and their ability to be combined to a derived scale for this construct, all items in the NSOPF-93 data set

relating to degree of faculty satisfaction with control or autonomy over aspects of instructional duties at the institution and other aspects of the job at this institution were submitted to an exploratory principal components factor analysis and rotated to identify variables that were moderately to highly correlated (Gall, Borg, & Gall, 1996). Fourteen items (questions 39a – 39f and questions 40a – 40h) were selected for this analysis in an attempt to develop solutions to communicate internal consistency and common meaning among the variables. Results of the principal components analysis yielded an explanation of the relationship of these variables in a three-factor solution. Although the three components in this analysis explained fifty six percent (56%) of the variance across the fourteen variables, only the primary grouping yielded a combination of variables that were conceptually consistent with the literature. This one factor that emerged represented the highest degree of intercorrelation and included those items relating to faculty satisfaction with authority over specific aspects of faculty instructional and other work responsibilities (Table 1). The reliability of this construct was confirmed through the use of Crohnbach's alpha. As Table 1 demonstrates, the factor loading of these variables were high (.907 to .818) as was the overall reliability (α = .8974). These four items were subsequently merged (mean) to a new variable that I have called faculty perceived control over work. This was the only component in

Independent Variables

Given the organization of the items on the NSOPF-93 survey and the large number of items used in this study, an attempt was made to place the items into a theoretical framework to test their relationship to perceived control and overall job satisfaction (Locke, 1976). This resulted in placement of the independent or predictor variables within three groups: background variables, job task variables, and financial reward variables. The independent variables described in this section are presented according to this framework. The first grouping of background variables includes gender, race, age, and educational background. In the second grouping, job task variables include academic rank, tenure status, satisfaction with facilities and resources, satisfaction with workload, and satisfaction with time to keep current in the field. The next grouping of financial reward variables include job security, opportunity for advancement in rank, freedom to do outside consulting, satisfaction with salary, and satisfaction with benefits. The final independent variable is union status. This independent variable was selected as a stand alone variable of interest in this study.

Background Variables

Gender
CODE:
1 = male

2 = female

Description of Variable:

This is a dichotomous variable that asked respondents "Are you ...". This variable is F51 and was taken as is from NSOPF-93.

Race/Ethnicity

CODE:

1 = White (non-Hispanic)
2 = African American
3 = Hispanic
4 = Asian/Pacific Islander
5 = Native American/Alaskan Native

Description of Variable:

This derived variable was created for the NSOPF-93 from derived variables X01F53 and SAS variable F54. This variable is X02F53 and was recoded from the NSOPF-93 coding to a dichotomous variable (1= minority, 2 = white) for the correlation and regression analyses in this study.

Age

CODE:

1 = Under 35
2 = 35–44
3 = 45-54
4 = 55-64
5 = 65-70
6 = 71 or older

Description of Variable:

This derived variable was created for the NSOPF-93 to redistribute the variable X01F52 age and separate respondents over the age of 65 into two separate categories (In Electronic Codebook, NSOPF93\FAC93.DAT on record 2 at 663-664). This variable is X03F52 and was taken as is from the NSOPF-93 for this study.

Educational Background

CODE:

1 = Certificate, diploma, or degree for completion of undergraduate program of at least 1 year but less than 2 years in length
2 = Associate's degree or equivalent
3 = Certificate, diploma, or degree for completion of undergraduate

program of more than 2 years but less than 4 years in length.
4 = Bachelor's degree or equivalent
5 = Master's degree or equivalent
6 = Doctoral degree (Ph.D., Ed.D., etc.)
7 = Professional degree (M.D., D.D.S., L.L.B., etc.)

Description of Variable:

This variable asked respondents to list the degrees or other formal awards held, the year received, the field code that applied, the name of the field, and the name and location of the institution from which they received each degree or award. Coding was listed for highest degree only (In Electronic Codebook, NSOPF93\FAC93.DAT on record 1 at 98-99). This variable is B16A1 and was recoded from the NSOPF-93 for this study to reverse the order of degree level from lowest to highest.

Job Task Variables

Academic Rank

CODE:

1 = Lecturer
2 = Instructor
3 = Assistant Professor
4 = Associate Professor
5 = Professor

Description of Variable:

For the purposes of this study, NSOPF-93 variable A9 was recoded. The NSOPF-93 variable asked respondents which of the possible responses best described their academic rank, title, or position at their institution during the 1992 Fall Term. The original code frame included codes 1-5 as described above plus code 6: "other rank". A review by NSOPF of the verbatims resulted in expansion of the code frame to include coding 7-25 (In Electronic Codebook, NSOPF93\FAC93.DAT on record 1 at 42-43). Because responses in codes 7-25 included job titles indicative of responsibilities inclusive of tasks other than teaching alone (i.e. Administrator, counselor, etc.), these responses were coded as system missing and excluded for the purposes of this study. To validate accuracy of this recoding, a cross tab was done with variable A9 Academic Rank, Title, or Position and Z2 Principal Activity. Only in codes 1-5 did 100% of respondents indicate teaching as their primary job responsibility. This

criterion was utilized to select the study population. The variable was further recoded for this study to represent directionality of academic rank from lowest to highest consistent with other variables.

Tenure Status
CODE:
1 = Not tenured
2 = Tenured
Description of Variable:
For the purposes of this study, NSOPF-93 variable X01A79 Tenure: Tenure Status was recoded. The original NSOPF-93 derived variable was created from SAS variable A7 to indicate tenure status of the respondent during the 1992 Fall Term. In the original variable, codes for "no tenure system for respondent's faculty status" and "no tenure system at this institution" were merged into one category (In Electronic Codebook, NSOPF93\ FAC93.DAT on record 2 at 399-400). For the purposes of this study, responses for code 3 "Not on tenure track" and code 4 "No tenure system for respondents faculty status or no tenure system at institution" were merged with code 2 responses and recoded as code 2 "Not tenured". In the final coding, the order of the codes were reversed for this study fro convenience and to demonstrate directionality from non-tenured to tenured status.

Facilities and Resources Variables (12 items)
CODE:
1 = Very poor
2 = Poor
3 = Good
4 = Very good
Description of Variable:
This category of variables consists of twelve NSOPF-93 variables C34A – C34L that asked respondents to rate each of the facilities or resources at their institution that were available for their use during the 1992 Fall Term. These variables include:
C34A Basic research equipment and instruments
C34B Laboratory space and supplies
C34C Availability of research assistants
C34D Personal computers
C34E Centralized computing facilities
C34F Computer networks with other institutions
C34G Audiovisual equipment

C34H Classroom space
C34I Office space
C34J Studio/performance space
C34K Secretarial support
C34L Library holdings

These variables were taken as is from the NSOPF-93 for this study. Theses items although similar in nature, represent conceptually distinct items. These items were grouped together by the NSOPF-93. Because their individual interaction with the outcome variables was of interest, they were grouped together on the basis of their conceptual, rather than empirical similarities but were included as individual items rather than combined into a single scale.

Workload
CODE:

1 = Very dissatisfied
2 = Somewhat dissatisfied
3 = Somewhat satisfied
4 = Very satisfied

Description of Variable:

This variable was one of nine items that asked respondents "How satisfied or dissatisfied are you with the following aspects of your job at this institution? – My work load". This variable is D40A and was taken as is from NSOPF-93.

Time To Keep Current in Field
CODE:

1 = Very dissatisfied
2 = Somewhat dissatisfied
3 = Somewhat satisfied
4 = Very satisfied

Description of Variable:

This variable was one of nine items that asked respondents "How satisfied or dissatisfied are you with the following aspects of your job at this institution? – Time available for keeping current in my field." This variable is D40D and was taken as is from NSOPF-93.

Financial Reward Variables

Job Security
CODE:

1 = Very dissatisfied
2 = Somewhat dissatisfied
3 = Somewhat satisfied
4 = Very satisfied

Description of Variable:

This variable was one of nine items that asked respondents "How satisfied or dissatisfied are you with the following aspects of your job at this institution? – My job security". This variable is D40B and was taken as is from NSOPF-93.

Opportunities for Advancement in Rank

CODE:

1 = Very dissatisfied
2 = Somewhat dissatisfied
3 = Somewhat satisfied
4 = Very satisfied

Description of Variables:

This variable is one of nine NSOPF-93 variables that asked respondents "How satisfied or dissatisfied are you with the following aspects of your job at this institution? - Opportunity for advancement in rank at this institution". This variable is D40C and was taken as is from the NSOPF-93 for this study.

Outside Professional Income

CODE:

1 = Very dissatisfied
2 = Somewhat dissatisfied
3 = Somewhat satisfied
4 = Very satisfied

Description of Variables:

This variable is one of nine NSOPF-93 variables that asked respondents "How satisfied or dissatisfied are you with the following aspects of your job at this institution? - Freedom to do outside consulting". This variable is D40E and was taken as is from the NSOPF-93 for this study.

Salary

CODE:

1 = Very dissatisfied
2 = Somewhat dissatisfied
3 = Somewhat satisfied
4 = Very satisfied

Description of Variables:

This variable is one of nine NSOPF-93 variables that asked respondents "How satisfied or dissatisfied are you with the following aspects of your job at this institution? - My salary". This variable is D40F and was taken as is from the NSOPF-93 for this study.

Benefits
CODE:
1 = Very dissatisfied
2 = Somewhat dissatisfied
3 = Somewhat satisfied
4 = Very satisfied
Description of Variables:
This variable is one of nine NSOPF-93 variables that asked respondents "How satisfied or dissatisfied are you with the following aspects of your job at this institution? - My benefits, generally". This variable is D40G and was taken as is from the NSOPF-93 for this study.

Union Status

CODE:
1 = Nonunion institution
2 = Union institution
Description of Variables:
For the purposes of this study, NSOPF-93 variable C38 Union Status was recoded. The original NSOPF-93 variable asked respondents "Are you a member of the union (or other bargaining association) that represents faculty at this institution?" All possible responses indicating there was no union or association representing faculty at the institution were recoded to 1 = nonunion institution. All possible responses indicating a union was present at the institution were recoded to 2 = union institution irrespective of individual faculty membership or eligibility for membership.

Section Two: Descriptive Analyses

For comparative purposes, the demographic reality of faculty populations in union and nonunion settings was explored. In this

section, a series of descriptive statistics of faculty at union and nonunion two-year colleges are presented relative to selected personal, background, and institutional variables. These variables are identified in the empirical literature as associated with perceptions of control over work and job satisfaction.

The study sample was derived from 31,354 college and university faculty in 974 institutions participating in the 1992-1993 National Survey of Postsecondary Faculty (NSOPF-93) conducted by the U.S. Department of Education National Center for Educational Statistics. For the purposes of this study, only two-year college respondents indicating teaching as their primary job responsibility and working on a full time basis were selected. All other faculty participating in the NSOPF-93 were excluded. The resulting study sample consisted of 3,636 faculty from 284 two-year colleges across the United States. Table 2 depicts the demographics of the study sample faculty. For comparison purposes, the study sample is compared to all faculty in the NSOPF-93 who indicated teaching as their primary responsibility whether working part or full time.

According to Table 2, males are underrepresented (49.3% study sample and 55.8% all faculty) and females over represented (50.7% study sample and 44.2% all faculty) in the study sample when compared to all teaching faculty. The distribution of White, African

American, and Hispanic faculty in the sample mirror the teaching faculty population as a whole. Asian Pacific Islander faculty are only slightly underrepresented (3.9% sample and 4.8% total) and Native American/Alaskan Native faculty slightly over represented (1.1% sample and 0.6% total) in the sample group compared to all teaching faculty.

Differences in the two populations are seen when faculty age, academic rank, tenure status and highest degree are compared. It is interesting to note there are more two-year college faculty in the 45-54 year age group (41.1% sample) and 55-64 year age group (20.5% sample) in the study sample than represented in these age groups in the total teaching faculty population (35.3% and 18.9% respectively total faculty). Although few differences are seem among the groups when comparing job title, a few of the differences are remarkable. It is interesting to note the study sample mirrors the total teaching faculty population for most job titles except the title of instructor. More faculty hold this title among two-year college faculty (50.8%) than of all teaching faculty (34.1%). Additionally, the title of professor is equally reported by two-year college faculty (20.6%) and is the single academic rank most often reported by both teaching faculty combined (19.9%). Table 2 further indicates full-time teaching faculty working in two-year colleges are more likely to hold tenure (52.6%) than all teaching faculty combined (35.9%).

TABLE 2 Distribution By Percentage of Demographic Characteristics For All Teaching Faculty (full and part time teaching faculty at all institutions) and Study Sample Faculty Members (full time teaching faculty at two-year colleges)

Variable	All Teaching Faculty (n = 20,308)	Study Sample (n = 3,636)
Gender		
Male	55.8	49.3
Female	44.2	50.7
Racial/ethnic background		
White (non-Hispanic)	81.1	81.6
African American	8.9	8.6
Hispanic	4.6	4.8
Asian/Pacific Islander	4.8	3.9
Native American/Alaskan Native	0.6	1.1
Age		
Under 35	10.3	7.7
35-44	30.5	27.8
45-54	35.3	41.1
55-64	18.9	20.5
65-70	3.8	2.4
71 or older	1.2	0.5
Academic rank		
Professor	19.9	20.6
Associate professor	16.1	14.5
Assistant professor	18.2	13.7
Instructor	34.1	50.8
Lecturer	5.2	0.4
Other	6.5	0.0
Tenure status		
Tenured	35.9	52.6
Tenure track	16.3	16.6
Not tenured	47.8	30.8
Highest degree		
Professional	6.1	2.0
Doctoral	38.5	15.7
Masters	43.4	64.6
Bachelors	9.4	12.2
Greater than 2yr, less than 4yr	0.6	0.9
Associates	1.6	3.5
1yr or less than 2yr	0.5	1.1

Note. Source: 1993 National Survey of Postsecondary Faculty.

It is not surprising that fewer teaching faculty in two-year colleges hold professional (2.0%) and doctoral (15.7%) degrees than their colleagues in all institutions combined (6.1% and 38.5% respectively). As expected, the primary degree held by teaching faculty in two-year colleges is the master's degree (64.6%). My familiarity with the two-year college setting supports this finding particularly given the minimum academic requirements for teaching certification in the community college. Additionally, vocational or professional/technical educational areas are located primarily in the two-year college setting, so it is not surprising that 17.7% of full-time teaching faculty at two year colleges hold less than a masters degree compared to 12.1% of teaching faculty from all institutions combined with this same degree of education.

Table 3 describes the sample population in more detail. This table breaks the study sample down into two groups: faculty at union two-year that more faculty in two-year colleges hold a bachelor or lower degree colleges and those at nonunion two-year institutions. In the overall sample, the numbers of males (49.3%) and female (50.7%) are essentially equal with a slightly larger representation of females noted. This gender balance is repeated in nonunion two-year colleges although female faculty are represented in higher numbers in nonunion colleges (56.0%) when compared to all institutions (50.7%). This is not the case in union two-year colleges where males are slightly over represented

TABLE 3 Demographic Information for Sample Faculty Members (full time teaching faculty at two-year institutions) by Institution Type
(n = 3,636)

Variable	Percentage of Faculty Working at: Union Institutions (n = 2,298)	Nonunion Institutions (n = 1,338)	All Institutions (n = 3,636
Gender			
Male	52.4	44.0	49.3
Female	47.6	56.0	50.7
Racial/ethnic background			
White (non-Hispanic)	81.6	81.7	81.6
African American	7.8	9.9	8.6
Hispanic	5.1	4.4	4.8
Asian/Pacific Islander	4.4	2.9	3.9
Native Amer./Alaskan Native	1.1	1.1	1.1
Age			
Under 35	6.4	9.9	7.7
35-44	25.4	31.9	27.8
45-54	42.3	38.9	41.1
55-64	22.6	16.9	20.5
65-70	2.7	1.8	2.4
71 or older	0.5	0.5	0.5
Academic rank			
Professor	23.8	15.0	20.6
Associate professor	15.2	13.3	14.5
Assistant professor	13.2	14.5	13.7
Instructor	47.4	56.7	50.8
Lecturer	0.4	0.5	0.4
Tenure status			
Tenure	64.1	32.8	52.6
Tenure track	15.7	18.1	16.6
Not tenured	20.2	49.1	30.8
Highest degree			
Professional	2.3	1.5	2.0
Doctoral	16.6	14.2	15.7
Masters	65.4	63.2	64.6
Bachelors	11.2	13.8	12.2
Greater than 2yr, less than 4yr	0.7	1.4	0.9
Associates	2.9	4.5	3.5
1yr or less than 2yr	0.9	1.4	1.1

Note. Source: 1993 National Survey of Postsecondary Faculty.

(52.4%) when compared to all institutions (49.3%). This inverse gender balance is more pronounced when comparing union institutions (52.4%male) to nonunion colleges (44.0% male). The racial/ethnic background of both union and nonunion faculty are not dissimilar and generally mirror their representation in the total study sample population overall with two exceptions. There are slightly more African American faculty in nonunion institutions (9.9%) than in union institutions (7.8%) and the sample population as a whole (8.6%). Additionally, there are more Asian/Pacific Islander faculty in union two-year colleges (4.4%) than nonunion colleges (2.9%) and the total sample population (3.9%). These differences in racial/ethnic background are very small and may be a reflection of the location of the colleges more than the influence of their union status.

In comparing age across institutional type, it can generally be stated that younger faculty are represented in nonunion colleges than in union institutions or in the whole sample of faculty combined. Almost forty-two union and nonunion colleges combined and 31.8% in percent (41.8%) of faculty in nonunion institutions is under the age of 44 years. This compares to 35.5% of faculty in this same age group in both union institutions alone. Across all types of these two-year colleges, the greatest percentage of faculty in a single age group is

among 45-54 years of age (42.3% union, 38.9% nonunion, 41.1% combined).

While faculty in union and nonunion colleges are most likely to hold the title of instructor (47.4% union colleges and 56.7% nonunion colleges), more faulty in union institutions (23.8%) than nonunion institutions (15.0%) reported holding the title of professor. This may be a representation of titles negotiated in the collective bargaining agreements or regional influence. Faculty in union institutions are more likely to hold tenure (64.1%) than faculty in nonunion institutions (32.8%). The master's degree was equally reported as the highest degree in both groups of these two-year college faculty. It is of interest to note that more faculty in nonunion institutions hold a bachelor or lower degree (21.1%) than faculty in union institutions (15.7%) or all institutions (17.7%).

Although the overall study sample included faculty from across the United States, it is not surprising that the concentration of union and nonunion institutions would differ by geographic region (Table 4) due to distribution of right to work states. The majority of faculty in union colleges were from the Far West (28.8%), Great Lakes (20.6), and Mid East (16.7%) whereas, faculty from nonunion colleges were predominantly from the Southeast (49.3%) and Southwest. Faculty in two-year colleges in the total sample population can be accounted for

primarily from the Southeast (24.3%), Far West (19.2%), Great Lakes (17.0%), and Mid East (13.6%) regions.

TABLE 4 College Demographic Information for Faculty Members by Institution Type

Variable	Institution Type		
	Union (n = 2,298)	Non-union (n = 1,338)	All Institutions (n = 3,636)
BEA region*			
New England	8.8	1.8	6.2
Mid East	16.7	8.2	13.6
Great Lakes	20.6	10.8	17.0
Plains	7.4	2.3	5.5
Southeast	9.8	49.3	24.3
Southwest	6.8	22.6	12.6
Rocky Mountain	1.0	2.2	1.5
Far West	28.8	2.8	19.2
Institutional control			
Public	98.7	93.5	96.8
Private	1.3	6.5	3.2
Institution size (FTE)			
1 – 563	1.3	9.8	4.5
564 – 1,423	10.8	15.0	12.3
1,424 – 3,574	34.4	37.9	35.7
3,575 – 8,372	38.5	28.6	34.8
Above 8,372	14.9	8.7	12.7

*Note: NCES derived variable from 91-92 IPEDS data to classify NSOPF-93 institutions according to geographic region, using the nine BEA (Bureau of Economic Analysis) region codes.

In the study sample, differences are seen between groups in the size of the institution in which faculty work. Specifically, 24.8% of faculty in nonunion colleges work in institutions of 1,423 or fewer full time equivalent students (FTE). This compares to 12.1% of faculty in

union institutions working in these same smaller size colleges. A greater percentage of two-year college faculty work in larger union colleges (53.4%) of 3,575 FTE or greater much like the sample population as a whole (47.5). The greatest percentage of faculty working at nonunion colleges report working in moderately sized colleges of 1,424 to 3,574 full time equivalent students (37.9%). When comparing male and female two-year college faulty in union and nonunion colleges, few differences are seen (Table 5). While the distribution of race and ethnicity is equally distributed among male faculty in union and nonunion colleges, African American females are over represented (12.6% nonunion versus 8.5% union) and Hispanic (2.9% nonunion versus 4.1& union) and Asian/Pacific Islander (2.0% nonunion versus 4.2% union) females are underrepresented in nonunion institutions compared to their colleagues in union colleges.

Generally, younger faculty in both types of institutions are more likely to be female and older faculty are more likely to be male (Table 5). While most faculty hold the title of instructor irrespective of gender or union/nonunion status, males appear more likely to hold the academic rank of professor if they work in union institutions (27.9%) than nonunion institutions (20.7%). Additionally, males are more likely than females to hold the title of professor irrespective of union status (27.9%

TABLE 5 Percentage Distribution of Faculty Demographics, by Institution Type and Gender (n = 3,636)

	Institution Type			
	Union (n = 2,298)		Non Union (n = 1,338)	
Variable	Males (n = 1,205)	Females (n = 1,093)	Males (n = 589)	Females (n = 749)
Racial/ethnic background				
White (non-Hispanic)	80.9	82.4	82.1	81.3
African American	7.2	8.5	6.5	12.6
Hispanic	6.1	4.1	6.3	2.9
Asian/Pacific Islander	4.6	4.2	4.1	2.0
Native American/Alaskan Native	1.2	0.8	1.0	1.2
Age				
Under 35	5.6	7.4	9.5	10.3
35-44	22.2	29.0	26.1	36.5
45-54	42.7	41.8	41.8	36.7
55-64	25.7	19.2	20.0	14.4
65-70	3.1	2.3	2.4	1.3
71 or older	0.7	0.3	0.2	0.8
Academic rank				
Professor	27.9	19.3	20.7	10.5
Associate professor	14.1	16.4	13.6	13.1
Assistant professor	11.1	15.5	13.4	15.4
Instructor	46.6	48.3	52.1	60.2
Lecturer	0.3	0.5	0.2	0.8
Tenure status				
Tenure	69.2	58.6	38.9	28.0
Tenure track	12.9	18.7	16.1	19.6
Not tenured	17.9	22.8	45.0	52.4
Highest degree				
Professional	2.5	2.1	1.4	1.5
Doctoral	20.0	12.9	18.4	10.9
Masters	59.4	71,9	57.3	67.8
Bachelors	11.6	10.8	13.0	14.5
Greater than 2yr, less than 4yr	0.6	0.7	2.1	0.8
Associates	4.6	1.0	6.1	3.2
1yr or less than 2yr	1.3	0.6	1.7	1.1

Note. Source: 1997 National Survey of Postsecondary Faculty.

of males versus 19.3% of females in union institutions; 20.7% of males versus 10.5% of females in nonunion institutions). Faculty in union institutions are more likely to be tenured. This holds true for both males (69.2% in union institutions versus 38.9% in nonunion institutions) and females (58.6% in union institutions versus 28.0% in nonunion institutions).

These descriptions of the sample population of two-year college faculty yield few surprises. There is a higher percentage of males in union college settings and a higher percentage of females in nonunion colleges. Additionally, two-year full time faculty are more likely to be tenured if they work in a college with a faculty union. Given the traditional role of the faculty in the two-year college setting, it is not surprising that most faculty in both settings hold the title of instructor and hold the masters as their highest degree earned. This is a unique phenomenon seen predominately in two-year colleges.

Section Three: Exploratory Analyses

Generally, full time two-year college faculty indicate they are satisfied with their jobs overall irrespective of differences in demographic characteristics or union/nonunion setting (Table 6). This is evident by the fact that the magnitude of the means fall within the higher means in the scale and the standard deviations are small. This finding is

consistent with that of previous research indicating community college faculty are happy in their instructional role (Valadez & Antony, 1998; Antony & Valadez, 2001; Pearson & Seiler, 1983).

Further analyses of findings in this study indicate, faculty in union two-year colleges are more satisfied overall than their colleagues at nonunion institutions. In comparing means of overall job satisfaction for faculty based on working in a union or nonunion college environment, faculty working in union colleges report significantly higher job satisfaction overall (union = 3.33, nonunion = 3.18). There is no significant difference between perceived control over work for faculty based on union or nonunion college environment.

TABLE 6 Mean Responses of Perceived Control and Overall Job Satisfaction For Faculty Based on Institution Union Status (n = 3636)

Outcome Variables	Institution Type			
	Union (n = 2298)		Non Union (n = 1338)	
	Mean	S.D.	Mean	S.D.
Perceived Control Over Work	3.08	1.23	3.01	1.24
Overall Job Satisfaction***	3.33	.73	3.18	.74

Note. Source: 1997 National Survey of Postsecondary Faculty. All items were rated using a 4-point scale: 1= *Very dissatisfied*; 2=*Somewhat dissatisfied*; 3=*Somewhat satisfied*; 4=*Very satisfied.*
***p<.001

As a precursor to the analyses germane to answering the research questions posed in this study, an exploratory analysis was conducted to determine if any difference existed the overall job satisfaction between faculty at union institutions and their colleagues at nonunion institutions based on background characteristics. The means of overall job satisfaction were estimated by examining responses from the NSOPF-93 question that asked faculty members to identify how satisfied or dissatisfied they were with their job at this institution overall. Data relative to selected demographic variables are presented for comparison purposes (Table 7). Table 7 looks at the variables accounting for the differences in overall job satisfaction for faculty in union and nonunion colleges. Significantly greater job satisfaction overall appears to be the case for both males (M = 3.31) and females (M = 3.34) and for white faculty (M = 3.33) working in union colleges. Further, faculty in union institutions between the age of 45 and 54 years report significantly greater job satisfaction (M = 3.34) than faculty of the same age range in nonunion colleges (M = 3.19). While both union and nonunion faculty report satisfaction in their instructional role, union faculty with the title of instructor indicate a significantly greater degree of overall job satisfaction ($M_{union} = 3.33$ versus $M_{nonunion} = 3.18$) when looking at job title. Finally, union faculty holding the

TABLE 7 Mean Responses of Overall Job Satisfaction of Union and Nonunion Faculty, by Selected Demographic Variables (n = 3,636)

	Institution Type			
	Union (n = 2,298)		Non Union (n = 1,338)	
Variable	Mean (SD)		Mean (SD)	
Gender				
Male***	3.31	(.75)	3.17	(.77)
Female***	3.34	(.71)	3.19	(.72)
Racial/ethnic background				
White (non-Hispanic)***	3.33	(.73)	3.18	(.75)
African American	3.32	(.67)	3.23	(.63)
Hispanic	3.27	(.77)	3.27	(.81)
Asian/Pacific Islander	3.24	(.72)	3.18	(.64)
Native American/Alaskan Native	3.33	(.73)	2.73	(.96)
Age				
Under 35	3.32	(.69)	3.14	(.70)
35-44	3.27	(.75)	3.13	(.71)
45-54***	3.34	(.72)	3.19	(.76)
55-64	3.36	(.72)	3.28	(.76)
65-70	3.47	(.76)	3.42	(.65)
71 or older	3.25	(.97)	2.71	(1.38)
Academic rank				
Professor	3.39	(.73)	3.30	(.73)
Associate professor	3.28	(.75)	3.17	(.72)
Assistant professor	3.27	(.73)	3.07	(.78)
Instructor***	3.33	(.72)	3.18	(.73)
Lecturer	2.89	(.93)	3.57	(.53)
Tenure status				
Tenure	3.35	(.73)	3.28	(.70)
Tenure track	3.29	(.73)	3.17	(.71)
Not tenured	3.28	(.73)	3.13	(.77)
Highest degree				
Professional	3.27	(.79)	3.35	(.81)
Doctoral	3.22	(.79)	3.07	(.77)
Masters***	3.34	(.72)	3.18	(.75)
Bachelors	3.38	(.68)	3.19	(.69)
Less than 2yr, greater than 4yr	3.27	(.59)	3.39	(.61)
Associates	3.44	(.59)	3.32	(.71)
1yr or less than 2yr	3.43	(.75)	3.28	(.75)

Note. Source: 1997 National Survey of Postsecondary Faculty. All items were rated using a 4-point scale: 1= *Very dissatisfied*; 2=*Somewhat dissatisfied*; 3=*Somewhat satisfied*; 4=*Very satisfied*. ***p<.001

masters degree as their highest earned credential report significantly greater job satisfaction (M = 3.34) compared to faculty holding other degrees. The results of this exploratory correlation between background variables and faculty overall job satisfaction suggests that union faculty may report greater satisfaction simply based on gender, race, age, and academic rank. These differences will be further examined in answering the research questions posed in this study.

Overall, it appears working in a union two-year college setting is more satisfying for White male and female, middle age faculty who hold distribution of these groups of faculty, they do not indicate the degree to which individual variables contribute to job satisfaction or the role that perceived control over their work plays in that satisfaction. They yield the masters degree. While these data provide a glimpse into the little information about the reality of the work environment for these faculty and specifically their perceptions of job satisfaction and sense of control over various aspects of their job. What remains unclear is whether working in a union or nonunion setting plays a role in two-year college faculty's perception of their work. Further analyses allow a preliminary foreshadowing of those possibilities.

In order to determine the relationship between perceived control over their work and overall job satisfaction for faculty in union environments compared to faculty in nonunion environments (research

nonunion question #1), Pearson correlations were computed (Table 8). The results of these correlations indicate that a significant relationship exists between faculty perceived control over their work and overall job satisfaction. This relationship is strongest among faculty working in colleges, although an increase in faculty perceived control relates to an increase in overall job satisfaction for all two-year college teaching faculty irrespective of union status. A sense of personal control is more positively associated with overall job satisfaction for faculty at nonunion institutions ($r = .269$) than for faculty at union institutions ($r = .202$) or

Table 8 Correlations Between Outcome Variables of Perceived Control Over Work and Overall Job Satisfaction for Two-year College Faculty

Population	**Pearson Correlation**
Entire faculty pooled sample ($n = 3,636$)	.229**
Faculty in union environments ($n = 2,298$)	.202**
Faculty in nonunion environments ($n = 1,338$)	.269**

Note: ** $p < .01$ level, two tails

for all colleges combined ($r = .229$).

In answer to research question one, I offer that a positive relationship exists between perceived control over work and overall job satisfaction for two-year college in union and nonunion college

environments and for all two-year college faculty combined. While correlation results between these outcome variables demonstrate a positive relationship, what they do not do is explain why the two variables are related and what accounts for these relationships. Specifically, it does not indicate proof of a causal relationship between faculty perceived control over their work and overall job satisfaction. This will be further explored in the regression analyses to follow.

Section Four: Regression Analyses

Section four will attempt to answer research questions two through four. Specifically, in this section, the extent to which personal background variables, job task variables, and financial reward variables are correlated with perceived control over work and overall job satisfaction will be explored (question 2). Additionally an attempt is made to determine what role personal background variables, job task variables, and financial reward variables play in predicting perceived control over instructional and other work related matters and overall job satisfaction for two-year college faculty irrespective of union or nonunion environment (question 3). As discussed in the review of literature, perceived control over work has been identified as a determinant in job satisfaction and performance in the empirical literature both within and outside of higher education (Antony &

Valadez, 1998; Finley, 1990; Kemerer & Baldridge, 1975; Ladd & Lipset, 1973; Perry, Menec, Struthers, Hechter, Schonwetter, and Menges, 1997, Pollicino, 1998; Diener, 1985, Kauppi, 1983; Niebrugge, 1994; Alesse, 1982). Finally, after controlling for the effects of personal background variables, job task variables, and financial reward variables, an attempt is made to determine how working in a union or nonunion environment predicts perceived control over work and overall job satisfaction for two-year college faculty (question 4).

Six regression analyses were conducted to generate findings in answer to research questions two through four posed in this study. Separate regression equations were run for each dependent variable utilizing the pooled faculty study sample and separate regression equations for faculty in union and nonunion college environments. Least squares regression (organized into hierarchical blocks) was chosen as the methodology for these analyses in order to look at all possible relationships among the variables. Standardized regression coefficients (β) were used to interpret the relative importance and predictive value of each variable. The placement of the independent variables within the blocks and their order of entry into the equations were guided by the theoretical and empirical frameworks described in chapter three.

Predicting Perceived Control Over Work

Each of research questions 2 through 4 has two distinct parts that look separately at the outcome variables of faculty perceived control over their work and overall job satisfaction. Part one of question 2 asks to what extent is two-year college faculty perceived control over their work correlated with selected personal background variables, job task variables, and financial reward variables irrespective of union or nonunion work environment. The predictive relationship between these variables and faculty perceived control is depicted in Table 9. Most of the explained variance (R-square = .319) is accounted for by a combination of job task variables and financial reward variables, with background variables contributing little to explaining the variance.

The correlations in Table 9 demonstrate job task variables and financial reward variables have a strong relationship to faculty perceived control (significant at the .01 level). Faculty indicating satisfaction with facilities and resources necessary for their teaching responsibilities are most likely to perceive control over their work. Specifically, satisfaction with classroom space (r=.433), office space (r=.413), audiovisual equipment (r=.378), and library holdings (r=.341) demonstrate the strongest relationship to faculty perceived control.

Table 9 Multiple regression models (pooled sample) predicting two-year college faculty perceived control over work, betas after controlling for each variable block.

Name of Variable	Zero Order Correlation	β Block 1	β Block 2	β Block 3	Final β
Block 1 – Background Variables					
Gender - female	-.008	-.007	.005	-.001	-.001
Race/Ethnicity-minority	.030	.020	.007	.006	.007
Age	.036*	.028	.002	.003	.003
Educational Background	-.007	-.011	.013	.015	.014
Block 2 – Job Task Variables					
Academic Rank	.028	.033	.011	-.010	-.010
Tenure Status	.045**	.038*	.004	-.020	-.025
Satisfaction w/ Facilities and Resources					
Basic research equipment and instruments	.073**	.076**	.013	.012	.012
Laboratory space and supplies	.130**	.137**	.009	.010	.011
Availability of research assistants	.017	.019	-.008	.001	.001
Personal Computers	.230**	.236**	.048*	.048*	.048*
Centralized computing facilities	.134**	.138**	.009	.002	.002
Computer networks	.077**	.078**	-.010	-.005	-.005
Audiovisual equipment	.378**	.391**	.098**	.094**	.093**
Classroom space	.433**	.454**	.210**	.212**	.213**
Office space	.413**	.418**	.161**	.156**	.156**
Studio/performance space	.057**	.060**	-.011	-.010	-.010
Secretarial support	.292**	.299**	.059**	.052**	.052**
Library holdings	.341**	.350**	.118**	.114**	.115**
Satisfaction w/ Workload	.186**	.184**	.084**	.058**	.058**
Satisfaction w/ Time to keep current in field	.185**	.192**	.090**	.039*	.039**
Block 3 – Satisfaction With Financial Rewards					
Job security	.192**	.192**	.097**	.071**	.071**
Opportunities for advancement in rank	.205**	.210**	.099**	.074**	.074**
Freedom to do outside consulting	.158**	.160**	.063**	.042**	.041**
Salary	.133**	.137**	.027	-.012	-.013
Benefits	.134**	.127**	.035*	.006	.004
Block 4 – Union Status	.030	.025	.021	.015	.015

Note: Table reports standardized regression coefficients (beta) for independent variables.
* significance at the .05 level
** significance at the .01 level
R-square after each block - block 1 = .002; block 2 = .306; block 3 = 319; block 4 = .319

A weaker but significant relationship is demonstrated between faculty satisfaction with secretarial support (r=.292), personal computers (r=.230), opportunities for advancement in rank (r=.205), job security (r=.192), workload (r=.186), time to keep current in the field (r=.185), and freedom to do outside consulting (r=.158) and their sense of control. While still significant, but representing the weakest relationship to perceived control are faculty satisfaction with their benefits (r=.134), centralized computing facilities (r=.134), salary (r=.133), laboratory space and supplies (r=.130), computer networks (r=.077), basic research equipment and instruments (r=.073), studio/performance space (r=.057), and tenure status (r=.045). Faculty age (r=.036) is the only background variable correlated with faculty perceived control over their work (significant at the .05 level). Table 9 also demonstrates the value of background variables, job task faculty perceived control over their work (research question 3). As can be seen in this table, both job task variables and financial reward variables are important predictors of two-year college faculty perceived control irrespective of union status. Although it appears that almost all of the variables in these two groups are correlated with faculty perceived control, not all of the variables have predictive value. When I control for all other variables, background variables are not predictive of faculty perceived control over their work, whereas seven of seventeen job task

variables are predictive of perceived control. Three of five financial reward variables are predictive of perceived control with satisfaction with salary and benefits not among those variables with predictive value.

The final betas in the regression model identify some job task variables as having the strongest predictive value on faculty perceived control over their work. These variables relate specifically to those facilities and resources two-year college faculty need to carry out their primary responsibility of teaching. After controlling for all variables in the equation, faculty satisfaction with their classroom space (β=.213) is the strongest predictor of faculty sense of control over their work. This variable remains stable in the model from entering in block 2 through the final regression. Faculty satisfaction with their office space (β=.156), college library holdings (β=.115), and audiovisual equipment (β=.093) follow a similar pattern through the model as does satisfaction with classroom space. Additionally, faculty satisfaction with their workload (β=.058), secretarial support (β=.052), time to keep current in their field (β=.039), and personal computers (β=.048) are also significant predictors of faculty perceived control.

It is interesting to note several job task variables such as faculty tenure status, satisfaction with research equipment, lab resources,

centralized computing facilities, computer networks, and studio facilities are on track to be predictive of sense of control, but they do not hold their importance when other job task and financial reward variables are entered into the equation. This is a similar case in determining the relative predictive value of faculty satisfaction with their salary and benefits on perceived control. These two financial reward variables do not remain predictive in the final block.

In summary, availability and quality of facilities and resources to carry out their teaching responsibilities makes the most difference in two-year college faculty perceiving they have control over significant aspects affecting their jobs. Following in relative importance for this pooled sample of faculty are financial reward variables of satisfaction with opportunities for advancement in rank (β=.074) and job security (β=.071). Satisfaction with workload (β=.058), freedom to do outside consulting (β=.041), and having time to keep current in the field (β=.039) remain predictive in the final regression, but represent the weakest predictive values. Satisfaction with salary and benefits appears to be correlated to perceived control, but these variables fall out as predictors in block 3.

It is most interesting to note that working in a union or nonunion college environment has no predictive value on two-year college faculty sense of control over their work when these faculty are pooled in the

sample. What will be explored in subsequent analyses is if any difference exists in the relative importance of these variables when the faculty sample is disaggregated by union and nonunion working environment.

Predicting Overall Job Satisfaction

Table 10 attempts to explain the remaining portions of research questions 2 and 3. Specifically, the second part of question 2 asks to what extent is two-year college faculty overall job satisfaction correlated with selected personal background variables, job task variables, and financial reward variables. Question 3 asks what role personal background variables, job task variables, and financial reward variables play in predicting overall job satisfaction for two-year college faculty irrespective of union or nonunion environment. Table 10 indicates that this model explains nearly forty six percent (R-square=.456) of the variance in this regression equation.

With overall job satisfaction as the dependent variable, the initial correlations suggest numerous background variables, job task variables, and satisfaction with financial rewards all having a strong relationship to overall job satisfaction for two-year college faulty. Twenty-two variables demonstrate a significant relationship with this outcome variable.

Table 10 Multiple regression models (pooled sample) predicting two-year college faculty overall job satisfaction, betas after controlling for each variable block.

Name of Variable	**Zero Order Correlation**	**β Block 1**	**β Block 2**	**β Block 3**	**β Block 4**	**Final β**
Block 1 – Background Variables						
Gender – female	.007	.016	.063**	.045**	.045**	.045**
Race/Ethnicity-minority	.038*	.016	.006	-.003	-.003	-.003
Age	.058**	.071**	.008	-.001	-.001	-.002
Educational Background	-.051**	-.060**	-.055**	-.041**	-.042**	-043**
Block 2 – Job Task Variables						
Academic Rank	.039*	.043*	.017	-.036*	-.035*	-.035*
Tenure Status	.085**	.088**	.058**	-.024	-.023	-.031*
Satisfaction w/Facilities and Resources:						
Basic research equipment and instruments	-.003	-.002	.002	.005	.005	.004
Lab space and supplies	.040*	.029	-.015	-.013	-.013	-.012
Availability of research assistants	-.015	-.020	.000	.029*	.029*	.028
Personal computers	.051**	.054**	.011	.012	.009	.009
Centralized computing Facilities	.031	.031	.018	-.006	-.006	-.005
Computer networks	-.033*	-.033*	-.038*	-.021	-.021	-.021
Audiovisual equipment	.092**	.098**	.035	.022	.016	.015
Classroom space	.077**	.079**	-.040*	-.038*	-.052**	-.051**
Office space	.101**	.101**	.024	.006	-.004	-.004
Studio/performance space	.031	.029	.015	.019	.020	.020
Secretarial support	.112**	.105**	.042*	.021	.018	.018
Library holdings	.109**	.104**	.037*	.023	.016	.016
Satisfaction with workload	.468**	.466**	.320**	.214**	.210**	.210**
Satisfaction with time to keep current in field	.442**	.441**	.262*	.078**	.075**	.076**
Block 3 – Satisfaction w/ Financial Rewards						
Job security	.446**	.450**	.313**	.194**	.190**	.190**
Opportunity for advancement in rank	.476**	.474**	.324**	.193**	.188**	.188**
Freedom to do consulting	.375**	.367**	.164**	.076**	.073**	.073**
Salary	.444**	.440**	.267**	.106**	.107**	.106**
Benefits	.421**	.412**	.278**	.142**	.142**	.140**
Block 4 – Perceived Control	.229**	.226**	.121**	.065**	.065**	.065**
Block 5 – Union Status	.094**	.094**	.062**	.028*	.028*	.028*

Note: Table reports standardized regression coefficients (beta) for independent variables.

* significance at the .05 level

** significance at the .01 level

R-square after each block – block 1=.008; block 2=.288; block 3=.450; block 4=.453; block 5= .454

Opportunity for advancement in rank (financial reward variable) demonstrates the greatest degree of correlation to overall job satisfaction (r=.476). For this pooled sample of full-time teaching faculty, satisfaction with workload (r=.468) and satisfaction with time to keep current in the field (r=.442) are job task variable most correlated with two-year college faculty job satisfaction. All five financial reward variables in this model rank among the highest as correlated with overall job satisfaction. In addition to opportunity for advancement in rank, satisfaction with job security (r=.446), satisfaction with salary (r=.444) and benefits (r=.421), and freedom to do outside consulting (r=.375) are all highly correlated to job satisfaction. In contrast to perceived control over work, union status of the college work environment is correlated to faculty overall job satisfaction (r=.094) when viewing these pooled faculty although union status as an independent variable does not rank among the higher correlation values.

In reviewing the final beta results of the regression analysis in Table 10, eleven variables are significant at the .01 level and three variables at the .05 level. Faculty satisfaction with workload (β=.210) is found to be most predictive of job satisfaction overall. The entry of other competing financial reward variables in the model diminishes the magnitude of the importance of opportunity for advancement in rank as

a predictor although this variable remains significant at the .01 level (β=.188). Both satisfaction with job security (β=.190) and satisfaction with opportunity for advancement in rank (β=.188) remain significant predictors of faculty overall job satisfaction behind satisfaction with workload. All five financial reward variables remain significant predictors of job satisfaction in the final regression in this model followed by faculty satisfaction with time to keep current in the field (β=.076).

It is interesting to note that satisfaction with classroom space represents a positive significant relationship with overall job satisfaction, but converts to a negative predictor when competing with other job task variables and financial reward variables in faculty priority. This variable begins as a moderately weak positive variable (β=.079) correlated with faculty satisfaction. Its affect becomes reversed (β=-.051) with the addition of job task variables in the model. This would suggest that in the absence of adequate financial rewards, increasing satisfaction with classroom facilities predicts lower faculty overall job satisfaction. While this may appear counterintuitive, an explanation offered for this finding is that in the absence of adequate financial rewards and presence of increasing workload, faculty experience resentment and concern as institutional resources are utilized for college infrastructure such as buildings and facilities. This

may be the perception even where those resources are utilized to improve teaching facilities.

Perceived control as an independent variable is correlated with and predictive of overall job satisfaction for two-year college faculty. The correlation values are moderately strong at r=.229 and remain fairly stable throughout the model. When competing with financial reward variables, perceived control is diminished somewhat in its predictive value for overall job satisfaction. This variable ranks seventh overall in strength (β=.065) in the final beta regression block. This supports the findings of a relationship and direct affect of perceived control on faculty overall job satisfaction.

In summary, the correlational and regression analyses presented in Tables 9 and 10 and described in this section were conducted to answer research questions two and three. Specifically, question two asks, to what extent are faculty perceived control over their work and overall job satisfaction correlated with selected personal background variables (gender, race/ethnicity, age, and educational background), job task variables (academic rank, tenure status, satisfaction with facilities and resources, workload, and time available for keeping current), and financial reward variables (satisfaction with job security, opportunities for advancement in rank, freedom to do outside consulting, salary and benefits). Question three asks, what is the predictive value of personal

background, job task, and financial reward variables, independent of unionization status, on faculty perceived control and overall job satisfaction? Results of these analyses indicate that while many of these variables are correlated with perceived control over work and overall job satisfaction, fewer of these variables are of value in predicting these outcomes for full-time teaching faculty in two-year colleges. Job task variables representing satisfaction with facilities and resources necessary to carry out the teaching role of two-year college faculty are most predictive of their perceived control over their job. Satisfaction with salary and benefits demonstrates no value in predicting perceived control over work for two-year college faculty. Satisfaction with workload as well as satisfaction with financial reward variables, surface as most predictive of two-year teaching faculty overall job satisfaction. The only background variable predictive of two-year college faculty overall job satisfaction is educational background level. Faculty perceived control over their work is both correlated with and predictive of two-year college faculty irrespective of union or nonunion setting. This regression equation explains over forty five percent of the variance in the model.

Predicting Perceived Control Based on College Environment Union Status

Research question four asks, after controlling for the affect of personal background, job task, and financial reward variables, how does working in a unionized college environment predict faculty members' perceived control over their work and overall job satisfaction? This was a primary question of interest in this study.

In answering this question, the independent variable of union work environment was entered as the final block in the regression equations represented in Tables 9 and 10. As demonstrated in Table 9, union status is not correlated with perceived control over work for faculty working in two-year colleges. Results of the regression analyses (Table 9) further indicates that after controlling for the affects of personal background variables, job task variables and financial reward variables, working in a union or nonunion setting is not predictive of two-year college faculty perceived control over their work.

It does appear there is a relationship between working in a union or nonunion college environment and overall job satisfaction for two-year college faculty. It is interesting to note that union status is correlated with overall job satisfaction (r=.094) at the .01 level and is a significant predictor of job satisfaction until block three of the model. With the entry of financial reward variables in the model the magnitude

of the affect diminishes the value of working in a union setting as a predictor of faculty overall job satisfaction. Although the magnitude of the predictive value of working in a union or nonunion college environment on overall job satisfaction is small in the final regression (β=.028) and significant at the .05 level, this is a significant finding of interest in this study. This relationship and the predictive value of the independent variables on overall job satisfaction, as well as perceived control over work for faculty disaggregated by union and nonunion work environments are further analyzed and described in Tables 11 and 12 in the following section.

Predicting Overall Job Satisfaction Based on College Union Status

As presented in Tables 9 and 10, union status is not predictive of two-year college faculty perceived control over their work, but is predictive of their overall job satisfaction. These analyses do not explain if the predictive values of the variables of interest in this study are moderated by working in a union or nonunion college environment. A deeper probing of the possible impacts of college union status is presented in the final correlations and regression models in this section.

Four regression equations were run to determine the degree to which working in a union or nonunion college setting moderates the affects of the variables of interest in this study. Tables 11 and 12 represent the results of separate multiple regressions of the variables on

perceived control over work (Table 11) and overall job satisfaction (Table 12). The model depicted in Table 11 explains thirty three percent of the variance for union faculty and nearly thirty two percent of the variance for nonunion faculty. These results are similar to the regression results found for the pooled populations (Table 8 R-square = .319). Although union status was not found to be a significant predictor of two-year faculty perceived control over their work, the degree to which these variables predict perceived control does vary when the sample population is looked at by college union status. In general, the same variables that are related to perceived control for faculty in union settings are related to perceived control for faculty in nonunion college environments with a few exceptions (Table 11). In other words, working in a union or nonunion college does not appear to be of much significance in predicting faculty perceived control. As was seen of these same analyses with the populations pooled, satisfaction with classroom space emerges as the most predictive variable of perceived control for faculty working in both union (β=.244) and nonunion (β=.169) colleges. The presence of a positive correlation between faculty age and tenure status and perceived control found when the populations are pooled can be accounted for entirely by working in a union or nonunion college environment. In union colleges,

Table 11 Separate multiple regression models predicting perceived control over work for two-year college faculty in union and nonunion environments, betas after controlling for each variable block

Name of Variable	Union Environment		Nonunion Environment	
	Zero Order Correlation	**Final β**	**Zero Order Correlation**	**Final β**
Block 1 – Background Variables				
Gender - female	-.018	-.002	.016	.001
Race/Ethnicity - minority	.045*	.021	.043	-.027
Age	.044*	.010	.015	-.008
Educational Background	-.007	.015	-.014	.021
Block 2 – Job Task Variables				
Academic Rank	.032	-.006	.012	-.010
Tenure Status	.044*	-.019	.027	-.029
Satisfaction with Facilities and Resources				
Basic research equipment and instruments	.059*	.014	.096**	.006
Laboratory space and supplies	.117*	-.004	.159**	.038
Availability of research assistants	.010	-.001	.029	.011
Personal Computers	.237**	.050*	.218**	.042
Centralized computing facilities	.130**	.000	.139**	.009
Computer networks	.088**	-.001	.058*	-.016
Audiovisual equipment	.392**	.085**	.355**	.100**
Classroom space	.466**	.244**	.406**	.169**
Office space	.422**	.156**	.398**	.158**
Studio/performance space	.053*	-.014	.066*	-.013
Secretarial support	.312**	.078**	.259**	.002
Library holdings	.327**	.088**	.373**	.166**†
Satisfaction with workload	.182**	.072**	.187**	038
Satisfaction with time to keep current in field	.162**	-.001	.216**	.105**
Block 3 – Satisfaction with Financial Rewards				
Job security	.188**	.060**	.193**	.074**†
Opportunities for advancement in academic rank	.182**	.042*	.240**	.130**†
Freedom to do outside consulting	.168**	.066**	.136**	.005
Salary	.131**	-.007	.129**	-.036
Benefits	.134**	.027	.127**	-.021

Note: Table reports standardized regression coefficients (beta) for independent variables.
* significance at the .05 level ** significance at the .01 level
† significant interaction between this variable and union status
Union R square after each block – block 1=.003; block 2=.320; block 3=.331
Nonunion R square after each block – block 1=.000; block 2=.300; block 3=.319

faculty who are older and hold tenure are more likely to indicate perceived control over their job (Table 11). Additionally, minority faculty in union colleges are more likely to report perceive control over their work than minority faculty in nonunion colleges. A stronger relationship between satisfaction with research equipment and lab facilities and faculty perception of control is seen for faculty in nonunion settings then faculty at union colleges. Satisfaction with computer networks is more correlated to perceived control for faculty at union colleges than faculty at nonunion colleges. Although these correlations point out differences in the relationship of the independent variables to the outcome variable of perceived control as a result of working at a union or nonunion college, they fail to provide a picture of how these variables predict faculty perceived control and the magnitude of those differences.

Table 11 clearly indicates that for both faculty at union and nonunion colleges, job task variables overall have the greatest predictive value on perceptions of control or autonomy. For both sample populations, satisfaction with classroom space leads all other variables in predicting perceived control. Quality classroom space appears to be more important for faculty in union colleges although these analyses are not able to determine if those differences are significant.

There are few differences in the predictive value overall of these variables for faculty in union and nonunion settings, but they are interesting to note. Three variables are predictive of perceived control for faculty in union colleges that are not significant for their colleagues at nonunion colleges. Satisfaction with secretarial support, workload, and freedom to do outside consulting are significant predictors of perceived control for faculty in union colleges. Aside from secretarial support, it is not uncommon for workload and restrictions on outside employment to be codified in the faculty contract. This may contribute to explaining the importance of these variables to faculty at institutions with a union contract present. For faculty at nonunion colleges, satisfaction with time to keep current in the field and opportunities for advancement in rank are significant predictors of perceived control while workload is not significant. It is interesting to note that satisfaction with workload has the third highest predictive value on perceived control when these populations are pooled. Its importance can be fully explained as a significant variable only for faculty in union colleges. Of interest as well is the lack of predictive value of background variables and salary and benefits on perceived control irrespective of union or nonunion setting.

In Table 12, the results of separate regression equations on overall job satisfaction by union setting are presented. As was seen in a

Table 12 Separate multiple regression models predicting overall job satisfaction for two-year college faculty in union and nonunion environments, betas after controlling for each variable block

Name of Variable	Union Environment		Nonunion Environment	
	Zero Order Correlation	**Final β**	**Zero Order Correlation**	**Final β**
Block 1 – Background Variables				
Gender - female	.017	.052**	.010	.037
Race/Ethnicity - minority	.023	-.004	.010	-.004
Age	.041*	-.014	.061*	.010
Educational Background	.060**	-.050**	.056*	-.033
Block 2 – Job Task Variables				
Academic Rank	.026	-.038*	.035	-.028
Tenure Status	.039	-.018	.087**	-.030
Satisfaction w/Facilities and Resources				
Basic research equipment and instruments	-.017	.001	.020	.004
Laboratory space and supplies	.041*	-.012	.049	-.017
Availability of research assistants	-.019	.024	-.009	.038
Personal Computers	.054**	.020	.046	-.009
Centralized computing facilities	.036	.000	.021	-.017
Computer networks	-.035	-.025	-.035	-.008
Audiovisual equipment	.081**	.013	.105**	.020
Classroom space	.057**	-.078**	.119**	-.004
Office space	.080**	-.008	.132**	-.013
Studio/performance space	.025	.025	.041	.011
Secretarial support	.086**	.011	.154**	.039
Library holdings	.098**	.016	.141**	.017
Satisfaction w/Workload	.461**	.222**	.470**	.185**
Satisfaction w/Time to keep current in field	.435**	.090**	.449**	.055*
Block 3 – Satisfaction w/Financial Rewards				
Job security	.406**	.166**	.489**	.230**†
Opportunities for advancement in academic rank	.452**	.200**	.505**	.168**
Freedom to do outside consulting	.359**	.054**	.390**	.106**†
Salary	.406**	.081**	.488**	.146**†
Benefits	.405**	.150**	.429**	.126**
Block 4 – Perceived Control	.202**	.066**	.269**	.076**†

Note: Table reports standardized regression coefficients (beta) for independent variables.
* significance at the .05 level ** significance at the .01 level
† significant interaction between this variable and union status
Union R square after each block – block 1=.007; block 2=.279; block 3=.424; block 4 = .427
Nonunion R square – block 1=.011; block 2 =.300; block 3 =.491 ; block 4 =.494

similar regression with the populations pooled (Table 10), more variables indicate a relationship to faculty overall job satisfaction then prove to be predictive. The regression model in Table 12 explains over forty two percent of the variance for faculty in union colleges and forty nine percent of the variance for faculty in nonunion colleges. In general, financial reward variables are most predictive of overall job satisfaction for both groups of two-year college faculty. A few exceptions should be noted. Only when these two groups of faculty are viewed separately can variables found predictive of overall job satisfaction in the pooled sample be further explained.

The predictive values of gender, educational background, academic rank, and classroom space are only significant for faculty at union colleges. The significance of gender as a predictor of overall job satisfaction can fully be explained in its importance only for faculty at union colleges. Women faculty at union institutions are more likely to report greater job satisfaction then men at these same institutions. This finding is contradictory to studies of job satisfaction among higher education faculty (Nussel, et al., 1988; Woodruff, 1992; Pollicino, 1996; Hill,1982) that have found male faculty reporting greater job satisfaction overall. Gender is not a predictor of overall job satisfaction at nonunion colleges. In the pooled regression model for overall job

satisfaction (Table 10) gender becomes important only after the addition of job task variables in the model.

For faculty in union colleges, the more advanced the academic degree held by faculty and the higher the academic rank, the more dissatisfied they are likely to be. While it appeared that classroom space was important as a negative predictor of overall job satisfaction for all two-year college faculty irrespective of union status, it is clear this variable is only significant for faculty at union colleges. This would suggest that resentment for college resources placed on infrastructure is only an issue for faculty working in union colleges.

Satisfaction with workload surfaces as the single variable most predictive of overall job satisfaction for faculty at colleges where a union is present. For faculty working in nonunion colleges, workload is second only to satisfaction with job security. Workload, job security, and opportunities for advancement in rank are the top three variables predictive of overall job satisfaction for both groups of faculty. These findings suggest for faculty working in a college where a union is present, how satisfied they are with their workload is most predictive of their overall job satisfaction. For faculty working in a college where no union is present, an increased sense of security in their job is most predictive of overall job satisfaction. I suggest the importance of job

security in overall job satisfaction for faculty in union colleges is moderated by the presence of the union.

Of interest in this study is the role played by faculty perceived control in predicting two-year college faculty overall job satisfaction. As Table 12 demonstrates, this variable is a significant predictor of overall job satisfaction for full-time two-year college teaching faculty at both union and nonunion college settings. This finding supports previous empirical studies linking faculty perceived control to overall job satisfaction (O'Hara, 1990; Thaxter & Graham, 1999; Pollicino, 1998; Diener, 1985; Perry, Menec, Struthers, Hechter, Schönwetter, & Menges, 1997; Copur, 1990). As will be demonstrated in the next section, this variable is even more important for faculty at nonunion colleges.

Interaction of Significant Variables With Union Status

The regression analyses depicted in Tables 9 – 12 were conducted to answer research question 3. Predictions 4 and 7 relate to research question 3 and speak to the degree to which the predictive values of the variables are different from one another when comparing faculty at union and nonunion colleges. Beta values for variables identified as significant predictors of perceived control and overall job satisfaction (Tables 11 and 12) indicate the betas are significantly different from zero, but they do not tell us anything about the interaction between one

another. In order to determine whether or not there was a significant interaction between the independent variables and union status, an additional regression analysis was conducted. To determine the presence of this interaction, I tested the cross product of all variables significant for both union and nonunion status in a separate pooled regression. Any cross product terms in the cross product pool that were significant predictors after controlling for all independent variables indicated the presence of a significant interaction between union status and the same component variable of the cross product. To interpret that interaction, I returned to the original non-pooled regressions (Tables 11 and 12) and examined the directionality of the betas.

When looking at the outcome variable of faculty perceived control over work (Table 11), interactions between the independent variables and union status only occurred in satisfaction with library holdings, job security, and opportunities for advancement in rank. The results of this cross product analysis indicates that although these variables are significant predictors of perceived control over work, there is a greater interaction of these variables with union status for faculty at nonunion institutions.

When looking at the outcome variable of overall job satisfaction (Table 12), interactions between the independent variables and union status are present for the variables of satisfaction with job security,

freedom to do outside consulting, salary, and perceived control. Again, significant interactions were seen only for faculty at nonunion colleges.

Summary

The findings of these data analyses offer valuable information about the nature of the reality for teaching faculty at two-year colleges. Although perceived control and overall job satisfaction are conceptually and empirically related for all faculty combined (r=.229) and for faculty at union (r=.202) and nonunion (r=.269) colleges respectively, the outcomes are impacted by different groups of variables. Certain job task variables are most predictive of perceived control for both groups whereas financial reward variables are most predictive of overall job satisfaction. These results would suggest that workload is an important factor for faculty in union colleges but not in nonunion institutions whereas job security is most important for faculty at nonunion colleges. Faculty perceived control over their work is predictive of overall job satisfaction for both groups of faculty.

The patterns of findings that have emerged from the analysis of data used in this study suggests the reality of faculty at union and nonunion institutions vary in a few but significant ways. The emergence of distinct and different variables affecting faculty perceived control and overall job satisfaction have implications for administrative

and policy decision makers in two-year colleges. This is of particular importance as colleges attempt to create and maintain college environments where faculty can be productive. These implications will be developed further in the next chapter.

CHAPTER FIVE

CONCLUSION

This study has examined what role working in a union or nonunion college has in influencing two-year college faculty perceptions of control over their work and overall job satisfaction. This chapter will (a) provide evidence in answer to each of the research questions posed in this study including evidence for each of the predictions presented in Chapter Three; (b) discuss the implications of these findings for theory and practice; (c) discuss the limitations of the study; and (d) propose directions for future inquiry in this area.

Review of Study Approach

Data from the 1992-1993 National Survey of Postsecondary Faculty (NSOPF-93) were used to examine how background characteristic variables, job task variables, and financial reward variables relate to and predict faculty perceived control over their work and overall job satisfaction for faculty in union and nonunion college environments. These variables have been identified in the theoretical and empirical literature as having a demonstrated influence on faculty perceived control over their work and overall job satisfaction (Perry, et al., 1997; Pollicino, 1996; Diener, 1985; Nussel, et al., 1988; Woodruff,

1992; Pollicino, 1996; Hill, 1982; Locke, 1976). The study was limited to full-time teaching faculty at two-year colleges.

Summary of Study Findings

This summary will be organized according to the questions and predictions this study proposed to test. Each of the four research questions and predictions posed in answer to the overall research question will be reviewed along with the extent to which it was supported by the findings in this study. Findings not necessarily relevant to the research questions but none the less valuable in terms of their importance to theory and practice will also be reviewed.

Review of Overall Study Research Question

Are there significant differences between perception of control over their work (i.e. autonomy) and overall job satisfaction among faculty working in union and nonunion colleges?

Research Question 1

When comparing faculty in union and nonunion environments, what is the relationship between faculty members' perceived control over their work and overall job satisfaction?

Hypothesis 1- A significant relationship exists between two-year college teaching faculty perceived control over their work and overall job satisfaction for faculty working in both union and nonunion colleges.

This study found that a positive relationship exists between two-year college faculty perceived control over work and overall job satisfaction irrespective of union status of the college. This finding supports Predictions 1 and is consistent with previous empirical evidence that faculty control over their work, demonstrated as autonomy, has a strong relationship to faculty satisfaction for two-year college faculty (Valadez & Antony, 2001; Finley, 1991). Given this strong relationship between perceived control and overall job satisfaction, a case is made for the importance of further analysis to determine the relative importance of individual factors influencing faculty perceived control over work and to determine if these factors function differently for faculty in colleges with a union and those without a union.

Hypothesis 2 - There is no difference in magnitude of the relationship between perceived control over work and overall job satisfaction among two-year college faculty working in union colleges and those working in nonunion colleges.

Results of this research further indicate the relationship between perceived control and overall job satisfaction is stronger for faculty in nonunion colleges than for faculty in union college environments. This finding does not support Prediction 2 which proposed no difference in the magnitude of the relationship between perceived control and overall job satisfaction based on working in a union or nonunion college environment. This predication was based on a review of the literature that found no theoretical or empirical support for the presence of a faculty union having a positive impact on the relationship between faculty perceived control and overall job satisfaction. This finding would suggest for all two-year colleges and particularly in nonunion colleges, measures intended to positively impact faculty perceived control would result in increasing perceptions of overall job satisfaction.

Results of this research further indicate two-year college teaching faculty generally perceive they have control over their work (Table 6). This finding contradicts the proposal that two-year college faculty do not feel they are meaningfully involved in important decision-making that directly affects their work (Finley, 1991; Hemmasi, Graf, and Lust, 1992).

There are, however, significant differences in the degree of satisfaction these two groups of faculty report. As evidenced in the results of this research, two-year college faculty at colleges in which a

union is present report significantly greater overall job satisfaction than their colleagues working at nonunion colleges. This being said, it is important to note that generally speaking two-year college teaching faculty report satisfaction with their jobs irrespective of the union status of their work setting. This is an important finding which supports empirical findings indicating relatively high level of job satisfaction among faculty at two-year colleges (Valadez & Antony, 1998, Pearson & Seiler, 1983). Further, this finding assists in clarifying the somewhat contradictory findings on the impact of unionization on job satisfaction among faculty at two-year colleges (Cornish, 1986; White, 1999; Finley, 1991).

Research Question 2

When comparing faculty in union and nonunion environments, to what extent are faculty perceived control over their work and overall job satisfaction correlated with:

Personal Background Variables

Gender, Age, Race, Education Background

Job Task Variables

Academic Rank, Tenure status, Facilities and Resources, Workload, Time available for keeping current in the field

Financial Reward Variables

Job security, Opportunities for advancement in rank, Freedom to Outside Consulting, Salary, Benefits

Findings for Research Question 2

Hypothesis 3 - When comparing two-year college faculty working in union and nonunion college environments, there will be no difference in the degree to which background variables (gender, race, age, and educational background), job task variables (academic rank, tenure status, satisfaction with resources, workload, and time to keep current in field), and financial reward variables (job security, opportunities for advancement in rank, freedom to do consulting, salary, and benefits) are correlated with perceptions of control over their work and overall job satisfaction.

Prediction 3 is only partially supported by the findings of this study. As demonstrated in Tables 9 and 11, in general, two-year college teaching faculty perceptions of control over their work are positively correlated with some background variables, job task variables, and financial reward variables. Satisfaction with resources necessary to carry out their teaching role (job task factors) account for the greatest degree of correlation with faculty perceived control over their work.

Background variables of faculty race/ethnicity and age were found to be correlated with faculty perceived control only for faculty at

union colleges (Table 11). Background factors were not found to be related to perceived control for faculty at nonunion colleges.

As a category, job task variables demonstrated the greatest degree of correlation with faculty perceived control for faculty at both union and nonunion colleges. Those variables representing availability of resources necessary to carry out their instructional role (research equipment and instruments, lab space and supplies, personal computers, centralized computing facilities, computer networks, audiovisual equipment, classroom and office space, studio performance space, secretarial support and library holdings) surfaced as those variables most correlated with faculty perceived control for both groups of faculty. For faculty at both union and nonunion colleges, satisfaction with classroom space and office space surfaced as the variables most highly correlated with perceived control over work. The correlation coefficients demonstrate a higher correlation between these two variables and perceived control for faculty at union colleges, although this study was not able to determine if the difference is significant. Additionally, workload and time available to keep current in their field were job task variables found to be correlated with perceived control.

It is interesting to note that tenure status was found to be correlated with perceived control only for faculty at union colleges. This finding might be explained as tenure status serving as a proxy for job

security for faculty at union institutions. Tenure and the process for attainment of tenure is most often codified in the negotiated agreement. Tenure status may or may not be related to increased salary for faculty. In this study population nearly sixty five percent of faculty at union colleges were tenured whereas thirty three percent of faculty at nonunion colleges held tenure status.

All the financial reward variables selected for this study (job security, opportunities for advancement in rank, freedom to do outside consulting, salary, and benefits) were found to be correlated with faculty perceptions of control over their work. Overall, few differences are seen the results of correlational analyses for these two groups of faculty suggesting few differences exist between the relative importance of these variables for two-year college teaching faculty irrespective of union status of their work environment.

In summary, job task variables, as a group, represent the strongest relationship to perceived control over work for two-year teaching faculty at both union and nonunion colleges. Specifically, satisfaction with classroom and office space are most related to faculty perceived control over work for both groups of faculty although this relationship is stronger for faculty at union colleges.

As demonstrated in Tables 10 and 12, when comparing faculty at union and nonunion colleges, few differences were found in the

variables related to overall job satisfaction. In general, variables in each of the blocks of variables demonstrated a positive relationship to overall job satisfaction, with similarities seen in the magnitude of the relationships. Those variables found with the strongest relationship to faculty overall job satisfaction were among the financial reward variables and job task variables. Specifically, all the financial reward variables as well as job task variables of satisfaction with workload and time to keep current in the field were found to be correlated with overall job satisfaction. Only for faculty at nonunion colleges does tenure status demonstrate a positive relationship to overall job satisfaction whereas satisfaction with personal computers and lab space/equipment is related to job satisfaction only for faculty at union colleges.

For faculty at union colleges, satisfaction with workload (job task variable) and opportunities for advancement in rank (financial reward variable) demonstrate the strongest relationship to overall job satisfaction. For faculty at nonunion colleges, financial reward factors of satisfaction with opportunities for advancement in rank, job security, and salary demonstrate the strongest relationship to overall job satisfaction.

In summary, this study found faculty perceived control most related to satisfaction with resources necessary to teach whereas overall job satisfaction was most related to satisfaction with workload and time

to keep current in the field as well as financial reward variables for both groups of faculty. The differences seen between faculty at union and nonunion colleges are more a factor of magnitude of the relationship rather than perceived control or satisfaction arising from difference types of variables.

Research Question 3

When comparing full-time two-year college teaching faculty in union versus nonunion environments, what is the predictive value of personal background, job task, and financial reward variables, on faculty perceived control and overall job satisfaction?

Findings For Research Question 3

Hypothesis 4 - When comparing full-time two-year college teaching faculty at union and nonunion colleges, there will be no difference in the degree to which background variables, job task variables, and financial reward variables predict perceived control and overall job satisfaction.

The findings for this prediction as presented in Tables 11 and 12 only partially support this prediction. It is true that when comparing the degree to which background variables predict faculty perceived control there is no difference among faculty at union and nonunion two-year colleges. For faculty in both union and nonunion institutions, background characteristics hold no predictive value on perceived

control over work. Background variables were not found to be predictive of overall job satisfaction for faculty at nonunion colleges. In comparison, being female and holding lower academic degrees is predictive of overall job satisfaction for faculty at nonunion colleges. It is possible that women faculty in the union environment share equally in the benefits afforded by the assurance in the faculty contract resulting in greater satisfaction then their colleagues at nonunion institutions. The magnitude of educational rank as a predictor of overall job satisfaction for faculty at union colleges is small. This does although, have implications for colleges in addressing issues of concern of faculty holding doctoral degrees and working in the unionized community college setting. It might be suggested that these faculty experience more role conflicts and job dissatisfaction as a result of working in a unionized college environment.

Although similar job task variables predict faculty perceived control over work, satisfaction with library holdings is significantly more important as predictor of perceived control for nonunion faculty. For both groups of faculty, workload is the most influential predictor of perceived control. Few differences were found in the number and magnitude of the predictors of overall job satisfaction as well when comparing faculty at union and nonunion colleges. For union faculty, satisfaction with workload is most predictive of overall job satisfaction.

Satisfaction with job security is the most important variable predicting job satisfaction for faculty at nonunion colleges. For faculty at nonunion colleges, job security, freedom to do outside consulting, salary, and benefits are significantly more important as predictors of overall job satisfaction. Only opportunities for advancement in rank surfaces as a significantly more important predictor of overall job satisfaction for faculty at union colleges. Five of five financial reward variables are predictive of overall job satisfaction for faculty at both types of institutions.

Hypothesis 5 - When controlling for all other groups of variables, job task variables will be most predictive of perceived control over work for two-year college faculty irrespective of union status of the college work environment.

This prediction is supported by this research. In determining the degree to which job task variables predict perceived control, in general terms, job task variables are most predictive of faculty perceived control for both groups of faculty. The variables most predictive of perceived control for both groups of faculty are satisfaction with classroom space, library holdings, and office space. Satisfaction with workload and secretarial support are predictive only for faculty at union colleges, whereas satisfaction with time to keep current in the field is predictive

of perceived control only for faculty at nonunion institutions. Only one variable was found to hold a significantly different predictive value for perceived control over work. Satisfaction with library holding was found to be significantly more predictive of perceived control for faculty in nonunion colleges. While I am not sure of the meaning of this finding, it is clear that the absence of adequate library resources lead faculty at nonunion colleges to feel less control over their ability to carry out their teaching responsibilities. While similarities in those variables predictive of perceived control were seen among faculty irrespective of union status of the college, satisfaction with secretarial support, workload, and personal computers function as predictors of this outcome variable for union faculty, whereas satisfaction with time to keep current in the field was predictive for faculty at nonunion colleges.

In general, fewer job task factors are predictive of faculty overall job satisfaction for faculty at both types of colleges. Satisfaction with workload and time to keep current in the field are predictive for both groups of faculty. An inverse relationship between satisfaction with classroom space and overall job satisfaction was found for faculty in union colleges. I propose that faculty in union colleges experience resentment as financial resources are put into college infrastructure in the absence of realized personal financial gains. This finding would be

fruitful ground for further inquiry particularly in the atmosphere of fiscal constraints in higher education seen in 2003.

Hypothesis 6 - When controlling for all other groups of variables, job task variables and financial reward variables (job security, satisfaction with opportunity for advancement in rank, opportunity for outside consulting, salary, and benefits) will be most predictive of overall job satisfaction for two-year college faculty irrespective of union status of the college environment.

This prediction is only partially supported by the findings. Faculty satisfaction with workload is the single variable most predictive of overall job satisfaction for faculty at union colleges. This variable comes from the job task variable group. Opportunities for advancement in rank (financial reward variable) is most predictive of overall job satisfaction for faculty at nonunion colleges. Table 12 does demonstrate that financial reward variables, as a group are most predictive of overall job satisfaction for two-year college teaching faculty irrespective of union status of the work environment. Additionally, this group of variables does rank among the strongest predictors of job satisfaction for both groups of faculty.

Financial reward variables also demonstrate predictive value on faculty perceived control, but to a lesser degree than job task variables.

Satisfaction with opportunities for advancement in rank holds the greatest predictive value of the financial reward variables for faculty at nonunion colleges. Freedom to do outside consulting is most predictive for faculty working in colleges with a union, whereas this variable is not predictive of perceived control for faculty at nonunion colleges. This may represent codification of prohibitions on outside employment seen in two-year college faculty contracts. Freedom to do outside consulting is predictive of perceived control only for faculty at union colleges. It is interesting to note that significant differences were found in the degree to which job security and opportunities for advancement in rank predict perceived control for these two groups of faculty. Clearly, these variables are more important in predicting perceived control for faculty in nonunion colleges. These findings would suggest that, in the absence of the security provided by the presence of a bargaining unit and negotiated contract, faculty sense of control over their work at colleges where no union is present depends on how secure they feel about their jobs and the opportunities they perceive for advancement in rank.

In summary, for faculty at nonunion colleges, satisfaction with the adequacy of library resources, a sense of security in their job, and opportunities for advancement in rank are more important than for faculty at union colleges in predicting perceived control over work.

For faculty working in a college with a faculty union, satisfaction with workload is the single most predictive variable of overall job satisfaction. This is followed by satisfaction with opportunities for advancement in rank and job security. For faculty at nonunion colleges, satisfaction with job security is most predictive of overall job satisfaction followed by satisfaction with workload and opportunities for advancement in rank. It could be argued that opportunities for advancement in rank relates directly to increased economic rewards and as such represents potential for increases. This may account for the fact that satisfaction with salary and benefits does not surface as the most predictive of faculty overall job satisfaction.

Hypothesis 7 - Financial reward variables (job security, opportunity for advancement in rank, opportunity for outside consulting, salary, and benefits) will be more predictive of overall job satisfaction for faculty at union institutions than for faculty at nonunion colleges.

This prediction is not supported by the findings in this study. Table 12 demonstrates that of the five financial reward variables selected for analysis in this study, three of those are more predictive of overall job satisfaction for faculty at nonunion colleges than for faculty at union colleges. These variables include satisfaction with job security, freedom to do outside consulting, and salary. These results

suggest that in the absence of the financial assurances afforded by the faculty contract and the representation by the faculty union, overall job satisfaction is closely ties to satisfaction with financial reward issues. Although these are significant predictors of overall job satisfaction for faculty at both types of colleges, these variables are more important to faculty satisfaction at nonunion colleges. Only opportunities for advancement in rank surfaces as a more important predictor of overall job satisfaction for faculty where a union is present. I suggest that the importance of this variable is in its ability to function as a proxy for potential to earn higher salary and gain additional status. From the results of this study, it is unclear if the importance of opportunity for advancement is a function of the college environment or a priority in negotiation. This suggests its importance in future inquiry in this area to determine why this single variable hold significant importance for faculty in union colleges.

Research Question 4

After controlling for the effect of personal background, job task, and financial reward variables, how does working in a union or nonunion college environment predict faculty members' perceived control over their work and overall job satisfaction?

Findings for Research Question 4

Hypothesis 8 - *Union status of the college will be predictive of two-year college faculty perceived control over work and overall job satisfaction.*

The findings of this study partially support this prediction. Table 9 demonstrates that union status is not predictive of two-year college teaching faculty perceived control over work. In contrast, Table 10 supports that union status of the college is predictive of overall job satisfaction. In other words, working in a college in which a union is present is predictive of greater overall job satisfaction. An additional finding in this study is the connection between faculty perceived control and overall job satisfaction. Perceived control is correlated to and predictive of overall job satisfaction for two-year college faculty. While these findings clarify the relationship between these variables and reinforce the importance of these constructs for faculty, they do not hold the relative importance to faculty that satisfaction with workload and satisfaction with job security have in predicting faculty overall job satisfaction.

Implications of Findings For Theory And Practice

The findings in this study clarify the contradictory nature of previous research on two-year college faculty job satisfaction and support that teaching faculty in these colleges are happy in their teaching role. This research further supports the importance of faculty perceived control in overall job satisfaction. This has important implications for administrators in these colleges.

Job satisfaction, particularly in the community college setting, is an important indicator of job retention for this group of faculty who are particularly prone to burnout and the potential to leave their teaching jobs for more attractive and higher paying employment. Finding ways attract and keep community college faculty on the job is an important function for presidents, vice presidents of instruction, deans of instruction, and division chairs in the community college.

Community college faculty are often perceived to be at the bottom of the higher education hierarchy in terms of workload, image, self-esteem, and salary (Kiem, 1984). Fugate and Amey (2000) suggest that community college faculty feel they receive little respect and their role is undefined and demanding. Further, new community college faculty express concerns with burnout due to the heavy teaching roles and challenges of teaching a diverse student population (Andrew and

Marzano, 1991). Understanding the function of college environment and the relative importance of specific factors influencing faculty perceptions of autonomy and overall job satisfaction are critical in improving the work of faculty in community colleges.

The results of this research suggest that job task factors play an important role in increasing faculty perceived control over their work and overall job satisfaction. These factors may be more easily manipulated through policy development and institutional priority setting. Administrators should pay particular attention to the importance of providing faculty with the resources necessary to carry out their primary role as teachers. Adequacy of classroom and office space, as well as attention to needs for ongoing in-service and continuing education balanced against reasonable workload expectation will result in significant movement in improving the quality of the work environment and resultant productivity of faculty.

One might suggest that unionization would contribute to the reality of work for faculty at colleges in which a union is not present. This may not be possible, particularly in right-to-work states or supported by faculty in call cases. In the absence of a faculty union, colleges should pay particular attention to addressing the job security needs of faculty. Participatory governance structures such as faculty senates, salary committees, coupled with strong personnel policies and

procedures are mechanisms colleges can employ to provide an increased sense of job security for faculty at nonunion colleges.

Limitations of The Study

The first limitation of this study is its inability to generalize results to all faculty in higher education. The focus of this study was on perceptions of teaching faculty exclusively at two-year colleges. Further, the inclusion of only full-time teaching faculty in the study population limits the ability to generalize findings to other types of faculty at other types of institutions. It is reasonable to believe the reality of part-time faculty and faculty whose educational roles include other responsibilities may be different than faculty whose jobs are confined to teaching in a two-year college setting. Although comparison of the experience of two-year teaching college faculty and teaching faculty at four year institutions has been of interest in the empirical literature on faculty satisfaction (Valadez & Antony, 2001, Pearson & Seiler, 1983; Antony & Valadez, 1998; Finley, 1991; Kemerer & Baldridge, 1975; Ladd & Lipset, 1973; Perry, Menec, Struthers, Hechter, Schonwetter, and Menges, 1997, Pollicino, 1998; Diener, 1985, Kauppi, 1983; Niebrugge, 1994; Alesse, 1982), such a comparison is outside the scope of this study.

Attempting to select specific populations and fit variables found in the empirical literature into a research model utilizing data collected by other researchers is a limitation when secondary data analysis is used as the analytic methodology. Although complex survey data sets like the NSOPF are a major source of data for social scientists and steps were taking by NCES to assure content validity and minimize sampling errors, the assumption of simple random sampling must be questioned. This introduces the possibility of a source of error in the analysis (Lee, Forthofer, & Lorimor, 1989). Using a model-based approach to sampling in large data sets assumes that a simple convenience sample of the total population exists. Potential errors of reliability and validity arise when the model is misspecified. It is suggested that these types of error can be minimized through the use of a combined design-based and model-based approach (Lee, Forthofer, & Lorimor, 1989). The experimental research methodology utilized in this study was grounded in the development of a model based on the relevant theoretical and empirical literature using a convenience sample from a large data set. The use of a combination of a more complex design-based and model-based approach is beyond the scope of this study. In this study, an attempt was made to simply redefine the analytic domain through selection of the sample population and to select variables supported in the literature and present in the survey. Although the model in this

study explained more than fifty percent of the variance in the outcome variables, other variables valuable in explaining faculty perceived control and overall job satisfaction remain undefined. It is likely that other variables not included in this study are linked to the major constructs of interest and would contribute to the variance left unexplained. Additionally, the impact of context on the results of a combination design-based and model-based approach cannot be ignored. As a result, the findings of this study need to be interpreted with these limitations in mind.

It is important to recognize that the national survey used to develop this data set was not specifically designed to measure faculty perceptions of control over their work or identify factors related to faculty overall job satisfaction. Although the variables selected from the NSOPF-93 are supported in the literature and have been used by other researchers, it should be noted that the individuals completing the survey were not asked specifically to relate their degree of satisfaction with the items selected in relation to their perceived control or overall job satisfaction. The items presented to the respondents in the entire NSOPF-93 were open to personal interpretation at the time they participated in this self-administered survey. As a result, the items may not have had the same meaning for all individual completing the survey. Additionally, Locke (1976) proposes that not all persons share

the same degree of ability or desire for introspection. In viewing the results of this research, it must be considered that the respondents may not have selected their responses after fully reflecting on their reality as it relates specifically to their perceived control over their work and overall job satisfaction.

The findings of this research must be taken in light of the age of the data set used. The findings of this research represent faculty responses to a survey conducted a decade ago. Although research findings on these data contribute to the overall body of knowledge about faculty in two-year colleges, the relevance of the finding to the current reality of faculty experience is limited. The benefits and contributions of these retrospective findings instead lie in the foundation they construct for future comparative analyses using the NSOPF-99 data set and other more current faculty data. An attempt has been made to cite empirical findings on job satisfaction and faculty autonomy that is representative of the entire body of this literature. As such, findings using faculty data collected beyond 1993 are certainly reflective of changes in the priorities and the reality of the work-life of faculty in two-year colleges in the current decade. This potential for incongruity between the findings in the most recent literature and the findings of this retrospective study should be considered in interpreting the results of this research.

This study identified differences between the level of perceived control over work and overall job satisfaction among faculty at union and nonunion colleges, but did not determine if those differences were statistically different. It was determined by the researcher to simply describe the nature and presence of any differences found. The inability to define the magnitude of those differences and thus their relative importance is a limitation of the findings.

Directions For Future Inquiry

The findings and conclusions of this study indicate the need for further research into the relationship between faculty satisfaction with specific aspects of their job, the union status of the college, and faculty perceived control and overall job satisfaction. Specifically, the most recent availability of the NSOPF-99 creates the opportunity for replication and comparison of the findings of study with these new data. The reality of faculty in higher education has changed in the most recent decade with the advancement in instructional technology in the classroom, the expansion of online educational offerings, and the economic and funding issues facing higher education in the beginning of the 21st century.

The results of this study indicate there are differences in the reality of teaching faculty at two-year union and nonunion colleges.

The implications of working in a union or nonunion college environment particularly on faculty perceptions of involvement in institutional governance, the roles of faculty organizations such as the faculty senate, and the economic reality of faculty are of importance as well. Additionally, the variables selected for inclusion in this study beg the question of what disciplinary variances might exist. Undoubtedly differences do exist for faculty both within and between disciplines, but those differences remain unexamined.

Additionally, the findings of this study suggest differences exist between the reality of faculty at union and nonunion two-year colleges based on race/ethnicity and age. These findings suggest further inquiry in this area would be fruitful particularly given the "graying" of community college faculty and the ongoing interest to attract and retain faculty of color in community colleges.

Although the research agenda on the impact of unionization in higher education was extensive in the decade between 1970 and 1980, research in this area has been limited in the past twenty years. Much of our current understanding how unions impact faculty is grounded in empirical literature that is well over three decades old. Clearly what is missing is a thorough and complete survey of the literature in this area and recommendations for a new research agenda.

Finally, it is important to continue to examine and more fully develop the theoretical and empirical constructs relating to faculty autonomy and job satisfaction. This is particularly true in the two-year college setting where considerable faculty retirements are expected in the next few years. Phillippe (1997) suggests that nearly fifty percent of the full time faculty in community colleges were more than forty nine years of age in 1992 and another thirty seven percent were between forty and forty nine in that same year. That would indicate that well over half of the full time community college faculty will retire in the next ten to fifteen years (Knight, 1996). Knight (1996) further suggests these retirements will cause a crisis as colleges attempt to replace these aging faculty. Recruitment and retention of faculty to community colleges is challenging. Boyer (1990) describes community college teaching as discouraging and frustrating for faculty who must teach academically under-prepared students, often without adequate facilities and access to limited resources. Further research to improve understanding of specific factors that contribute to job satisfaction is critical for administrators in two-year colleges who attempt to retain current faculty and attract quality new faculty to community colleges.

REFERENCES

Alesse, Bruce-G. (1982). Information Discrepancy as a Predictor of Organizational Satisfaction. A paper presented at the annual meeting of the International Communication Association, Boston, MA. (ERIC Document Reproduction Service No. ED 219 823)

Alfred, R. & Carter, P. (1993). Rethinking the business of management. New Directions for Community Colleges, 21,7-19.

Andes, J. (1982). A decade of development in higher education collective bargaining: changes in contract content. Journal of Collective Bargaining Negotiations, 1, 285-295.

Andes, John (1974). Developing Trends in Content of Collective Bargaining in Postsecondary Education (Special Report #6). Washington, D.C.: Academic Collective Bargaining Information Service. (ERIC Document Reproduction Services No. ED 092 036)

Antony, James Soto & Valadez, James R. (1998). An Exploration of the Job Satisfaction of American Part-Time College Faculty. A paper presented at the 23rd Annual Meeting of the Association for the Study of Higher Education, Miami, FL (ERIC Document Reproduction Services No. ED 427 597).

Baker, G.A. & Prugh, S.E. (1988). Reward structures in unionized and nonunionized community colleges. Community/Junior College Quarterly, 12, 121-136.

Baker, H.K. (1984). The impact of collective bargaining on faculty compensation in community colleges. Community/Junior College Quarterly, 8, 193-204.

Baldridge, J.V. & Kemerer, F.R. (1975). Unions on campus. San Francisco: Jossey-Bass.

Baldridge, J.V. & Kemerer, F.R. (1977). Academic senates and faculty collective bargaining. In G.L. Riley (Ed.), Governing academic organizations (pp. 327-347). Berkley, CA: McCutchan Publishing Corp.

Baldridge, J.V., Kemerer, F. R., & Associates (1981). Assessing the impact of faculty collective bargaining. AAHE-ERIC/Higher Education Research Report No.8, 1981. Washington, D.C.: American Association For Higher Education.

Baldwin, D.B. (1989). Union influence on faculty satisfaction with compensation and resources. Journal of Collective Negotiations, 18(4), 315-326.

Balkin, David B. (1989). Union influence on faculty satisfaction with compensation and resources. Journal of Collective Negotiations, 18(4), 315-326.

Bandura, Albert (1986). Social foundation of thought and action: A social cognitive theory. Englewood Cliffs, N.J.: Prentice Hall.

Beaulieu, Ann M. (1995). Collective bargaining contract language in Washington public community colleges and perceptions of faculty influence on college governance (Doctoral Dissertation, Gonzaga University). Dissertation Abstracts International, 9618129.

Bellott, F.K. & Tutor, F.D. (1990). A Challenge to the Conventional Wisdom of Herzberg and Maslow Theories. Paper presented at the19th annual meeting of the Mid-South Educational Research Association, New Orleans, LA.

Benedict, Mary Ellen & Wilder, Lisa (1999). Unionization and tenure and rank outcomes in Ohio universities. Journal of Labor Research, XX (2), 185-199.

Benoit, R.J. & Smith, A. (1980). Demographic and job satisfaction characteristics of Florida community college faculty. Community/Junior College Research Quarterly, 4, 263-324.

Bigoness, W.J. (1978). Correlates of faculty attitudes toward collective bargaining. Journal of Applied Psychology, 63, 228-233.

Birnbaum, Robert (1974). Unionization and faculty compensation. Educational Record, 55(1), 29-33.

Birnbaum, Robert (1980). Creative academic bargaining: Managing conflict in the unionized college and university. New York: Teachers College Press.

Birnbaum, Robert (1988). How colleges work. San Francisco: Jossey-Bass.

Blackburn, R.T. & Lawrence, J.H. (1995). Faculty at work: Motivation, expectation, and satisfaction. The John Hopkins University Press: Baltimore.

Borjas, G.J. (1979. Job satisfaction, wages, and unions. Journal of Human Resources, 14,21-40.

Bornheimer, Deane G. (1985). Conditions influencing faculty voting in collective bargaining elections. Research in Higher Education, 22(3), 291-305.

Borstorff, Patricia, Nye, David L., & Feild, Hubert S. (1994). Correlates of collective bargaining support in a right-to-work state: A study of university professors. Journal of Collective Negotiations, 23(1), 15-26.

Bowman, L.S. (1995). Work satisfaction and group differences: Full-time and part-time faculty in community colleges. Unpublished doctoral dissertation, University of Colorado, Denver.

Brett, J.M. (1980). Why employees want unions. Organizational Dynamics, 8, 47-50.

Brown, William B. & Stone, Courtenay C. (1979, Spring). Student-faculty ratios and unions. Educational Record, 169-174.

Brown, William W. & Stone, Courtenay C. (1977). Academic unions in higher education: Impacts on faculty salary, compensation, and promotions. Economic Inquiry, XV, 385-396.

Bullers, S. (1999). Selection Effects in the Relationship Between Women's Work/Family Status and Perceived Control. Family Relations: Interdisciplinary Journal of Applied Family Studies, 48(2), 181-188.

Butler, G.L.(1982). The expressed faculty preference for collective bargaining related to selected measures of job satisfaction, perceptions of collective bargaining, and attitudes toward unions and union officials. Dissertation Abstracts International, AAT8225496.

Cameron, Kim S. (1985). Investigating the causal association between unionism and organizational effectiveness. Research in Higher Education, 23(4), 387-411.

Caravelli, J.J. (1993). A national study of the importance of work facets and job satisfaction levels of technology educators. Unpublished doctoral dissertation, Clemson University.

Carnegie Foundation for the Advancement of Teaching. (1985). Carnegie survey of faculty. San Francisco: Jossey Bass.

Carr, R.K. & VanEyck, D.K. (1973). Collective bargaining comes to the campus. Washington, D.C.: American Council On Education.

Carnevale, D.G. (1995). How Employees Assess the Quality of Physical Work Settings. Public Productivity and Management Review, 18, 221-231.

Castro, Consuelo Rey. (2000). Community College Faculty Satisfaction and The Faculty Union. New Directions for Institutional Research, 1, 105, 59-67.

Chandler, M.K. & Julius, D.J. (1985, Spring). Governance and unionized campuses. Thought & Action, The National Education Association Journal, 1,2, 17-30.

Chase, Bob (1997, February). The New NEA: Reinventing Teacher Unions for a New Era. Presentation at the meeting of the National Press Club, Washington, D.C.

Clay, R.J. (1977). A validation study of Maslow's hierarchy of needs theory. (Report No. CE 014 839, ERIC Document Reproduction Service No. ED 150 416.

Cohen, A. M. & Brawer, F. B. (1996). The American community college (3rd Ed.). San Francisco: Jossey-Bass.

Commission of the Future of Community Colleges. (1988). Building communities: A vision for a new century. Washington, D.C.: American Association of Community Colleges.

Copur, Halil (1990). Academic Professionals: A study of conflict and satisfaction in the professoriate. Human Relations, 43(2), 113-127.

Cornish, D.G. (1986). Faculty perceptions of collective bargaining in selected Illinois public community colleges. Unpublished Doctoral Dissertation, Illinois State University.

Cranny, C. J., Smith, P.C., & Stone, E.F. (1992). Job satisfaction. New York: Lexington.

Dallinger, J.M. & Beveridge, M.D. (1993, May). Faculty Satisfaction With the Influence of a Union and The Administrative Aspects of Academic Jobs. Paper Presented At The Annual Meeting Of The Association for Institutional Research, Chicago, IL.

Dayal, S. (1989). Collective bargaining among academic professional: an analysis of issues and outcomes. Journal of Collective Negotiations, 18(3), 207-216.

De George, R. T. (1997). Academic freedom and tenure. Lanham, Md.: Rowman & Littlefield.

Diener, T. (1984). College Faculty and Job Satisfaction. A paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA (ERIC Document Reproduction Services No. ED 248820).

Diener, T. (1985). Job satisfaction and college faculty in two predominately black institutions. Journal of Negro Education, 54(4), 558-565.

Drummond, M.E. & Reitsch, A. (1995). The Relationship Between Shared Governance Models and Faculty and Administrator Attitudes. Journal of Higher Education Management, 11(1), 49-58.

Dworkin, James B. & Lee, Do-Hwa (1985). Faculty intentions to unionize: theory and evidence. Research in Higher Education, 23(4), 375-387.

Finkelstein, M.J. (1984). The American academic profession: A synthesis of social scientific inquiry since World War II. Columbus: Ohio State University Press.

Finley, C.E. (1991). The relationship between unionization and job satisfaction among two-year college faculty. Community College Review, 19(2), 53-60.

Finley, C.E. (1990). The relationship between union status, mean salary, and job satisfaction among two-year college faculty. Unpublished doctoral dissertation, Ohio University, OH.

Fiorentino, L.M. (1999). Job satisfaction among faculty in higher education. Unpublished doctoral dissertation. University of New York, Buffalo.

Fishwick, Gregory (1988). The compatibility of organizational cultures and collective bargaining practices. Dissertation Abstracts International, (AAT 8903800).

Franklin, H., Burgos-Sasscer, R., Kessel, B., & Mack, J. (1991, July). Faculty Leadership: A Dynamic Potent Force for Comprehensive Institutional Development. Paper presented at the Annual Conference on Leadership Development of the League for Innovation in Community Colleges, Chicago, IL. (ERIC Document Reproduction Services No. ED 344-629).

Garbarino, J.W. & Aussieker, B. (1975). Faculty bargaining: change and conflict. New York: McGraw-Hill.

Gawel, J. E. (1997). Herzberg's Theory of Motivation and Maslow's Hierarchy of Needs. Washington, D.C.: ERIC Clearinghouse on Assessment and Evaluation. (ERIC Document Reproduction Service No, ED 421 486).

Gilmore, Joseph E. (1991, Fall). Participative governance bodies in higher education. In R. Birnbaum (Ed.), Faculty in governance: The role of senates and joint committees in academic

Glisson, C., & Durick, M. (1988). Predictors of job satisfaction and organizational commitment in human service organizations. Administrative Science Quarterly, 33(10, 61-81.

Gomez-Majia, L.R. & Balkin, D.B. (1984, Sept). Faculty satisfaction with pay and other job determinants under union and non-union conditions. Academy of Management Journal, 591-602.

Graf, L.A., Hemmasi, M., Newgren, K.E., & Nielsen, W.R. (1994). Profiles of those who support collective bargaining in institutions of higher learning and why: An empirical examination. Journal of Collective Negotiations, 23(2), 151-162.

Gunne, M. G. & Mortimer, K.P. (1975). Distributions of authority and patterns of governance. University Park, Pa.: Center for the Study of Higher Education, Pennsylvania State University.

Guthrie-Morse, Barbara, Leslie, Larry L, & Hu, Teh-Wei (1981). Assessing the impact of faculty unions: The financial implications of collective bargaining. Journal of Higher Education, 52(3), 237-255.

Hagedorn, L.S. (2000). Conceptualizing Faculty Job Satisfaction: Components, Theories, and Outcomes. New Directions for Institutional Research, 2000, 105, 18-32.

Hagedorn, L.S. (1994). Retirement Proximity's Role in the Production of Satisfaction in Academe. Research In Higher Education, 35(5), 711-728.

Hagedorn, L.S. (1996). Wage Equity and Female Faculty Job Satisfaction: The Role of Wage Differentials in a Job Satisfaction Causal Model. Research in Higher Education,35(5), 569-598.

Hagedorn, L.S. (1998). Implications to Postsecondary Faculty of Alternative Calculation Methods of Gender Based Wage Differentials. Research In Higher Education, 39(2), 143-162.

Hagedorn, L.S. & Sax, L.J. (1999). The Role of Family Related Factors in Faculty Job Satisfaction. Paper presented at the annual meeting of the Association for Institutional Research conference, Seattle.

Harshbarger, B. (1989). Faculty commitment to the university: Influences and issues. Review of Higher Education, 13, 29-45.

Herzberg, F., Mausner, B., & Snyderman, B.B. (1959). The motivation to work. New York: John Wiley & Sons.

Hill, M.D. (1982). Variations in job satisfaction among higher education faculty in unionized and nonunionized institutions in

Pennsylvania. Journal of Collective Negotiations in the Public Sector, 11(2), 165-180.

Hill, M.D. (1983). Some factors affecting the job satisfaction of community college faculty in Pennsylvania. Community/Junior College Quarterly, 7, 303-317.

Hoy, Wayne K. & Miskel, Cecil G. (1996). Educational administration: Theory, research, and practice (5th ed.). New York: McGraw-Hill, Inc..

Hutton, J.B. & Jobe, M.E. (1985). Job satisfaction of community college faculty. Community/Junior College Quarterly, 9, 317-324.

Jackson, G. & Moulton, N. (1993). From boxing to ballet: Remaking a community college. New Directions for Community Colleges, 21, 35-44.

Julius, D. J. (1979). Management rights and union interests in higher education: An analysis of a nationwide sample of collective bargaining agreements negotiated at American colleges and universities (Columbia University Teachers College). Dissertation Abstracts International, 40/01A, 120.

Kaplin, William A. & Lee, Barbara A. (1995). The Law of Higher Education (3rd ed.). San Francisco: Jossey-Bass.

Kaufman, J.W. (1984). Relationship Between Teacher Motivation and Commitment to the Profession. A paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Kauppi, D.R. and others (1983). Job satisfaction predictors of rehabilitation counseling graduates. Rehabilitation-Counseling Bulletin, 26(5), 336-41.

Kemerer, Frank R. & Baldridge, J. Victor (1975). Unions on campus. San Francisco: Jossey-Bass.

Kemerer, F. R. & Baldridge, J. V. (1981). Senates and unions: unexpected peaceful coexistence. Journal of Higher Education, 52(3), 256-264.

Knox, J.W. (1987). Trade unionism in Canadian universities: an empirical study of unionized and nonunionized academic staff at Canadian universities. Unpublished doctoral dissertation, University of Bradford, U.K.

Kreitner, R. (1995). Management (6th ed.). Boston: Houghton Mifflin Co.

Ladd, E.C. & Lipset, S.M. (1973). Professors, unions, and American higher education. Washington, D.C.: American Enterprise Institute. For Public Policy Research.

Ladd, Everett C. & Lipset, Seymour M. (1977). Effects of unionism on higher education. In Riley, Gary L. & J. Victor Baldridge (Eds.), Governing academic organizations (pp. 295-326). Berkley, CA: McCutchan Publishing Corporation.

Leslie, L.L. & Hu, T.W. (1977). The financial implications of collective bargaining. Journal of Education Finance, 3(1), 32-53.

Lillydahl, J. & Singell, L. (1993). Job satisfaction, salaries and unions: The determination of university faculty salary. Economics of Education Review, 12(3), 233-243.

Lindner, J.R. (1998). Understanding employee motivation. Journal of Extension (On-Line), 36(3), Available:http//:www.joe.org/jor/1998 june/rb3.html.

Locke, E.A. (1976). The nature and causes of job satisfaction. In M.D. Dunnette (Ed.), Handbook of industrial and organizational psychology, (pp. 1297-1349). New York: John Wiley & Son.

Marshall, Joan L. (1979). The effects of collective bargaining on faculty salaries in higher education. Journal of Higher Education, 50(3), 310-322.

Maslow, A.H. (1954). Motivation and personality. New York: Harper & Row.

McKinley, J.B. (1982). Toward the proletarianization of physicians. in professional as worker. Boston: G.K. Hall and Company.

Mintzberg, H. (1979). The structuring of organizations. Englewood Cliffs: Prentice-Hall.

Miskel, C. G., Glasnapp, D., & Hatley, R. (1975). A test of the inequity theory for job satisfaction using educators' attitudes toward work motivation and work incentives. Educational Administration Quarterly 11(1), 38-54.

Monks, James (2000). Unionization and faculty salaries: New evidence from the 1990s. Journal of Labor Research, XXI(2), 305-314.

Morgan, D.R. & Kearney, R.C. (1977). Collective bargaining and faculty compensation: A comparative analysis. Sociology of Education, 50(1), 28-39.

Moskus, Jerry (1999, April). Soaring moles and burrowing eagles: Decision-making in the learning college. Learning Abstracts, World Wide Web Edition, 2, 3, 1-4.

Moxley, L.S. (1977). Job satisfaction of faculty teaching higher education. An examination of Herzberg's dual-factor theory and Porter's need satisfaction research. Report No. HE 008 966, ERIC Document Reproduction Service No. ED 139 349).

National Center For Education Statistics (1997). 1993 National study of postsecondary faculty (nsopf-93) user's manual public-use faculty and institution data (NCES 98-287), Washington, D.C.: U.S. Department of Education Office of Educational Research and Improvement.

Niebrugge, K.M. (1994). Burnout and Job dissatisfaction Among Practicing School Psychologists in Illinois. A paper presented at the 26th annual meeting of the National Association of School Psychologists, Seattle, WA.

Nussel, E.J., Wiersma, W., & Rusche, P.J. (1988, May-June). Work satisfaction of education professors. Journal of Teacher Education, 45-50.

Ohara, L. (1990). Faculty self-esteem: The 4th governance paradigm. Community/Junior College Quarterly, 14, 149-154.

Olsen, D. (1993). Work satisfaction and stress in the first and third year of academic appointment. Journal of Higher Education, 64(4), 454-471.

Olsen, D., Maple, S.A., & Stage, F.K. (1995). Women and minority faculty job satisfaction. Journal of Higher Education, 66(3), 267-294.

Olswang, Steven G. & Lee, Barbara A. (1984). Faculty Freedoms and Institutional Accountability: Interactions and Conflicts. (ASHE-ERIC Higher Education Research Report, No.5).

Ormsby, J. G. & Watts, L.R. (1991). College faculty unionization and its effect on the gender/job satisfaction relationship. Journal of College Negotiations, 20(1), 43-52.

Ormsby, J.G. & Ormsby, S.Y. (1988). The effect of unionization on faculty job satisfaction: A longitudinal study. Collective Negotiations, 17(2), 153-160.

Pardee, R.L. (1990). Motivation theories of Maslow, Herzberg, McGregor & McClelland: A literature review of selected theories dealing with job satisfaction and motivation. (Report No. CG 022 314, ERIC Document Reproduction Service No. ED 316 767).

Pearson, D.A. & Seiler, R.E. (1983). Environmental satisfiers in academe. Higher Education, 12, 35-47.

Perry, R. P., Menac, V.H., Struthers, C.W., Hechter, F.J., Schonwetter, D.J., & Menges, R.J. (1997). Faculty in transition: A longitudinal analysis of the role of perceived control and type of institution in adjustment to postsecondary institutions. Research In Higher Education, 38(5), 519-556.

Plascak-Craig, F.D. & Bean, J.P. (1989). Education Faculty Job Satisfaction in Major Research Universities. Paper presented at the Annual Meeting of the Association for the Study of Higher Education, Atlanta, GA. (ERIC Document Reproduction Services No. ED 313 978).

Pollicino, E. (1996). Institutional mission and faculty satisfaction: organizational and professional values in higher education. Unpublished doctoral dissertation, St. John's University.

Ponak, A., Thompson, M., & Zerbe, W. (1992). Collective bargaining goals of university faculty. Research in Higher Education, 33(4), 415-431.

Pritchard, R. D. & Peters, L. H. (1973). The relationship between structured job analysis information, interests, and job satisfaction. (Report No. CE 000 530). Lafayette, IN: Purdue University, Dept. of Psychological Sciences. (ERIC Document Reproduction Service No. ED 084 379).

Quarstein, V.A., McAfee, R.B., & Glassman, M. (1992). The situational occurrences theory of job satisfaction. Human Relations, 45(8), 859-873.

Rabban, D. M. (1992). Is Unionization Compatible With Professionalism? In B. H. Johnson (ed.), The Impact of Collective Bargaining on Higher Education: A 20 Year Perspective. New York: Baruch College, City University of New York.

Retsinas, J (1982). Teachers bargaining for control. American Educational Research Journal, 19, 353-370.

Rhoades, Gary (1998). Managed professionals: unionized faculty and restructuring academic labor. Albany: State University Of New York Press.

Robertson, L.J. (1995). The job satisfaction of women faculty in home economics and business programs. Dissertation Abstracts International, AAT9601785.

Robertson, L.J. & Bean, John P. (1998). Women faculty in family and consumer sciences: influences on job satisfaction. Family and Consumer Sciences Research Journal, 27(2), 167-193.

Rockman, I.F. (1986). The influence of gender, occupation, ecological status, autonomy, and decision-making opportunity on job satisfaction. Unpublished doctoral dissertation, University of California, Santa Barbara.

Rubiales, D. M. (1998). Collective Bargaining at Community Colleges: A Report From California. Acadame, 84(6), 40-42.

Schutz, William C. (1966). The Interpersonal Underworld: FIRO-A Three-Dimensional Theory of Interpersonal Behavior. Palo Alto, CA: Science and Behavior Books.

Smith, T.L. (1992). The impact of university faculty unionization on the male-female wage differential. Journal of Collective Negotiations, 21(2), 101-110.

Stephenson, Ann Elizabeth (1986). The impact of collective bargaining on community college governance and faculty welfare (Doctoral dissertation, University of Texas at Austin). Dissertation Abstracts International, AAT 8700286.

Szura, J.P. & Vermillion, M.E. (1975). Effects of defensiveness and self-actualization on a Herzberg replication. Journal-of-Vocational-Behavior; 7(2), 181-186.

Tangman, Ruth S. (1998). A challenge to academic governance in community colleges: changes in faculty involvement through collective bargaining. Unpublished doctoral dissertation, University of New Mexico, NM.

Temte, Ann (1997). An analysis of change in faculty influence over academic issues in the collective bargaining agreements of selected Washington state community and technical colleges. Unpublished doctoral dissertation, Oregon State University, OR.

Thompson, A.W.J. (1974). An introduction to collective bargaining in higher education. Ithaca, N.Y.: New York School Of Industrial And Labor Relations.

Thaxter, L.P. & Graham, S.W. (1999). Community college faculty involvement in decision-making. Community College Journal of Research and Practice, 23(7), 655-674.

Thompson, D.P., McNamera, J.F., & Hoyle, J.R. (1997). Job satisfaction in educational organizations: A synthesis of research findings. Educational Administration Quarterly, 33(1), 7-38.

Tierney, William G. (1993). Critical leadership and decision making in a postmodern world. In (Ed.), Building communities of difference: higher education in the 21st century. Westport, CT: Bergin & Garvey.

Valadez, James R. & Antony, James Soto (2001). Job Satisfaction and Commitment of Two-Year College Part-Time Faculty. Community College Journal of Research and Practice, 25:, 97-108.

Vander Putten, J., McLendon, M.K., & Peterson, M.W. (1997). Comparing union and nonunion staff perceptions of the higher education work environment.. Journal of Higher Education, 38(1), 131-147.

White, F. L. (1999). Thirteen years later: Perceived effects of collective bargaining on selected faculty-management relationships in California multi-community college districts. Dissertation Abstracts International, AAT9103925.

Wiley, C. (1993). A historical look at the effect of collective bargaining on faculty salaries in California community colleges. Journal of Collective Negotiations in the Public Sector, 22(2), 157-172.

Wiley, C. (1994). The effect of unionization on community college faculty remuneration: An overview. Community College Review, 21(1), 48-57.

Williams, Gwen B. & Zirkel, Perry A. (1988). Academic penetration in faculty collective bargaining contracts in higher education. Research in Higher Education, 28(1), 76-95.

Williams. D., Olswang, S. G., & Hargett, G. (1986). A matter of degree: Faculty morale as a function of involvement in institutional decisions during times of financial stress. Review of Higher Education, 9(3), 287-301.

Wilson, E.M. (1992). Rejection of collective bargaining by faculties at major research universities: A theoretical inquiry. Dissertation Abstracts International, #AAT9233956.

Woodruff, M.M. (1992). Relationship between faculty participation in the decision-making process and job satisfaction at urban, private universities in Connecticut. Dissertation Abstracts International, AAT9236147.

Vroom, V.H. (1965). Work and motivation. New York: Wiley.

Appendix: NSOPF-93 Faculty Questionnaire

OMB No. 1850-0666
Expiration Date: 12/93

U.S. Department of Education
Office of Educational Research and Improvement

National Center for Education Statistics

1993 NATIONAL STUDY OF POSTSECONDARY FACULTY

FACULTY QUESTIONNAIRE

All information on this form will be kept confidential and will not be disclosed or released to your institution or any other group or individual.

Co-sponsored by: National Science Foundation
National Endowment for the Humanities

Contractor: National Opinion Research Center (NORC)
University of Chicago
Mailing Address:
1525 East 55th Street
Chicago, Illinois 60615
Toll-Free Number: 1-800-733-NORC

NATIONAL STUDY OF POSTSECONDARY FACULTY
Instructions for Completing Faculty Questionnaire

Many of our questions ask about your activities during the 1992 Fall Term. By this, we mean whatever academic term was in progress on October 15, 1992.

All questions that ask about your position at "this institution" refer to your position during the 1992 Fall Term at the institution listed on the label on the back cover of the questionnaire.

This questionnaire was designed to be completed by both full-time and part-time instructional faculty and staff, and non-instructional faculty, in 2- and 4-year (and above) higher education institutions of all types and sizes. Please read each question carefully and follow all instructions. Some of the questions may not appear to fit your situation precisely; if you have a response other than those listed for a particular question, write in that response.

Most questions ask you to circle a number to indicate your response. Circle the number in front of your response and not the response itself. Other questions ask you to fill in information; write in the information in the space provided.

Mailing instructions for returning the completed questionnaire are on page 26.

If you have any questions on how to proceed, please call NORC toll-free at 1-800-733-NORC.

NATIONAL STUDY OF POSTSECONDARY FACULTY:
Faculty Questionnaire

1. **During the 1992 Fall Term, did you have any instructional duties at this institution (e.g., teaching one or more courses, or advising or supervising students' academic activities)?** *(CIRCLE ONE NUMBER)*

   1. Yes **(ANSWER 1A)** 2. No **(SKIP TO QUESTION 2)**

   1A. **During the 1992 Fall Term, were . . .** *(CIRCLE ONE NUMBER)*

   1. ***all*** **of your instructional duties related to credit courses,**
   2. **some of your instructional duties related to credit courses or advising or supervising academic activities for credit, or**
   3. ***all*** **of your instructional duties related to *non*credit courses or advising or supervising *non*credit academic activities?**

2. **What was your principal activity at this institution during the 1992 Fall Term? If you have equal responsibilities, please select one.** *(CIRCLE ONE NUMBER)*

   1. Teaching
   2. Research
   3. Technical activities (e.g., programmer, technician, chemist, engineer, etc.)
   4. Clinical service
   5. Community/public service
   6. Administration
      (WRITE IN TITLE OR POSITION) _____
   7. On sabbatical from this institution
   8. Other (subsidized performer, artist-in-residence, etc.)

3. **During the 1992 Fall Term, did you have faculty status at this institution?** *(CIRCLE ONE NUMBER)*

   1. Yes
   2. No, I did not have faculty status
   3. No, no one has faculty status at this institution

SECTION A. NATURE OF EMPLOYMENT

4. **During the 1992 Fall Term, did this institution consider you to be employed part-time or full-time?** *(CIRCLE ONE NUMBER)*

1. Part-time **(ANSWER 4A)** 2. Full-time **(SKIP TO QUESTION 5)**

4A. **Did you hold a part-time position at this institution during the 1992 Fall Term because . . .** *(CIRCLE "1" OR "2" FOR EACH REASON)*

Yes	No	
1	2	a. you preferred working on a part-time basis?
1	2	b. a full-time position was not available?
1	2	c. you were supplementing your income from other employment?
1	2	d. you wanted to be part of an academic environment?
1	2	e. you were finishing a graduate degree?
1	2	f. of other reasons?

5. **Were you chairperson of a department or division at this institution during the 1992 Fall Term?** *(CIRCLE ONE NUMBER)*

1. Yes
2. No

6. **In what year did you begin the job you held at this institution during the 1992 Fall Term? Include promotions in rank as part of your Fall 1992 job.** *(WRITE IN YEAR)*

19 ☐☐

7. **What was your tenure status at this institution during the 1992 Fall Term?** *(CIRCLE ONE NUMBER)*

1. Tenured → **7A. In what year did you achieve tenure at this institution?** 19 ☐☐ → **(SKIP TO QUESTION 9)**
2. On tenure track but not tenured
3. Not on tenure track
4. No tenure system for my faculty status
5. No tenure system at this institution

8. **During the 1992 Fall Term, what was the duration of your contract or appointment at this institution?** *(CIRCLE ONE NUMBER)*

1. One academic term
2. One academic/calendar year
3. A limited number of years (i.e., two or more academic/calendar years)
4. Unspecified duration
5. Other

9. **Which of the following best describes your academic rank, title, or position at this institution during the 1992 Fall Term?** *(CIRCLE ONE NUMBER, OR "NA")*

NA. Not applicable: no ranks designated at this institution **(SKIP TO QUESTION 11)**

1. Professor
2. Associate Professor
3. Assistant Professor
4. Instructor
5. Lecturer
6. Other *(WRITE IN)*_____

10. **In what year did you first achieve this rank?**
(WRITE IN YEAR)

19 ☐☐

11. **During the 1992 Fall Term, which of the following kinds of appointments did you hold at this institution?**
(CIRCLE ALL THAT APPLY)

1. Acting
2. Affiliate or adjunct
3. Visiting
4. Assigned by religious order
5. Clinical
   (WRITE IN TITLE OR POSITION) _____
6. Research
   (WRITE IN TITLE OR POSITION) _____
7. None of the above

12. What is your principal field or discipline of teaching? *(REFER TO THE LIST OF MAJOR FIELDS OF STUDY ON PAGES 5 AND 6 AND ENTER THE APPROPRIATE CODE NUMBER AND NAME BELOW. IF YOU HAVE NO FIELD OF TEACHING, CIRCLE "NA")*

NA. Not Applicable

CODE FOR FIELD OR DISCIPLINE: _____ NAME OF PRINCIPAL FIELD/DISCIPLINE

13. What is your principal area of research? If equal areas, select one. *(IF YOU HAVE NO RESEARCH AREA, CIRCLE "NA")*

NA. Not Applicable

CODE FOR FIELD OR DISCIPLINE: _____ NAME OF PRINCIPAL FIELD/DISCIPLINE

CODES FOR MAJOR FIELDS OF STUDY AND ACADEMIC DISCIPLINES

	AGRICULTURE
101	Agribusiness & Agricultural Production
102	Agricultural, Animal, Food, & Plant Sciences
103	Renewable Natural Resources, including Conservation, Fishing, & Forestry
110	Other Agriculture
	ARCHITECTURE & ENVIRONMENTAL DESIGN
121	Architecture & Environmental Design
122	City, Community, & Regional Planning
123	Interior Design
124	Land Use Management & Reclamation
130	Other Arch. & Environmental Design
	ART
141	Art History & Appreciation
142	Crafts
143	Dance
144	Design (other than Arch. or Interior)
145	Dramatic Arts
146	Film Arts
147	Fine Arts
148	Music
149	Music History & Appreciation
150	Other Visual & Performing Arts
	BUSINESS
161	Accounting
162	Banking & Finance
163	Business Administration & Management
164	Business Administrative Support (e.g., Bookkeeping, Office Management, Secretarial)
165	Human Resources Development
166	Organizational Behavior
167	Marketing & Distribution
170	Other Business
	COMMUNICATIONS
181	Advertising
182	Broadcasting & Journalism
183	Communications Research
184	Communication Technologies
190	Other Communications
	COMPUTER SCIENCE
201	Computer & Information Sciences
202	Computer Programming
203	Data Processing
204	Systems Analysis
210	Other Computer Science
	EDUCATION
221	Education, General
222	Basic Skills
223	Bilingual/Cross-cultural Education
224	Curriculum & Instruction
225	Education Administration
226	Education Evaluation & Research
227	Educational Psychology
228	Special Education
229	Student Counseling & Personnel Svcs.
230	Other Education
	TEACHER EDUCATION
241	Pre-Elementary
242	Elementary
243	Secondary
244	Adult & Continuing
245	Other General Teacher Ed. Programs
250	Teacher Education in Specific Subjects
	ENGINEERING
261	Engineering, General
262	Civil Engineering
263	Electrical, Electronics, & Communication Engineering
264	Mechanical Engineering
265	Chemical Engineering
270	Other Engineering
280	Engineering-Related Technologies
	ENGLISH AND LITERATURE
291	English, General
292	Composition & Creative Writing
293	American Literature
294	English Literature
295	Linguistics
296	Speech, Debate, & Forensics
297	English as a Second Language
300	English, Other

	FOREIGN LANGUAGES
311	Chinese (Mandarin, Cantonese, or Other Chinese)
312	French
313	German
314	Italian
315	Latin
316	Japanese
317	Other Asian
318	Russian or Other Slavic
319	Spanish
320	Other Foreign Languages
	HEALTH SCIENCES
331	Allied Health Technologies & Services
332	Dentistry
333	Health Services Administration
334	Medicine, including Psychiatry
335	Nursing
336	Pharmacy
337	Public Health
338	Veterinary Medicine
340	Other Health Sciences
350	HOME ECONOMICS
360	INDUSTRIAL ARTS
370	LAW
380	LIBRARY & ARCHIVAL SCIENCES
	NATURAL SCIENCES: BIOLOGICAL SCIENCES
391	Biochemistry
392	Biology
393	Botany
394	Genetics
395	Immunology
396	Microbiology
397	Physiology
398	Zoology
400	Biological Sciences, Other
	NATURAL SCIENCES: PHYSICAL SCIENCES
411	Astronomy
412	Chemistry
413	Physics
414	Earth, Atmospheric, and Oceanographic (Geological Sciences)
420	Physical Sciences, Other
430	MATHEMATICS
440	STATISTICS
450	MILITARY STUDIES
460	MULTI/INTERDISCIPLINARY STUDIES
470	PARKS & RECREATION
480	PHILOSOPHY AND RELIGION
490	THEOLOGY
500	PROTECTIVE SERVICES (e.g., Criminal Justice, Fire Protection)
510	PSYCHOLOGY
520	PUBLIC AFFAIRS (e.g., Community Services, Public Administration, Public Works, Social Work)
530	SCIENCE TECHNOLOGIES
	SOCIAL SCIENCES AND HISTORY
541	Social Sciences, General
542	Anthropology
543	Archeology
544	Area & Ethnic Studies
545	Demography
546	Economics
547	Geography
548	History
549	International Relations
550	Political Science & Government
551	Sociology
560	Other Social Sciences
	VOCATIONAL TRAINING
	CONSTRUCTION TRADES
601	Carpentry
602	Electrician
603	Plumbing
610	Other Construction Trades
	CONSUMER, PERSONAL, & MISC. SERVICES
621	Personal Services (e.g., Barbering, Cosmetology)
630	Other Consumer Services
	MECHANICS AND REPAIRERS
641	Electrical & Electronics Equipment Repair
642	Heating, Air Conditioning, & Refrigeration Mechanics & Repairers
643	Vehicle & Mobile Equipment Mechanics & Repairers
644	Other Mechanics & Repairers
	PRECISION PRODUCTION
661	Drafting
662	Graphic & Print Communications
663	Leatherworking & Upholstering
664	Precision Metal Work
665	Woodworking
670	Other Precision Production Work
	TRANSPORTATION AND MATERIAL MOVING
681	Air Transportation (e.g., Piloting, Traffic Control, Flight Attendance, Aviation Management)
682	Land Vehicle & Equipment Operation
683	Water Transportation (e.g., Boat & Fishing Operations, Deep Water Diving, Marine Operations, Sailors & Deckhands)
690	Other Transportation & Material Moving
900	*OTHER (IF YOU USE THIS CODE, BE SURE TO WRITE IN A COMPLETE DESCRIPTION AT QUESTIONS 12-13, AND 16)*

SECTION B. ACADEMIC/PROFESSIONAL BACKGROUND

14. Which of the following undergraduate academic honors or awards, if any, did you receive?
(CIRCLE ALL THAT APPLY)

1. National academic honor society, such as Phi Beta Kappa, Tau Beta Pi, or other field-specific national honor society
2. Cum laude or honors
3. Magna cum laude or high honors
4. Summa cum laude or highest honors
5. Other undergraduate academic achievement award
6. None of the above

15. When you were in graduate school, which of the following forms of financial assistance, if any, did you receive?
(CIRCLE ALL THAT APPLY, OR CIRCLE "NA")

NA. Not applicable; did not attend graduate school **(GO TO QUESTION 16)**

1. Teaching assistantship
2. Research assistantship
3. Program or residence hall assistantship
4. Fellowship
5. Scholarship or traineeship
6. Grant
7. G.I. Bill or other veterans' financial aid
8. Federal or state loan
9. Other loan
10. None of the above

16. Please list below the degrees or other formal awards that you hold, the year you received each one, the field code (from pages 5-6) that applies, name of the field, and the name and location of the institution from which you received each degree or award. Do not list honorary degrees. *(COMPLETE ALL COLUMNS FOR EACH DEGREE)*

CODES FOR TYPE OF DEGREE

1 Professional degree (M.D., D.D.S., L.L.B., etc.)
2 Doctoral degree (Ph.D., Ed.D., etc.)
3 Master's degree or equivalent
4 Bachelor's degree or equivalent
5 Certificate, diploma, or degree for completion of undergraduate program of more than 2 years but less than 4 years in length
6 Associate's degree or equivalent
7 Certificate, diploma, or degree for completion of undergraduate program of at least 1 year but less than 2 years in length

	A. Degree Code (see above)	B. Year Received	C. Field Code (from pp. 5-6)	D. Name of Field (from pp. 5-6)	E. Name of Institution (a) and City and State/Country of Institution (b)
(1) Highest	____	19____	____	_____	a. _____
				_____	_____
					b. _____
					_____
(2) Next Highest	____	19____	____	_____	a. _____
				_____	_____
					b. _____
					_____
(3) Next Highest	____	19____	____	_____	a. _____
				_____	_____
					b. _____
					_____
(4) Next Highest	____	19____	____	_____	a. _____
				_____	_____
					b. _____
					_____

17. **During the 1992 Fall Term, were you employed only at this institution, or did you also have other employment including any outside consulting or other self-owned business, or private practice?** *(CIRCLE ONE NUMBER)*

1. Employed only at this institution **(SKIP TO QUESTION 19)**
2. Had other employment, consulting, self-owned business, or private practice

→ **17A.** **How many different jobs, other than your employment at this institution, did you have during the 1992 Fall Term? Include all outside consulting, self-owned business, and private practice.** *(WRITE IN NUMBER)*

_____ Number of Jobs

18. **Not counting any employment at this institution, what was the employment sector of the main other job you held during Fall 1992?** *(CIRCLE ONE NUMBER)*

1. 4-year college or university, graduate or professional school
2. 2-year or other postsecondary institution
3. Elementary or secondary school
4. Consulting, freelance work, self-owned business, or private practice
5. Hospital or other health care or clinical setting
6. Foundation or other nonprofit organization other than health care organization
7. For-profit business or industry in the private sector
8. Federal government, including military, or state or local government
9. Other *(WRITE IN)* _____

18A. **What year did you begin that job?** *(WRITE IN YEAR)*

19 ☐☐

18B. **What was your primary responsibility in that job?** *(CIRCLE ONE NUMBER)*

1. Teaching
2. Research
3. Technical activities (e.g., programmer, technician, chemist, engineer, etc.)
4. Clinical service
5. Community/public service
6. Administration
7. Other

18C. **Was that job full-time or part-time?** *(CIRCLE ONE NUMBER)*

1. Full-time
2. Part-time

19. **The next questions ask about jobs that ended before the beginning of the 1992 Fall Term. For the three most recent and significant main jobs that you held during the past 15 years, indicate below the year you began and the year you left each job, the employment sector, your primary responsibility, and whether you were employed full-time or part-time.**

- **Do not list promotions in rank at one place of employment as different jobs.**
- **Do not include temporary positions (i.e., summer positions) or work as a graduate student.**
- **List each job (other than promotion in rank) separately.**

If not applicable, circle "NA" ——→		NA	NA	NA
		A.	B.	C.
(1)	YEARS JOB HELD	MOST RECENT MAIN JOB (PRIOR TO FALL 1992)	NEXT MOST RECENT MAIN JOB	NEXT MOST RECENT MAIN JOB
	FROM:	19_____	19_____	19_____
	TO:	19_____	19_____	19_____
(2)	EMPLOYMENT SECTOR	*(CIRCLE ONE)*	*(CIRCLE ONE)*	*(CIRCLE ONE)*
	4-year college or university, graduate or professional school	1	1	1
	2-year or other postsecondary institution	2	2	2
	Elementary or secondary school	3	3	3
	Consulting, freelance work, self-owned business, or private practice	4	4	4
	Hospital or other health care or clinical setting	5	5	5
	Foundation or other nonprofit organization other than health care organization	6	6	6
	For-profit business or industry in the private sector	7	7	7
	Federal government, including military, or state or local government	8	8	8
	Other	9	9	9
(3)	PRIMARY RESPONSIBILITY	*(CIRCLE ONE)*	*(CIRCLE ONE)*	*(CIRCLE ONE)*
	Teaching	1	1	1
	Research	2	2	2
	Technical activities (e.g., programmer, technician, chemist, engineer, etc.)	3	3	3
	Clinical service	4	4	4
	Community/public service	5	5	5
	Administration	6	6	6
	Other	7	7	7
(4)	FULL-TIME/PART-TIME	*(CIRCLE ONE)*	*(CIRCLE ONE)*	*(CIRCLE ONE)*
	Full-time	1	1	1
	Part-time	2	2	2

20. **About how many of each of the following have you presented/published/etc. during your entire career and during the last 2 years? For publications, please include only works that have been accepted for publication. Count multiple presentations/publications of the same work only once.** ***(CIRCLE "NA" IF YOU HAVE NOT PUBLISHED OR PRESENTED)***

NA. No presentations/publications/etc. **(GO TO QUESTION 21)**

(WRITE IN A NUMBER ON EACH LINE; IF NONE, WRITE IN "0")

Type of Presentation/Publication/etc.	A. Total during career	B. Number in past 2 years
(1) Articles published in refereed professional or trade journals	_____	_____
(2) Articles published in nonrefereed professional or trade journals	_____	_____
(3) Creative works published in juried media	_____	_____
(4) Creative works published in nonjuried media or in-house newsletters	_____	_____
(5) Published reviews of books, articles, or creative works	_____	_____
(6) Chapters in edited volumes	_____	_____
(7) Textbooks	_____	_____
(8) Other books	_____	_____
(9) Monographs	_____	_____
(10) Research or technical reports disseminated internally or to clients	_____	_____
(11) Presentations at conferences, workshops, etc.	_____	_____
(12) Exhibitions or performances in the fine or applied arts	_____	_____
(13) Patents or copyrights (excluding thesis or dissertation)	_____	_____
(14) Computer software products	_____	_____

SECTION C. INSTITUTIONAL RESPONSIBILITIES AND WORKLOAD

21. During the 1992 Fall Term, how many undergraduate or graduate thesis or dissertation committees, comprehensive exams, orals committees, or examination or certification committees did you chair and/or serve on at this institution? *(CIRCLE "NA" IF YOU DID NOT SERVE ON ANY COMMITTEES)*

NA. Did not serve on any undergraduate or graduate committees **(GO TO QUESTION 22)**

(WRITE IN A NUMBER ON EACH LINE; IF NONE, WRITE IN "0")

Type of Committee	A. Number served on	B. Of that number, how many did you chair?
(1) Undergraduate thesis or dissertation committees	_____	_____
(2) Undergraduate comprehensive exams or orals committees (other than as part of thesis/dissertation committees)	_____	_____
(3) Undergraduate examination/certification committees	_____	_____
(4) Graduate thesis or dissertation committees	_____	_____
(5) Graduate comprehensive exams or orals committees (other than as part of thesis/dissertation committees)	_____	_____
(6) Graduate examination/certification committees	_____	_____

22. During the 1992 Fall Term, what was the total number of classes or sections you taught at this institution? Do not include individualized instruction, such as independent study or individual performance classes. Count multiple sections of the same course as a separate class, but not the lab section of a course. *(WRITE IN A NUMBER, OR CIRCLE "0")*

0. No classes taught **(SKIP TO QUESTION 25)**

_____ Number of classes/sections **(ANSWER 22A)**

22A. How many of those classes were classes for credit?

0. No classes for credit **(SKIP TO QUESTION 25)**

_____ Number of classes/sections for credit **(ANSWER QUESTION 23 ON THE NEXT PAGE)**

23. **For each class or section that you taught for credit at this institution during the 1992 Fall Term, please answer the following items. Do not include individualized instruction, such as independent study or individual one-on-one performance classes.**

If you taught multiple sections of the same course, count them as separate classes, but do not include the lab section of the course as a separate class. For each class, enter the code for the academic discipline of the class. (Refer to pages 5-6 for the codes. Please enter the code rather than the course name.)

	A. FIRST FOR-CREDIT CLASS	B. SECOND FOR-CREDIT CLASS
(1) CODE FOR ACADEMIC DISCIPLINE OF CLASS (from pp. 5-6)		
(2) DURING 1992 FALL TERM		
Number of weeks the class met?	a. _____	a. _____
Number of credit hours?	b. _____	b. _____
Number of hours the class met per week?	c. _____	c. _____
Number of teaching assistants, readers?	d. _____	d. _____
Number of students enrolled?	e. _____	e. _____
Was this class team taught?	f. 1. Yes 2. No	f. 1. Yes 2. No
Average # hours per week *you* taught the class?	g. _____	g. _____
(3) PRIMARY LEVEL OF STUDENTS	*(CIRCLE ONE)*	*(CIRCLE ONE)*
Lower division students (first or second year postsecondary) or	1	1
Upper division students (third or fourth year postsecondary) or	2	2
Graduate or any other post-baccalaureate students, or	3	3
All other students?	4	4
(4) PRIMARY INSTRUCTIONAL METHOD USED	*(CIRCLE ONE)*	*(CIRCLE ONE)*
Lecture	1	1
Seminar	2	2
Discussion group or class presentations	3	3
Lab, clinic or problem session	4	4
Apprenticeship, internship, field work, or field trips	5	5
Role playing, simulation, or other performance (e.g., art, music, drama)	6	6
TV or radio	7	7
Group projects	8	8
Cooperative learning groups	9	9

C.	D.	E.	
THIRD FOR-CREDIT CLASS	FOURTH FOR-CREDIT CLASS	FIFTH FOR-CREDIT CLASS	
a. _____	a. _____	a. _____	a. Number of weeks the class met
b. _____	b. _____	b. _____	b. Number of credit hours
c. _____	c. _____	c. _____	c. Number of hours the class met per week
d. _____	d. _____	d. _____	d. Number of teaching assistants, readers
e. _____	e. _____	e. _____	e. Number of students enrolled
f. 1. Yes 2. No	f. 1. Yes 2. No	f. 1. Yes 2. No	f. Was this class team taught
g. _____	g. _____	g. _____	g. Average # hours per week you taught
(CIRCLE ONE)	*(CIRCLE ONE)*	*(CIRCLE ONE)*	
1	1	1	Lower division students
2	2	2	Upper division students
3	3	3	Graduate, post-baccalaureate students
4	4	4	All other students
(CIRCLE ONE)	*(CIRCLE ONE)*	*(CIRCLE ONE)*	
1	1	1	Lecture
2	2	2	Seminar
3	3	3	Discussion group or class presentations
4	4	4	Lab, clinic or problem session
5	5	5	Apprenticeship, internship, etc.
6	6	6	Role playing, simulation, performance, etc.
7	7	7	TV or radio
8	8	8	Group projects
9	9	9	Cooperative learning groups

24. **Did you teach any undergraduate courses for credit during the 1992 Fall Term at this institution?**

1. Yes **(ANSWER 24A)** 2. No **(SKIP TO QUESTION 25)**

24A. **In how many of the undergraduate courses that you taught for credit during the 1992 Fall Term did you use . . .** *(CIRCLE ONE NUMBER FOR EACH ITEM)*

None	Some	All		
1	2	3	a.	Computational tools or software?
1	2	3	b.	Computer-aided or machine-aided instruction?
1	2	3	c.	Student presentations?
1	2	3	d.	Student evaluations of each other's work?
1	2	3	e.	Multiple-choice midterm and/or final exam?
1	2	3	f.	Essay midterm and/or final exams?
1	2	3	g.	Short-answer midterm and/or final exams?
1	2	3	h.	Term/research papers?
1	2	3	i.	Multiple drafts of written work?
1	2	3	j.	Grading on a curve?
1	2	3	k.	Competency-based grading?

25. **For each type of student listed below, please indicate how many students received individual instruction from you during the 1992 Fall Term, (e.g., independent study or one-on-one instruction, including working with individual students in a clinical or research setting), and the total number of contact hours with these students per week. Do not count regularly scheduled office hours.** *(WRITE IN A NUMBER ON EACH LINE; IF NONE, WRITE IN "0")*

Type of students receiving Formal Individualized Instruction	A. Number of students	B. Total contact hours per week
(1) Lower division students (first or second year postsecondary)	_____	_____
(2) Upper division students (third or fourth year postsecondary)	_____	_____
(3) Graduate or any other post-baccalaureate students	_____	_____
(4) All other students	_____	_____

26. **During the 1992 Fall Term, how many regularly scheduled office hours did you have per week?** *(WRITE IN A NUMBER; IF NONE, WRITE IN "0")*

_____ Number of hours per week

27. **During the 1992 Fall Term, how much informal contact with students did you have each week outside of the classroom? Do not count individual instruction, independent study, etc., or regularly scheduled office hours.** *(WRITE IN A NUMBER; IF NONE, WRITE IN "0")*

_____ Number of hours per week

28. **During the 1992 Fall Term, were you engaged in any professional research, writing, or creative works?**

1. Yes **(ANSWER QUESTION 29)** 2. No **(SKIP TO QUESTION 34)**

29. **How would you describe your primary professional research, writing, or creative work during the 1992 Fall Term?** *(CIRCLE ONE NUMBER)*

1. Pure or basic research
2. Applied research
3. Policy-oriented research or analysis
4. Literary or expressive
5. Program/Curriculum design and development
6. Other

30. **During the 1992 Fall Term, were you engaged in any funded research or funded creative endeavors? Include any grants, contracts, or institutional awards. Do not include consulting services.** *(CIRCLE ONE NUMBER)*

1. Yes
2. No (SKIP TO QUESTION 34)

31. **During the 1992 Fall Term, were you a principal investigator (PI) or co-principal investigator (Co-PI) for any grants or contracts?** *(CIRCLE ONE NUMBER)*

1. Yes
2. No (SKIP TO QUESTION 33)

32. **During the 1992 Fall Term, how many individuals other than yourself were supported by all the grants and contracts for which you were PI or Co-PI?** *(WRITE IN NUMBER; IF NONE, WRITE IN "0")*

_____ Number of individuals

33. **Fill out the information below for each funding source during the 1992 Fall Term. If not sure, give your best estimate.**

A. Funding source *(CIRCLE "1" OR "2" FOR EACH SOURCE)*		B. Number of Grants/ Contracts	C. Work done as... *(CIRCLE ALL THAT APPLY)*	D. Total funds for 1992-93 academic year	E. How funds were used *(CIRCLE ALL THAT APPLY)*
(1) This institution?	1. Yes → 2. No	_____	1. PI 2. Co-PI 3. Staff	$ _____	1. Research 2. Program/curriculum development 3. Other
(2) Foundation or other nonprofit organization?	1. Yes → 2. No	_____	1. PI 2. Co-PI 3. Staff	$ _____	1. Research 2. Program/curriculum development 3. Other
(3) For profit business or industry in the private sector?	1. Yes → 2. No	_____	1. PI 2. Co-PI 3. Staff	$ _____	1. Research 2. Program/curriculum development 3. Other
(4) State or local government?	1. Yes → 2. No	_____	1. PI 2. Co-PI 3. Staff	$ _____	1. Research 2. Program/curriculum development 3. Other
(5) Federal Government?	1. Yes → 2. No	_____	1. PI 2. Co-PI 3. Staff	$ _____	1. Research 2. Program/curriculum development 3. Other
(6) Other source? *(WRITE IN)* _____	1. Yes → 2. No	_____	1. PI 2. Co-PI 3. Staff	$ _____	1. Research 2. Program/curriculum development 3. Other

34. **How would you rate each of the following facilities or resources at this institution that were available for your own use during the 1992 Fall Term?** *(CIRCLE ONE NUMBER, OR "NA," ON EACH LINE)*

Not Available/ Not Applicable	Very Poor	Poor	Good	Very Good	
NA	1	2	3	4	a. Basic research equipment/instruments
NA	1	2	3	4	b. Laboratory space and supplies
NA	1	2	3	4	c. Availability of research assistants
NA	1	2	3	4	d. Personal computers
MA	1	2	3	4	e. Centralized (main frame) computer facilities
NA	1	2	3	4	f. Computer networks with other institutions
NA	1	2	3	4	g. Audio-visual equipment
NA	1	2	3	4	h. Classroom space
NA	1	2	3	4	i. Office space
NA	1	2	3	4	j. Studio/performance space
NA	1	2	3	4	k. Secretarial support
NA	1	2	3	4	l. Library holdings

35. **Listed below are some ways that institutions and departments may use internal funds for the professional development of faculty.**

A. Was institutional or department funding available for your use during the past two years for . . .		B. Did you use any of those funds at this institution?	C. Were those funds adequate for your purposes?
(1) tuition remission at this or other institutions?	1. Yes → 2. No DK. Don't know	1. Yes → 2. No	1. Yes 2. No
(2) professional association memberships and/or registration fees?	1. Yes → 2. No DK. Don't know	1. Yes → 2. No	1. Yes 2. No
(3) professional travel?	1. Yes → 2. No DK. Don't know	1. Yes → 2. No	1. Yes 2. No
(4) training to improve research or teaching skills?	1. Yes → 2. No DK. Don't know	1. Yes → 2. No	1. Yes 2. No
(5) retraining for fields in higher demand?	1. Yes → 2. No DK. Don't know	1. Yes → 2. No	1. Yes 2. No
(6) sabbatical leave?	1. Yes → 2. No DK. Don't know	1. Yes → 2. No	1. Yes 2. No

36. **On the average, how many hours per week did you spend at each of the following kinds of activities during the 1992 Fall Term?** *(IF NOT SURE, GIVE YOUR BEST ESTIMATES)*

Average number hours per week during the 1992 Fall Term	
_____	a. All paid activities at this institution (teaching, research, administration, etc.)
_____	b. All unpaid activities at this institution
_____	c. Any other paid activities outside this institution (e.g., consulting, working on other jobs)
_____	d. Unpaid (pro bono) professional service activities outside this institution

37. **In column A, we ask you to allocate your <u>total</u> work time in the Fall of 1992 (as reported in Question 36) into several categories. We realize that they are not mutually exclusive categories (e.g., research may include teaching; preparing a course may be part of professional growth). We ask, however, that you allocate as best you can the proportion of your time spent in activities whose primary focus falls within the indicated categories. In column B, indicate what percentage of your time you would <u>prefer</u> to spend in each of the listed categories.**

A. % of Work Time Spent	*(WRITE IN A PERCENTAGE ON EACH LINE. IF NOT SURE, GIVE YOUR BEST ESTIMATE; IF NONE, WRITE IN "0")*	**B. % of Work Time Preferred**
_____%	a. **Teaching** (including teaching, grading papers, preparing courses; developing new curricula; advising or supervising students; working with student organizations or intramural athletics)	_____%
_____%	b. **Research/Scholarship** (including research; reviewing or preparing articles or books; attending or preparing for professional meetings or conferences; reviewing proposals; seeking outside funding; giving performances or exhibitions in the fine or applied arts, or giving speeches)	_____%
_____%	c. **Professional Growth** (including taking courses, pursuing an advanced degree; other professional development activities, such as practice or activities to remain current in your field)	_____%
_____%	d. **Administration**	_____%
_____%	e. **Outside Consulting or Freelance Work**	_____%
_____%	f. **Service/Other Non-Teaching Activities** (including providing legal or medical services or psychological counseling to clients or patients; paid or unpaid community or public service, service to professional societies/associations; other activities or work not listed in a-e)	_____%
100%	PLEASE BE SURE THAT THE PERCENTAGES YOU PROVIDE ADD UP TO 100% OF THE TOTAL TIME.	100%

38. **Are you a member of the union (or other bargaining association) that represents faculty at this institution?**

1. Union is available, but I am not eligible
2. I am eligible, but not a member
3. I am eligible, and a member
4. Union is not available at this institution

SECTION D. JOB SATISFACTION ISSUES

39. **How satisfied or dissatisfied are you with each of the following aspects of your instructional duties at this institution?** *(CIRCLE "NA" IF YOU HAD NO INSTRUCTIONAL DUTIES)*

NA. No instructional duties **(GO TO QUESTION 40)**

(CIRCLE ONE NUMBER FOR EACH ITEM; IF AN ITEM DOES NOT APPLY TO YOU, WRITE IN "NA" NEXT TO THE ITEM)

Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied	
1	2	3	4	a. The authority I have to make decisions about content and methods in the courses I teach
1	2	3	4	b. The authority I have to make decisions about other (non-instructional) aspects of my job
1	2	3	4	c. The authority I have to make decisions about what courses I teach
1	2	3	4	d. Time available for working with students as an advisor, mentor, etc.
1	2	3	4	e. Quality of undergraduate students whom I have taught here
1	2	3	4	f. Quality of graduate students whom I have taught here

40. **How satisfied or dissatisfied are you with the following aspects of your job at this institution?** *(CIRCLE ONE NUMBER FOR EACH ITEM)*

Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied	
1	2	3	4	a. My work load
1	2	3	4	b. My job security
1	2	3	4	c. Opportunity for advancement in rank at this institution
1	2	3	4	d. Time available for keeping current in my field
1	2	3	4	e. Freedom to do outside consulting
1	2	3	4	f. My salary
1	2	3	4	g. My benefits, generally
1	2	3	4	h. Spouse or partner employment opportunities in this geographic area
1	2	3	4	i. My job here, overall

41. **During the next three years, how likely is it that you will leave this job to . . .**
(CIRCLE ONE NUMBER FOR EACH ITEM)

Not At All Likely	Somewhat Likely	Very Likely		
1	2	3	a.	accept a part-time job at a different postsecondary institution?
1	2	3	b.	accept a full-time job at a different postsecondary institution?
1	2	3	c.	accept a part-time job not at a postsecondary institution?
1	2	3	d.	accept a full-time job not at a postsecondary institution?
1	2	3	e.	retire from the labor force?

42. **At what age do you think you are most likely to stop working at a postsecondary institution?**
(WRITE IN AGE, OR CIRCLE "DK")

_____ Years of age

DK Don't know

43. **If you were to leave your current position in academia to accept another position inside or outside of academia, how important would each of the following be in your decision?** *(CIRCLE ONE NUMBER FOR EACH ITEM)*

Not Important	Somewhat Important	Very Important		
1	2	3	a.	Salary level
1	2	3	b.	Tenure-track/tenured position
1	2	3	c.	Job security
1	2	3	d.	Opportunities for advancement
1	2	3	e.	Benefits
1	2	3	f.	No pressure to publish
1	2	3	g.	Good research facilities and equipment
1	2	3	h.	Good instructional facilities and equipment
1	2	3	i.	Good job or job opportunities for my spouse or partner
1	2	3	j.	Good geographic location
1	2	3	k.	Good environment/schools for my children
1	2	3	l.	Greater opportunity to teach
1	2	3	m.	Greater opportunity to do research
1	2	3	n.	Greater opportunity for administrative responsibilities

44. **If you could elect to draw on your retirement and still continue working at your institution on a part-time basis, would you do so?** *(CIRCLE ONE)*

1. Yes
2. No

DK. Don't know

45. **If an early retirement option were offered to you at your institution, would you take it?** *(CIRCLE ONE)*

1. Yes
2. No

DK. Don't know

46. **At which age do you think you are most likely to retire from all paid employment?** *(WRITE IN AGE, OR CIRCLE "DK")*

_____ Years of age

DK. Don't know

SECTION E. COMPENSATION

Note: Your responses to these items as with all other items in this questionnaire are voluntary and strictly confidential. They will be used only in statistical summaries, and will not be disclosed to your institution or to any individual or group. Furthermore, all information that would permit identification of individuals or institutions will be removed from the survey files.

47. For the calendar year 1992, estimate your gross compensation before taxes from each of the sources listed below.

(IF NOT SURE, GIVE YOUR BEST ESTIMATES; IF NO COMPENSATION FROM A SOURCE, WRITE IN "0")

Compensation from this institution:

$ _____ a. Basic salary → b. Type of appointment (e.g., 9 months) ☐ # of months

$ _____ c. Other teaching at this institution not included in basic salary (e.g., for summer session)

$ _____ d. Supplements not included in basic salary (for administration, research, coaching sports, etc.)

$ _____ e. Non-monetary compensation, such as food, housing, car (Do not include employee benefits such as medical, dental, or life insurance)

$ _____ f. Any other income from this institution

Compensation from other sources:

$ _____ g. Employment at another academic institution

$ _____ h. Legal or medical services or psychological counseling

$ _____ i. Outside consulting, consulting business or freelance work

$ _____ j. Self-owned business (other than consulting)

$ _____ k. Professional performances or exhibitions

$ _____ l. Speaking fees, honoraria

$ _____ m. Royalties or commissions

$ _____ n. Any other employment

$ _____ o. Non-monetary compensation, such as food, housing, car (Do not include employee benefits such as medical, dental, or life insurance)

Other sources of earned income *(WRITE IN BELOW):*

$ _____ p. _____

$ _____ q. _____

48. For the calendar year 1992, how many persons were in your household including yourself?

_____ Total number in household

49. For the calendar year 1992, what was your total household income?

$ _____ Total household income

50. For the calendar year 1992, how many dependents did you have? Do not include yourself. (A dependent is someone receiving at least half of his or her support from you.)

_____ Number of dependents

SECTION F. SOCIODEMOGRAPHIC CHARACTERISTICS

51. **Are you . . .**

1. male, or
2. female?

52. **In what month and year were you born?**
(WRITE IN MONTH AND YEAR)

☐☐ 19☐☐
MONTH YEAR

53. **What is your race?** *(CIRCLE ONE NUMBER)*

1. American Indian or Alaskan Native
2. Asian or Pacific Islander (ANSWER 53A)
3. African American/Black
4. White
5. Other *(WRITE IN BELOW)*

_____

54. **Are you of Hispanic descent?**
(CIRCLE ONE NUMBER)

1. Yes (ANSWER 54A)
2. No (SKIP TO QUESTION 55)

→ 54A. **What is your Spanish/Hispanic origin? If more than one, circle the one you consider the most important part of your background.**

1. Mexican, Mexican-American, Chicano
2. Cuban, Cubano
3. Puerto Rican, Puertorriqueno, or Bouricuan
4. Other *(WRITE IN BELOW)*

_____

55. **What is your current marital status?**
(CIRCLE ONE NUMBER)

1. Single, never married
2. Married
3. Living with someone in a marriage-like relationship
4. Separated
5. Divorced
6. Widowed

→ 53A. **What is your Asian or Pacific Islander origin? If more than one, circle the one you consider the most important part of your background.** *(CIRCLE ONE NUMBER)*

1. Chinese
2. Filipino
3. Japanese
4. Korean
5. Southeast Asian (Vietnamese, Laotian, Cambodian/Kampuchean, etc.)
6. Pacific Islander
7. Other *(WRITE IN BELOW)*

_____

(SKIP TO QUESTION 55)

56. **In what country were you born?**
(CIRCLE ONE NUMBER)

1. USA
2. Other *(WRITE IN)*_____

57. **What is your citizenship status?**
(CIRCLE ONE NUMBER)

1. United States citizen, native
2. United States citizen, naturalized
3. Permanent resident of the United States (immigrant visa)

_____
COUNTRY OF PRESENT CITIZENSHIP

4. Temporary resident of United States (non-immigrant visa)

_____
COUNTRY OF PRESENT CITIZENSHIP

58. **What is the highest level of formal education completed by your mother and your father?**
(CIRCLE ONE FOR EACH PERSON)

A. Mother	B. Father		
1	1	a.	Less than high school diploma
2	2	b.	High school diploma
3	3	c.	Some college
4	4	d.	Associate's degree
5	5	e.	Bachelor's degree
6	6	f.	Master's degree
7	7	g.	Doctorate or professional degree (e.g., Ph.D., M.D., D.V.M., J.D./L.L.B.)
8	8	h.	Other
DK	DK	i.	Don't know

59. Please indicate the extent to which you agree or disagree with each of the following statements. *(CIRCLE ONE NUMBER FOR EACH STATEMENT)*

Disagree Strongly	Disagree Somewhat	Agree Somewhat	Agree Strongly	
1	2	3	4	a. Teaching effectiveness should be the primary criterion for promotion of college teachers at this institution.
1	2	3	4	b. Research/publications should be the primary criterion for promotion of college teachers at this institution.
1	2	3	4	c. At this institution, research is rewarded more than teaching.
1	2	3	4	d. State or federally mandated assessment requirements will improve the quality of undergraduate education.
1	2	3	4	e. Female faculty members are treated fairly at this institution.
1	2	3	4	f. Faculty who are members of racial or ethnic minorities are treated fairly at this institution.
1	2	3	4	g. If I had it to do over again, I would still choose an academic career.

60. Please indicate your opinion regarding whether each of the following has worsened, stayed the same, or improved in recent years at this institution. *(CIRCLE ONE FOR EACH ITEM)*

Worsened	Stayed the Same	Improved	Don't Know	
1	2	3	DK	a. The quality of students who choose to pursue academic careers in my field
1	2	3	DK	b. The opportunities junior faculty have for advancement in my field
1	2	3	DK	c. The professional competence of individuals entering my academic field
1	2	3	DK	d. The ability of this institution to meet the educational needs of entering students
1	2	3	DK	e. The ability of faculty to obtain external funding
1	2	3	DK	f. Pressure to increase faculty workload at this institution
1	2	3	DK	g. The quality of undergraduate education at this institution
1	2	3	DK	h. The atmosphere for free expression of ideas
1	2	3	DK	i. The quality of research at this institution

THANK YOU VERY MUCH FOR YOUR PARTICIPATION

Return this completed questionnaire in the enclosed prepaid envelope to:

National Opinion Research Center (NORC)
University of Chicago
1525 East 55th Street
Chicago, Illinois 60615

Vita

Joann Linville was born in Buffalo, New York. She currently calls Yuma, Arizona her home. At the Oregon Health Sciences University in Portland, Oregon she earned Bachelor of Science degree in Nursing. Her Master of Education degree was earned from Western Washington University in Bellingham, Washington. She has over thirty years experience as faculty and administrator in community colleges in Oregon, Washington and Arizona. In 2003 she earned a Doctor of Education at the University of Washington in Educational Leadership and Policy Studies.