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**Examining the relationship between collective bargaining and
worker participation: An empirical investigation of issues and
processes relating to level of satisfaction**

Moore, Willie Mack, Ph.D.

The Ohio State University, 1987

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EXAMINING THE RELATIONSHIP BETWEEN COLLECTIVE BARGAINING AND
WORKER PARTICIPATION: AN EMPIRICAL INVESTIGATION OF ISSUES AND
PROCESSES RELATING TO LEVEL OF SATISFACTION

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of the Ohio State University

By

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* * * * *

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CHAPTER I
INTRODUCTION AND PURPOSE OF STUDY

Introduction

In the United States collective bargaining (CB) has been the principal interaction between unionized workers and management in the workplace. The main goal is to reduce industrial conflict and lead to terms and conditions mutually satisfying to both parties. The 1935 National Labor Relations Act (NLRA) formally established collective bargaining as the dominant form of industrial democracy for workers to gain inputs into the decision-making process.

In recent years, efforts have been made to further address mutual interests by the establishment of formal worker participation (WP) processes which afford workers greater voice in workplace issues. These joint efforts are normally referred to as quality of work life (QWL), quality circles (QC), employee involvement (EI), etc. Such activities are commonly adopted in response to growing concerns about the need to increase productivity, enhance our ability to compete in domestic and foreign markets, and improve the quality of work life.

While these worker participation processes are usually established within the CB framework, researchers and many practitioners generally advocate keeping the two separate (Kochan and Dyer, 1976; Rosow and Zager, 1982; Cole, 1982). This position may be impractical as well as impossible to maintain within the organization. Rankin (1986) believes the practice of separating the processes is fundamentally flawed. He states that "while the separation of QWL and contract negotiations and administration may have been politically and philosophically useful, it is best described as a convenient fiction" (p.3). Moreover, a review of current research on the effectiveness of various WP efforts seem to support the premise that it is not operationally possible to effect a distinct separation of WP from CB over time (for example, see Kochan, Katz & Mower, 1984).

Purpose of the Study

This study attempts to determine if there are empirical or practical reasons for formal worker participation (WP) process to be independent from the process of collective bargaining (CB). Also, since in unionized environments WP efforts are generally entered into within the CB framework, this research seeks to determine the extent to which the separation of WP and CB (issues and processes) may influence the attitudes of labor union officials. What are their attitudes towards WP processes? What influences these attitudes? And what is the impact of the relationship between CB and WP on their personal satisfaction with their own jobs and with their role as a

union official? The principal reason for focusing on labor union officials is quite simple. In the literature and in interviews they are the party typically most associated with the demand to keep the two processes separate.

The central underlying issue can be stated, as suggested by Jain (1980);
as:

has the traditional bargaining system, with its adversarial character, been modified in such a way as to accommodate formal joint cooperation processes, and still having maintained the integrity of the traditional bargaining process?

According to Jain, the "American concept of worker participation in management is almost exclusively viewed within the context of the institution of collective bargaining" (p. 82). In the near future, it is probably safe to conclude that CB will still be regarded as the main form of workplace voice in America for unionized workers. However, whether the two processes are in fact being integrated by unions and management needs to be investigated and is the principal focus of this study.

Significance of the Study

As noted, Kochan and Dyer (1976) and others have advocated the separation of worker participation from collective bargaining processes. The 1973 UAW-GM agreement is representative of the attempts to separate the two. Theory and to some degree initial practice may have been well-intentioned; however, they may be incomplete in addressing the real scope of the participative process (Micallef and Moore, 1986). For example, existing theory frequently addresses the establishment of cooperative efforts, but

does not address union-management relationships as they mature, especially as the parties seek to address issues that are more meaningful and significant than those often found in the initial stages of the WP process.

Views on Separating the Two

It is generally felt that the relations between labor and management consist of two independent entities with separate and often conflicting goals (Nadler, Hanlon, and Lawler, 1980; Kochan and Dyer, 1976; Lawler and Drexler, 1978; Loevy, 1980). Rosow and Zager (1982) concur with Kochan and Dyer (1976) and Cole (1982) that unions should maintain a clear line of demarcation between CB and WP. But, they acknowledge that certain questions arising out of the CB process may require settlement within the WP process. The National Center for Productivity and Quality of Working Life ("Recent Initiatives," 1976) adds that WP efforts should not undermine but reinforce the formal CB process. Experience has demonstrated, however, that theory and practice are not always congruent.

Labor Relations Not Confined to Traditional-Adversarial Bargaining

Although it has been commonly suggested that WP and CB are autonomous and independent processes and should remain separate, some common elements do exist. One common thread is their attempt to establish mutual relationships outside of traditional arms-length negotiations; i.e., the use of informal methods to resolve grievances, and the creation of joint union-management committees (Katz, Kochan, and Gobeille, 1983). While the bargaining process still continues to be the main vehicle for decision-making between the parties, there are a number of instances where labor and

management have supplemented the bargaining process with other efforts aimed at facilitating change.

Also, researchers have found that union-management interactions appear to resemble mixed-motive relationships (Walton and McKersie, 1965). That is, they are characterized partly by distributive problem-solving (one party gains only at the expense of the other) and partly by integrative negotiation behaviors (the solution can provide gains for both parties), such that the parties see an amalgam of the two strategies in dealing with each other (Weinberg, 1983).

CB and WP Not Incompatible

According to Siegel and Weinberg (1982) "the adversary style of American industrial relations has permitted rather than forestalled ventures in cooperation, both home-grown and adapted, and it remains sufficiently plastic to adjust to new parameters" (pp. 2-3). For example, union and management leaders have historically engaged in joint activities outside of the normal bargaining mode to address common problems or reduce conflicts. Although participation is seen by some researchers as involving different processes from those of traditional bargaining (Clarke, Fatchett and Roberts, 1972), this does not necessarily lead to the conclusion that participation is external to the context of collective bargaining. They claim that although the two processes differ the end result may not be entirely different. For instance, both function as a vehicle for employee voice regarding workplace needs and interests.

Traditional bargaining is thought to be related to WP efforts in at least two ways: (1) it is seen as the main instrument for introduction of WP schemes into the organization, and (2) the actual process of negotiating the collective agreement at the plant-level is also the process by which participative management is implemented (Jain, 1980). Likewise, it can also be said that the CB process itself is a potential mechanism for addressing the participation and quality of work life needs of organized workers (Lewin, 1981).

An often identified crucial factor in assessing the initiation and maintenance of cooperation activities is trust (Bluestone, 1980; Holley and Jennings, 1984). In particular, labor unions' willingness to engage in joint WP processes is influenced by their belief in employers' words and actions. Such beliefs are usually carried over from interactions between the parties under collective bargaining.

CB and WP Integration: An Important Workplace Consideration

There now appears to be a need to integrate WP processes with the broader CB processes on a strategic level. This need stems from employees' desire to address more meaningful workplace issues, the ineffectiveness of maintaining two processes, and the difficulty of separating relevant issues. This, of course, does not imply that there necessarily needs to be a total integration or merger of the participation process with grievance and negotiations procedures. But, the parties need to recognize that WP efforts designed to function independent of the bargaining process are seen at best to be ephemeral. That is, WP effectiveness is shortlived if issues addressed under CB are restricted from WP consideration and vice versa.

One of the keys to participation success is whether the parties are able to maintain effective collaborative efforts at the workplace over an extended period of time. This is an especially important criterion for assessing the commitment of union and management leaders to the WP process. In essence, "can the parties continue genuine cooperation during periods when difficult problems are being solved within the adversarial-distributive bargaining relationship" (Katz, Kochan and Gobeille, 1983)? And, will the WP process continue long after the initial stimulus for its adoption has dissipated?

There appears to be no true conceptual or empirical reason to avoid the major institution that unions and management have adopted to resolve workplace conflicts and define conditions of employment. By integrating formal participation and bargaining processes union and management leaders are recognizing joint cooperation as a practical strategy for instituting organizational change and insuring effective operation of the firm (Rankin, 1986).

Impact on Labor Officials

The CB and WP relationship can be viewed in terms of its impact on the level of satisfaction of labor officials. In essence, is the satisfaction level of labor officials influenced by the relationship between CB and WP? If so, to what extent? This study addresses whether there is a difference in satisfaction level related to the separation of bargaining and participation processes.

In assessing labor officials' attitudes the concept of trust is introduced as a moderator of the CB and WP relationship and level of satisfaction. While trust has often been identified by researchers and labor officials as

influencing WP efforts it has received little research attention. Accordingly, this study seeks to shed some light on the influence of trust on CB and WP.

As depicted in Figure 1 the needs and interests of the organization and employees are addressed via CB and WP processes. Labor officials satisfaction can be influenced by how well the bargaining and participation relationship address these needs and interests. Trust is shown as an influencing or moderating factor. Therefore, in this study the level of satisfaction is based on how labor officials respond to the working of this model.

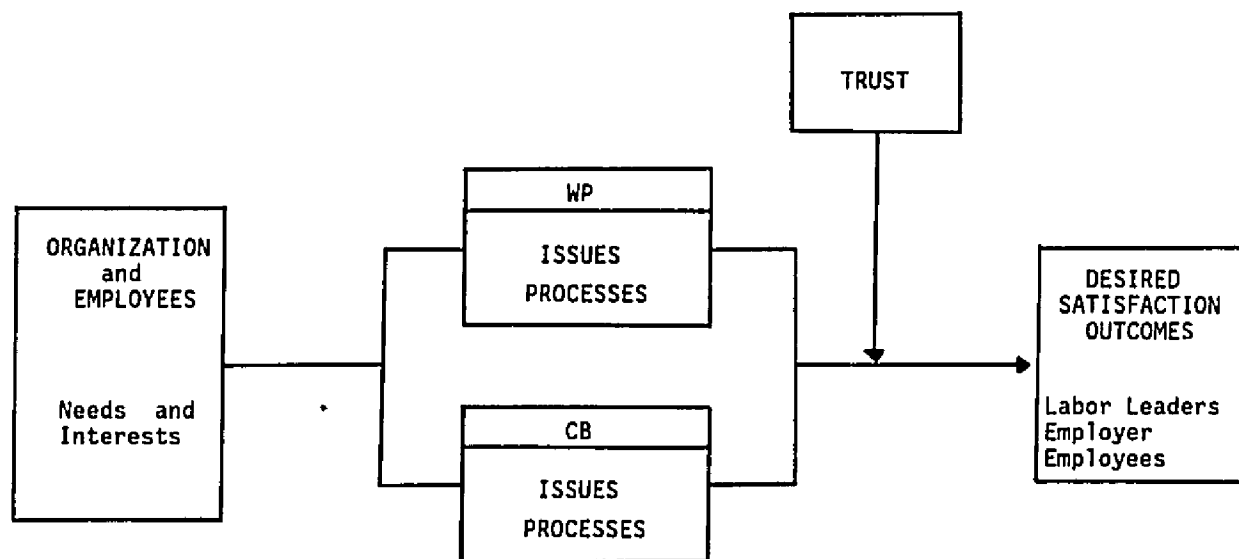


FIGURE 1. Process Influencing Level of Labor Leader Satisfaction

Since CB is also considered a worker voice process, the question can be raised regarding "why do we need another process which in essence is a replication of the legal mechanism set up by law to involve employees?" In response it can be said that CB, while it is a form of participation by workers, generally involves workers in the decision-making process

indirectly, through their representatives. On the other hand, WP efforts seek to foster more direct participation of individual workers in workplace decision making. Furthermore, WP tends to focus on a broader range of issues such as production and quality improvement, machine set-up, equipment maintenance, etc. which usually do not come under the purview of typical CB processes. Thus, it is not a matter of replication or substitution of processes, but one of enlarging the number of employees involved and broadening the range of issues mutually addressed by the two sides. Under WP the goal is to elicit worker knowledge, skills and attention on relevant issues on a continuous basis.

Definitions of Key Terms and Factors

Collective Bargaining (CB)

Collective bargaining, is considered the "cornerstone to honest labor-management cooperation" (Donahue, 1984, p. 6) and has been defined and characterized in many fashions. In the view of Davey, Bognanno and Estenson (1982), it is a continuous relationship between a group of employees and their employer involving contract administration and negotiations over wages, hours and conditions of employment. From a broader perspective, Shulman and Chamberlain (1949) characterize CB as a process for ongoing joint decision-making and adjustment at the workplace. Regardless of definition, and as commonly practiced, the bargaining process' involvement is frequently limited in scope and often directly involves only the

representatives of workers and management in decision-making activities.

For this investigation traditional collective bargaining is defined as an activity whereby union and management officials attempt to resolve interests in a manner which will sustain and possibly enrich their continuing relationship. Commonly included are the negotiations process, bargaining outcomes or results, and administration of the agreement (Kochan, 1980; Holly and Jennings, 1984). The CB process often is characterized by: its formality; arms length interactions; predominantly distributive rather than integrative bargaining; predominantly adversarial rather than cooperative relations, and the tradition whereby management acts and the union reacts (Kochan, 1980; Barbash, 1980, Scobel, 1981).

Worker Participation (WP)

For the purpose of this study worker participation (WP) is defined as those processes formally recognized by both the union and management and commonly involve groups of workers in formal or informal decision-making processes. These processes may operate under a variety of labels such as quality of work life (QWL), employee involvement (EI), labor-management participation teams (LMPT), and labor-management cooperation (LMC). Also, WP is considered as (1) a supplement, not a substitute, to the collective agreement (Siegel and Weinberg, 1982); (2) formally recognized in the labor agreement usually through a memorandum of understanding (Kochan, Katz, and Mower, 1984), and (3) there is a mutual commitment to the process by management and the union is essential for success (Schuster, 1983).

Collective Bargaining Categories

Frequently researchers have found that union-management interactions appear to resemble mixed-motive relationships. That is, they are characterized by both "distributive" and "integrative" negotiation strategies, such that the parties experience an amalgam of the two behaviors in dealing with each other (Weinberg, 1983).

In this study these collective bargaining behaviors or activities are categorized as narrow or broad. A narrow or limited definition of CB may be evidenced in situations where the parties' commonly interface only under contractually required conditions (e.g., negotiations and grievances), and usually adhere to and confine their deliberations to mandatory subjects of CB such as wages, hours and terms of employment. In contrast, a broader definition of CB is said to exist in those situations where the parties engage in formal and informal interactions within the context of the formal agreement, but also seek to expand the opportunities for such exchanges. They may establish special issue committees and programs such as: safety and health committees, employee suggestion systems, job evaluations committees, alcohol and drug abuse programs, blood donor programs, medical insurance cost containment committees and the like. Here, the CB process is more dynamic and flexible, and may be expanded to include formal joint committees (WP) for more integrative problem-solving on additional issues of mutual concern.

Issues

The term issues refer to those subjects that are commonly addressed by union and management representatives under formal collective bargaining

(Gold, 1986). Below is a listing of the CB issues used in this study.

a. Personnel

Working conditions	Changes in job duties
Work procedures	Employee performance standards
Changes in wage rates	Dismissals/discharges
Safety and health conditions	Grievances
Work schedules	Attendance guidelines
Job reclassification	Job evaluations
Job transfers	Seniority/Job posting system
Leaves of Absence	Worker discipline
Hiring of new employees	Shift transfers
Work force size	Promotions in the work unit
Training or upgrading	Layoffs
Use of company bulletin boards	Supervisors working
Holidays work schedule	Night shift premium
Overtime scheduling	Recalls from layoff
Medical insurance cost containment	Apprenticeships
Severance pay for layoff	Retraining
Shop rules	

b. Production

Improvement in job methods	Setting production levels
Promotions to supervisory positions	Production planning
Subcontracting of work	

c. Corporate Financing and General Policy

Opening and closing of departments/shifts	Use of pension funds Plant location
Transfer or expansion of plant operations	Incentive systems, profit sharing, and bonus plans

Processes

Processes refer to those formal workplace mechanisms created by union and management representatives to resolve their concerns regarding the nature of the employment exchange and related workplace issues. In this study these mechanisms include negotiations, grievance procedure, special-issue joint committees, and formal worker participation.

Level of Satisfaction

This construct is operationalized as the perceptions of local labor officials regarding: (a) the extent to which the union is effectively meeting the needs and expectations of its members; (b) the extent to which the labor-management employment exchange is personally satisfying to the labor officials as an employee, and (c) the extent to which their role or involvement as a labor official is personally satisfying.

The degrees of satisfaction considered in this study are as follows:

- a. Less Very little feeling that WP and/or CB processes meet needs and expectations.
- b. Limited Feelings that WP process and/or CB process may meet needs or expectations, but only on certain restricted issues.

- c. More Feelings that the CB process may meet needs and expectations, and is flexible to allow for some joint union-management programs as needed.
- d. Most Feelings that both the WP process and the CB process fully meet needs and expectations on a wide-range of issues.

More often than not workplace satisfaction is interpreted in terms of job satisfaction (Heneman, Schwab, Fossum, and Dyer, 1986). In any case job satisfaction, as Hoppock (1935) earlier pointed out, is somewhat problematical because of its evanescent and variable nature. Nevertheless, the concept is commonly viewed as describing an individual's complex set of beliefs, feelings, and behavioral tendencies about work and the work environment (Dunham and Smith, 1979; Locke, 1983; Smith, Kendall and Hulin, 1969).

Trust

In this study trust is used as a moderator variable to determine whether the relationship between the level of satisfaction and various independent variables will differ depending on the degree of trust indicated by labor officials. The concept of trust is perhaps even more transient and varied in nature than satisfaction and, thus, is more difficult to define and operationalize. Trust, historically considered as an important influencing variable in the CB process, is also a frequently identified key construct in WP processes (Kochan and Dyer, 1976; Schuster, 1984b; Lewin, 1981; Kochan, Katz, and Mower, 1984; Scobel, 1981; Nadler, Hanlon and Lawler, 1980; Bluestone, 1979, 1980).

Giffin (1967) has defined trust as the "reliance upon the characteristics of an object, or the occurrence of an event, or the behavior of a person in order to achieve a desired but uncertain objective in a risky situation" (p. 105). Accordingly, in this study trust refers to labor officials' willingness to rely upon the words or actions of management. It is not examined as a personality variable or an element of individual character (see Gibb, 1978). But, as employed by Scott (1980), it relates to the willingness of labor officials to engage in formal cooperative efforts that may increase their personal vulnerability. In essence, it is an indication of the possible risk labor officials are willing to take that management will keep or live up to their word. For example, risk that management will not use WP processes as a guise to undercut the labor official's position; circumvent the labor agreement, or undermine worker rights or job security.

Labor Union Officials

Throughout this investigation this term refers to those individuals who were elected or selected by the union membership to hold positions of responsibility in union organizations; e.g., district or regional officers, local union president, steward, committeeperson, etc.

CHAPTER II

SYNTHESIS OF RELEVANT RESEARCH

Introduction

While the adversarial principle has long dominated the American labor relations scene, industrial relations history is also replete with philosophical, theoretical and practical examples of formal joint cooperative employee involvement initiatives. Over the past decade, the efficacy of the traditional adversarial position has been seriously questioned. More and more unionized firms are experimenting with extending the boundaries of, but not abandoning, the principles of adversarial bargaining.

The employee involvement movement reflects a growing concern over sluggish productivity growth, persistent unit labor costs, high unemployment, growth in foreign competition in the U.S., and the eroding economic base in the once prosperous U.S. industrial-belt (Juris and Roomkin, 1980; Greenberg and Glaser, 1980). Added to this are the needs of an aging work force, demands for job security, and interest of better educated workers for greater job challenge and voice in managing their jobs.

This chapter covers the environment and context of CB and WP: the evolution of each; various forms of cooperation; determinants, benefits to, and obstacles to cooperation, and legal implications. Relevant theories, research, models and key concepts are also covered.

The Evolutionary Role of Collective Bargaining and Worker Participation

The American labor movement as we know it today has evolved time. Although characteristically adversarial, it has adjusted to changing social events, hostile employer attitudes and actions, and wide ranging employee preferences for more than 100 years (Bognanno and Myhr, 1985; Derber, 1977). Collective bargaining is the designated labor policy of the land, especially in the private sector. However, it can be said that American employers have never fully accepted the legitimacy of labor unions, but willingly tolerate collective bargaining as long as it is economically feasible or necessitated by environmental matters (Chamberlain, 1958; Juris and Roomkin, 1980).

Historically, the strength of the labor movement has depended on four criteria: (1) its structure and financial stability; (2) its ability to work within the established political and economic systems; (3) its activities in the relevant social environment such as legislation, media, and public opinion, and (4) the ability of union leaders to identify and satisfy members' goals and interests (Holley and Jennings, 1984).

Early Environment

The American labor movement dates from the early part of nineteenth century, although transient worker organizations and sporadic worker protests occurred previously (Cohen, 1975). Efforts at unionization were largely confined to the skilled crafts of shoemaking, weaving, tailors, printing trades, rather than lesser skilled factory workers (Sloane and Witney, 1977). The latter were widely divided in terms of language skills and ethnic backgrounds, and lacking critical skills they were subject to frequent layoffs. As a result they were much more difficult to organize into cohesive and long lasting labor unions.

The labor movement also continued to face severe challenges as the common law was frequently used as a form of control over their actions (Chamberlain, 1958). Until the mid-1930s Congress adopted an essentially laissez-faire policy toward labor and management relations. Each side could muster its economic resources, the union -- strikes and picketing; the employer -- lockouts and discharges, to exert pressure to bear upon the other (Gorman, 1976).

The Institutional School

John Commons (1913), Selig Perlman (1928) and other institutional economists rejected Adam Smith's (1937) classical approach to the analysis of labor problems and policies. The thrust of their framework was to shift from viewing labor as a market commodity to one of labor-management transactions and working rules of collective activities. They rejected

industrial class consciousness as a motivating force and substituted worker self-interestedness or job possessing orientation (Perlman, 1958).

Institutionalists stressed the importance of negotiations and compromise among the conflicting interests of labor, management, and the public.

Perlman (1928) emphasized that the job is the focal point of union activity, especially in a world of limited opportunity; thus, unionism holds a proprietary attitude towards job rights.

Management and Bureaucratic Theory

The current participation environment has evolved from alternative forms of industrial governments (Derber, 1969). These include Weber's (1947) concept of bureaucracy which emphasized specialization, hierarchical authority and a set of rules, and Taylor's (1911) scientific management which emphasized rules by experts and the law of one best way.

Taylor maintained that workers needed extensive management direction since they were only interested in money and were incapable of thinking further ahead than their next paycheck (Simmons and Mares, 1985). Chester Barnard (1938) expanded on the need for dominant management control and authority in the workplace. Barnard believed that management should act in a paternalistic way by taking into account the legitimate needs and interests of workers. In essence, Barnard and Weber's principles of bureaucratic management portrayed the role of management as "supreme and anti-union."

Management Philosophy

The labor environment prior to the passage of the National Labor Relations Act was disorganized, confused, inconsistent and dominated by management (Heneman, Schwab, Fossum and Dyer, 1986). Various economic, social and political reasons contributed to the mood of the country being generally counter to the philosophy and tactics of the labor movement (Kochan, 1980). Management either ignored or denied employees the opportunities to collectively impact decisions that affected their health, safety and welfare. There were numerous company representation plans or company unions throughout the United States, but they were so thoroughly dominated by management that effective and objective employee representation was extremely limited (Gorman, 1976).

Industrial Relations and The Third Party's Role

Since the 1930s, collective bargaining has served as the basic institution for American industrial workers to enhance their economic security and expand their sphere of influence in the workplace (Kochan, Katz and Mower, 1984). Congress passed the 1926 Railway Labor Act and 1935 Wagner Act to promote the bargaining process and balance the power of labor and management. As the power scales seemingly tipped toward unions and certain groups within both labor and management abused the public trust, Congress passed the 1947 Taft-Hartley and 1959 Landrum-Griffin Acts to restore workplace balance and control the behavior of the parties (Holley and Jennings,

1984). Labor laws in total (a) circumscribe sharply the power of the courts to intervene in labor disputes; (b) institutionalize government's role in collective bargaining; (c) control collective bargaining interactions, and (d) provide for industrial jurisprudence (Dulles and Dubofsky, 1984).

Unionism and the Industrial Environment

The labor movement has recognized that at times confrontation and conflict may be wasteful and that new cooperative approaches are necessary to solve present and future problems ("Report of the AFL-CIO," 1985). But there must be some form of reciprocation from management, and unions must be able to withstand employer confrontation. As AFL-CIO secretary-treasurer Donahue (1984) has stated, "I believe deeply in a conflict theory of labor relations as the soundest basis for worker representation, worker participation and worker gains" (p. 5). He adds that the adversarial role (or period of conflict) under CB should be limited to the period of negotiations. During the lifetime of the contract it should be replaced by a period of cooperation where the parties seek to improve workplace life and productivity.

Factually, over the years there has been a steady erosion of union representation in the private sector. Some of the decline can be attributed to a so-called "new industrial relations" (Foulkes, 1981; "New Industrial Relations," 1981). This includes more favorable benefits and working conditions for employees that were not directly brought about by union efforts.

Mills (1981) offers additional reasons for the decline of the American labor movement: (1) non-union or partially unionized employers have given substantial wages and benefits to avoid conflict with employees over amount of compensation and benefits (see also Garbarino, 1984); (2) employers have effectively used their influence to persuade employees not to undertake union activities; (3) the law has not allowed unions the use of important economic weapons in organizing campaigns (see also Heshizer and Graham, 1984); (4) employers have been successful in litigation in the union organization process; (5) some employers have shifted facilities and employees to largely nonunion regions of country, and (6) employers have successfully defeated union efforts to strengthen their legal position. In particular, the "situs picketing" or "equal treatment" bill in 1975 and the labor law reform bill in 1978 were major defeats for the labor movement (Mills, 1981; Kovach, 1985). In line with these can be added: the economic slowdown of the 1970s, bargaining concessions, plant closings, layoffs, and the immobility of workers especially older workers.

Management Contradiction

In recent years American labor unions have had to deal with what has been termed a contradiction in labor-management relations. On the one hand, employers espouse cooperation at the workplace level. Concurrently, they promote a policy of union avoidance or not having unions involved in strategic decision-making, and lobby against legislation promoting collective bargaining (Kochan and Piore, 1985).

The Outlook for Cooperative Policies

Union leaders are often accused of providing negative direction or stifling the wishes of the majority of its membership; however, in actuality and politically, the union's ruling body actions are limited by the expressed wishes of the members. As Slichter has stated , "even when a union clearly understands that the demand for the services of union members is very sensitive to the labor costs of union employers, it may not adopt the policy of helping employers reduce their costs" (p. 569). And realistically and politically, labor leaders will resist advice or commands which, if carried out, would threaten defeat at the next local election" (Bok and Dunlop, 1970, p. 474).

American management frequently has rejected union participation in workplace decision-making. Some researchers and labor leaders feel this is evident by such actions as (1) the management contradiction referred to above and (2) unionized employers' aggressiveness in seeking to reduce the effectiveness of unions. Management's position has led Foulkes' (1981) to conclude that in lieu of a depression or major changes in company environmental factors or union effectiveness, it is somewhat unrealistic to expect, at least in the private sector, any significant reversal in management opposition.

Worker Participation: Reforming the System of Collective Bargaining

The meaning, dimensions, and duration of the earlier mentioned "new industrial relations" are unclear. As Knickerbocker and McGregor (1973)

have stated, collective bargaining (involving conflict) does not disappear when formal cooperation (involving mutual aid) processes are instituted. Also, it is perfectly possible for union and management to cooperate on some issues (for example, job evaluation) and conflict on others (for example, wages). What remains to be seen is the stability of worker participation processes over time as management and union representatives seek to jointly manage a workplace where cooperation, conflict, competition and compromise all interact.

In the view of Donahue (1984) "unions can be strengthened by the return to the issues of the office and the shop floor where labor's fundamental strength lies" (p. 10). The ultimate choice of whether or not to actively support the development of formal worker participation processes is best made by local union leaders. The need for change in their bargaining relationship and the viability of some form of participation as a partial solution to their problems will need to be considered. Also, how the WP process fits into their overall bargaining strategy is a critical determinant. Unions may be required to relinquish one of its traditional bases of power and security in return for greater information and perhaps influence over a wider array of issues that traditionally have been reserved for management (Donahue).

The Worker Participation Context

The results of many worker participation (WP) efforts can be summarized as being a short-term "marriage of convenience" rather than being a

permanent step toward establishing democracy in the workplace. Fear and suspicion still exist among many unions and workers regarding the intent and purposes behind cooperative programs. Some union leaders, for example, ask how can management meaningfully promote cooperation while lobbying for anti-labor legislation and employing consultants for union-busting strategies (Bognanno and Myhr, 1985). The worst scenario union leaders fear is to get burned after agreeing to cooperate. For example, they would consider it suicidal to see cooperation efforts result in layoff of their members.

Other arguments advanced by critics of WP, as noted by Parker (1985), and others are: (1) employers may use the process as a strategy to gain control over and require more effort from employees without employees having real influence or power; (2) unions may lose touch with its membership or experience more internal political turmoil; (3) workers and/or management may see these processes as substitutes for, rather than supplements to, the formal bargaining process; (4) workers may question the need for a union if employers are listening to and resolving their problems and concerns through WP, and (5) unions may become too closely associated with or co-opted by managerial decisions.

Comparative Involvement Styles

Experimental employee involvement projects initiated in the 1960s attracted wide attention in North America, the United Kingdom, and Scandinavia with Europe commonly regarded as having led the way (Siegel and Weinberg, 1982). Some of the principal techniques tested in the 1960s required changes in the division of labor: the introduction of self-managed, autonomous work teams that take collective responsibility for performing a set of tasks; the organization of simple tasks into more complex wholes requiring more knowledge and skill, and the use of flexible assignment patterns (Walton, 1973).

Thomson (1981) believes that American industrial relations systems possess considerable strength principally at the workplace level. In the U.S. the real test of participative efforts is based on the results of those efforts carried out in unionized environments. To be persuasive, assertions of new-found workplace cooperation must identify shifts in the behavior of organized labor. Without unions, outside observers cannot get the information to distinguish between paternalism and participation and develop a true picture of workers' attitudes (Levitan and Johnson, 1983). The U.S. distributive-adversarial system is not a result of evil unions nor evil management. But, grows out of institutional arrangements for power and authority inherent in American industrial relations (Schrank, 1978).

National Collaborations

Throughout the 20th century and especially during wartime when an economic crisis affected specific industries or firms, cooperative modes of interaction were tried to reduce workplace issues in unionized environments (Leone, 1983). The federal government has been a prime mover in the establishment of various committees and commissions comprised of national business, labor and public leaders (Beer and Driscoll, 1977). They consulted on major questions of national policy as demonstrated by labor-management committees established during World Wars I and II (Simmons and Mares, 1985). Advocates of these committees predicted they would become a permanent feature of the U.S. industrial relations system. But in fact, most of them disappeared, either because the crisis which gave rise to them abated or they were perceived as impinging upon the formal bargaining process (Moye, 1980).

Continuing Efforts

Except for national emergencies the historic record of national committees and commissions has been described as one of "productive failures" (Moye, 1980). Frequently, labor or management decided too much power was being ceded to the other side. Presidential efforts during peacetime to keep stability and the unity spirit alive among labor and management have been futile (Siegel and Weinberg, 1982). Despite this record, political leaders continue to

find some utility in a forum where top-level labor and business officials exchange views and make recommendations to a receptive government (Beer and Driscoll, 1977).

In response to the economic adversities of the 70s the federal government encouraged employers and unions to consider collaboration to their mutual advantage (Leone and Eleey, 1983). The FMCS was authorized to facilitate joint consultation. Preventive mediation is carried out through their "Relations by Objective" (RBO) program which involves a step-by-step approach to identify and resolve in-plant problems.

Industry-Wide Cooperation Efforts

Union and management representatives have established formal industry-wide mechanisms to deal jointly with long-term problems that no individual company or union in the industry could resolve by itself. Such arrangements have been established in coal mining, trucking, construction, retail food, men's clothing, the railroad and steel industries (Joyce, 1985). Perhaps the principal lesson drawn from the construction industry is that worker participation is meaningful only when it arises from the workers' own self-organization. Without strong, vital trade unions to express workers' needs, one can have the appearance, but not the substance, of worker involvement.

Community-Wide Cooperation

Many urban areas and states have had some kind of economic development program since the end of World War II. Overall they function as a forum for the exchange of ideas, information and research (Leone and Eleey, 1983). In addition, many area-wide labor-management committees were established to facilitate interaction among company and union representatives. They address economic problems affecting the entire local community, with emphasis on job retention, labor-management communications, and mediating labor disputes (Eleey, 1983).

Area-wide labor-management committees have been established in Toledo, Ohio, 1945; Louisville, Kentucky, 1946; Jamestown, New York, 1972; Cumberland, Maryland, 1975; Jackson County, Michigan, 1958; South Bend, Indiana, 1963; Fox Cities Area, Wisconsin; Evansville, Indiana, 1975, and Buffalo, New York, 1975 (Gold, 1976; Slegel and Weinberg, 1982).

Local or Workplace Level

Contrary to the contemporary impression, labor-management cooperation at plant-level is not novel in U.S. It can be traced back to the 1920s and World War I (Dulles and Dubofsky, 1984). One of the more publicized cooperative ventures was introduced in 1923 at the Glenwood shop of the Baltimore and Ohio (B & O) Railroad (Slichter, Healy and Livernash, 1960; Simmons and Mares, 1985). Another began in 1929 and involved the

Naumkeag Steam Cotton Company and the United Textile Workers in Salem, Massachusetts (Slichter, 1941). Of particular note from this experiment is Slichter's conclusion that the union should limit accepting responsibility in traditional management areas.

Types of Plant-Level Participative Processes

Quality Circles (QC)

These differ from other cooperative arrangements in their reliance on the direct participation of rank and file employees, instead of their representatives, in small problem-solving groups (Brett and Hammer, 1982; "New Industrial Relations," 1981). First used extensively in Japan, QC's have been adopted by a number of U.S. firms (Alexander, 1984; Mohr and Mohr, 1983; Dewar, 1982; Cole, 1982). Even before the inroads of Japanese competition created a great wave of interest in QCs, there had been experiments with participative shop-floor QC groups in the U.S., but without emphasis on training in statistical control techniques (Rubenstein, 1977).

Quality-of- Work-Life (QWL)

The term QWL is often used to cover various qualitative features of work organization that have not been sufficiently addressed such as the degree of flexibility workers have on job, the extent of voice in how work is done, and the extent to which employees are able to use their capabilities (Walton, 1973). However, typical QWL objectives of enhancing employee dignity, participation, job satisfaction and material welfare have long been considered as major goals of American labor unions (Tannenbaum, 1951; Loevy, 1980). QWL activities became prevalent during the 1970s as unions and management

sought to address workers needs outside of the traditional bargaining system.

Other or Plant-Level Initiatives

Flexible Work Schedules

Introduced at the Messerschmidt Research and Development Center in West Germany in 1967 as *gleitzeit* (gliding time), flexible work schedules were adopted rapidly by banks, insurance companies and other white-collar employers in western Europe and later in the U.S. (Gold, 1976; Weinberg, 1983).

Scanlon Plans

Developed in the late 1930s by Joseph N. Scanlon, steelworker and local union president. Their essential appeal rests upon bonuses given to all employees based on a measure of the company's performance (Lawler, 1977). Such plans seek to harmonize management's concern for productivity with labor's fair share of the gains, within a framework of collective bargaining (Lesieur, 1958; Driscoll, 1985).

More important than the money-incentive element, in the opinion of its leading advocates, is the total program or philosophy of how management and unions can work in a cooperative fashion (Lesieur and Puckett, 1969). For more on the Scanlon Plan see Lawler, 1977; Schuster, 1980b; White, 1979.

Employee Stock Ownership Plans (ESOPs) and Profit Sharing

The provision of employees shares in company stock as a means of giving them a sense of ownership and enlisting more fully their loyalty and cooperation is an additional initiative. While companies have not usually involved unions in the planning of stock ownership programs, hard-pressed companies

seeking wage concessions have provided stock ownership plans as part of their settlements with the United Auto Workers (UAW) (Hammer and Stern, 1980; Weinberg, 1983).

Case Studies of Cooperative Efforts

Some of the more widely-publicized participation cases are General Foods' Topeka plant, Volvo's Kalmar plant, Donnelly Mirror, and Philips of Holland (Walton, 1985; Davis and Cherns, 1975; Glaser, 1976). A review of the literature shows that positive changes in organizational effectiveness are reported in a large number of cases. There are percentage changes in production output, labor costs, rejects, absenteeism, and turnover after the implementation of WP and organizational restructuring. Frequently, statistical tests are not reported and experimental controls for contaminants, such as improvements in technology, are not used. Thus, it is not possible to tell if these changes are significant or caused by other factors in the organizational environment (Suttle, 1977).

In the United Mineworkers - Rushton Mine Company Project in Pennsylvania, a joint labor-management committee, with the help of outside consultants, introduced a new form of work organization, the autonomous work group. It led to gains in safety, skill and communication but brought no significant change in productivity (Mills, 1976; Goodman, 1980; Lawler and Drexler, 1978). However, the lingering traditional adversary relationship led to the eroding of worker trust in the process (Schrank, 1978).

Eventually, the Rushton project waned as employees vetoed implementing the project as a mine-wide system. According to Goodman (1979), this project which was initiated and managed as "experimental" emphasized the need for institutionalizing the process in order to diffuse and sustain organizational change.

Harmon Industries International, Inc. Automotive Division's mirror manufacturing plant in Bolivar, Tennessee entered into a joint agreement with the United Auto Workers to establish autonomous work groups. This was the first worker participation project to test the feasibility of QWL in a unionized setting (Schrank, 1978). It involved work restructuring based on principles of "security, equity, democracy, and individualism." (Duckles, Duckles, and Maccoby, 1977; Macy, 1980). The Harmon program was regarded as idealistic and academic (Siegel and Weinberg, 1982). Although there were some increases in job satisfaction the hoped for financial gains to employees were not realized (Macy, 1980; Wallace and Driscoll, 1981).

General Motors (GM) and United Auto Workers (UAW) quality-of-work-life (QWL) programs, which began in 1970, introduced joint cooperative efforts to replace conflict ("New Industrial Relations," 1981; Walton, 1985; Holley and Jennings, 1984). The story of large-scale GM-UAW's Quality-of-Work-Life Program implemented through a network of national and plant-wide joint committees has been recounted in detail by union and management participants and academic investigators (Bluestone, 1980; Fuller, 1980 and 1981; Guest, 1979). Their joint experiments have underscored the importance of avoiding any attempts to circumvent the CB agreement. The

GM-UAW QWL results indicate that management fears of loss of authority and prestige are gradually diminishing (Walton, 1985).

Public Sector Employee Involvement Initiatives

Growth of collective bargaining in federal, state and local government in the past decade has been accompanied by increasing interest in cooperative arrangements for exploration of common problems and peaceful adjustments of differences (Martin, 1976). A variety of joint projects have been undertaken in response to mounting pressure to improve productivity at all public sector levels. Only a few cases have been reported in detail.

Siegel and Weinberg (1982) identified some comparisons with private sector programs: (a) scope of labor-management cooperation appears greater in the public sector; (b) unions and employee associations include a larger proportion (over two-fifths) of total number of workers (about 16 million) than in private; (c) but, they do not perform their negotiating functions as fully, freely or surely; (d) collective bargaining is still unevenly accepted by public employees and in some instances been rejected out right; (e) strikes are commonly forbidden, and (f) machinery for impartial and binding arbitration is still not used routinely or as a last resort for the settlement of disputes that threaten to erupt into open hostilities.

As in the private sector, committees formed for public sector joint consultation or problem-solving are wide-ranging and differ in vigor, efficacy, and longevity (Brookshire and Rogers, 1981; Gold, 1986; Weinberg, 1983;

"Recent Initiatives," 1976). A prerequisite for constructive public sector union-management cooperation is for the parties to have a disposition to temper the adversarial impulse. This condition, although necessary, is not sufficient. Success also requires joint leadership, commitment, patience, knowledge and skill (Hackman, 1985; Lawler and Drexler, 1985).

Operational Framework For Understanding The Bargaining and Participation Processes

One of the basic premises of this study is that the linking of formal worker participation and collective bargaining processes should not be summarily dismissed or considered an unworkable proposition. In fact it can be said that the general concept of worker participation as practiced in America "is almost exclusively viewed within the context of the institution of collective bargaining" (Jain, 1980, p. 82). The collective bargaining adversarial process has been credited with generating much of the progress in dealing with issues that might be covered under the participation process such as health, safety and job security (Lewin, 1981).

Participation processes have been said to imply a "mixed bag" of potential risks and opportunities for local unions at the local level (Kochan, Katz, and Mower, 1984). Nevertheless, the potential benefits make it necessary for unions and management to consider modifications in their traditional roles and adversarial processes (Kochan and Piore, 1985). Stated another way,

participative efforts have been identified as dynamic processes which bring about meaningful organizational changes (Weinberg, 1983). Thus, given the suggested interaction with collective bargaining, there often is a need to adjust the traditional collective bargaining process as appropriate.

Worker Participation Research and Implications

In addition to theory and practice, research on cooperative efforts has focused on worker participation processes without addressing their direct relationship with collective bargaining. This, perhaps unintentionally, supports the view that the two are separate processes.

Most of the relevant empirical participation literature relate to models of organizational change or effectiveness. For example, general models for understanding the process of organizational change in the context of union-management relations have been developed by Kochan & Dyer (1976), Nadler, Hanlon, & Lawler (1980), Lewin (1981), and Schuster (1984c). Drexler & Lawler (1977) provided a case study approach which highlight the complexities involved in cooperative projects. Kochan, Katz, & Mower (1984) also discuss various worker participation models in union settings as they relate to organizational change and program effectiveness.

The views of union leaders and activists on participative efforts in the context of organizational change have been studied by various researchers (see Kochan, Lipsky, & Dyer, 1975; Dyer, Lipsky, & Kochan, 1977; and Ponak &

Fraser, 1979). Hammer and Stern (1986) found tentative support for their model suggesting that the labor organization engaged in cooperative programs when management moves in and out of cooperation modes of behavior over time.

The overall effectiveness of union-management cooperation has also been studied as it affects the operation of a number of plant level safety and health committees (Kochan, Dyer, and Lipsky, 1977). However, as is commonly the case, this research does not give attention to integrating formal cooperative processes with traditional collective bargaining. A couple of implications are of particular note from this empirical study. One is that safety and health committees are representative of integrative issues (Walton and McKersie, 1965). Two, as issues are addressed within the traditional relationship, the parties are challenged to develop capabilities for jointly managing cooperative problem-solving within the context of formal bargaining.

Environment For Change Within The Bargaining Context

The work environment is changing due to world-wide market shifts, changing worker characteristics, increasing technology, more intensified domestic and foreign competition, and new union and management philosophies (Miljus, 1986; Jacoby, 1982). The industrial relations literature has popularized the idea of labor and management lowering their traditional bargaining postures and seeking mutually beneficial outcomes (Jacoby). As Ferman and Klingel (1985) have suggested, the shift from the traditional rules-centered organization (or calculative rationality) to the participative

idea-centered organization (or generative rationality) should be seen as adaptive responses both to external turbulence and shop floor tensions.

Overall, the American success with participation activities in unionized environments has been considered temporal and relative (Goodman, 1980). Those participation efforts achieving less than expected results may be related to a number of factors including their separation from the formal bargaining process.

The more common theoretical position associated with participative programs has been that they should be kept separate from the traditional collective bargaining process (Kochan and Dyer, 1976). This position is given practical support by a majority of American labor leaders who advocate that formal employee involvement type programs should not enter into any area of the collective agreement (Watts, 1984; International Association of Machinists (IAM), 1984). The IAM extends this position further by stating that involvement in cooperation activities ought to "be no preamble to softness in negotiations over traditional collective bargaining matters ..." (p. 17).

Schuster (1984b) has suggested that the line of demarcation principle has more often been invoked partly in an attempt to reduce the union's initial resistance to participating in cooperative efforts. Further, in reality such a separation may be impossible to achieve and maintain over a time, and that often WP and CB are intertwined. It should follow that as employee involvement programs mature and begin to address other than narrow workplace issues, there may be an inevitable overlap with contract administration and

grievance procedures.

Strauss (1980) points out that some WP processes are integrative mechanisms par excellence. Regardless of how they are introduced in the firm, they will have an impact on a number of traditional CB practices. There is ample evidence that the introduction of WP processes has what Bluestone (1980) terms a "salubrious effect upon the adversarial CB system" (p. 40). Bluestone also notes that long-existing joint employee involvement efforts have shown that the parties have a more constructive CB relationship, more satisfied work force, improved quality, reduction in grievance handling, absenteeism, disciplinary cases, and less labor turnover.

Formal WP processes are seen as a continuing way of life, co-existing with the CB process to bring about organizational change and effectiveness (Jain, 1980; Jacoby, 1982). Such efforts may require a change in traditional union-management processes in favor of WP processes, including employment involvement and development of work groups (Kochan, Katz, and Mower, 1984; Miljus, 1986). The end result of such processes may create a new social reality in the work environment (Ferman and Klingel, 1985).

Conceptual Model for Integrating Worker

Participation and Collective Bargaining

Joint workplace participation efforts have a number of ideological foundations. Among them are (a) the institutionalist's assumption regarding the

inherent nature of and legitimacy of conflict of interests between labor and management (Kochan, 1980); (b) a recognition of the importance of an "open systems" approach (Katz and Kahn, 1966) to models of worker participation processes, and (c) union leaders general support of dealing with a variety of issues outside of collective bargaining (Dyer, Lipsky, and Kochan, 1977; Kochan, Lipsky, and Dyer, 1975; Ponak and Fraser, 1979). With respect to WP and CB, a further foundation is that the worker participation and collective bargaining can be kept separate and distinct only if the parties are cooperating on minor problems or issues which are not related to traditional collective bargaining (Weinberg, 1983).

Stimulus

Generally, WP begins with a stimulus that is recognized by both the union and management as significant to initiate a joint effort (Kochan and Dyer, 1976). The response to the stimulus is predicated on the cooperative effort being compatible with the overall collective bargaining strategies and goals of both parties.

Kochan and McKersie (1983), among others, discuss internal and external motives which may launch joint WP efforts. They include foreign competition, poor product quality, loss of industry market, and technological changes within the industry.

Commitment

The long-term viability of worker participation activities depends on the total commitment of the organization, including that of top management and

union leadership (Goodman, 1980; Walton, 1975; Jain, 1980; Fuller, 1981). It can be thought of as being the relative strength of the parties' identification with and involvement in the organization (Steers, 1977; Schuster, 1984c). The parties' commitment along with stimulus are also influencing factors in obtaining the commitment of the rank-and-file, first-line and middle management. Schuster (1983) identified several factors that may interfere with continuing commitment of the parties. They are: unresolved long-standing attitudinal or managerial issues, lack of trust, union political pressures, and turnover of key personnel in both organizations.

Strategy

The concept of strategy or strategic choice plays a very active role in the decisions of all the actors in the industrial relations system (Kochan, McKersie and Cappelli, 1984; Jain, 1980). Piore (1985) underscores the importance of strategy to unions especially with regard to (1) taking wages out of competition, and (2) maintaining a sense of community within the industrial relations system.

Labor leaders, similar to their management counterparts, need to establish and implement a set of decisions and actions to meet identified goals and objectives (Pearce and Robinson, 1982; Radford, 1980). Deutsch (1986) has suggested that the labor movement is required to initiate such planning in the face of management's design and implementation of new technologies. In commenting on American unions' industrial relations strategies, Kochan, McKersie, and Katz (1985) suggest that unions need to "...link continued

workplace cooperation and innovation to involvement and influence in the strategic business and government decisions that affect long run employment and membership security..." (p. 29). According to Deutsch, the challenges for American unions is to do so "within a context of cooperative and hostile labor relations and new economics constraints" (p. 529). The AFL-CIO Committee Report ("Report of the AFL-CIO," 1985) gave credence to such a need by admonishing the labor movement to engage in strategic planning to better cope with dramatic shifts in its internal and external environments.

McKersie (1985), in what he called "entrepreneurial decisions," stated that unions need to focus on decisions affecting not only the union itself, but also the shape of its labor-management environment. The research of Kochan and McKersie (1983), and Kochan and Piore (1985) give us some insights into some of the labor movement's strategies in dealing with external and internal environmental pressures, including the strategy's relationship with formal cooperative efforts.

Schuster (1984c) and others (e.g., Kochan, Katz and Mower, 1984) have indicated that labor should think strategically about how WP will impact the interests of their members. Also, there should be some link between cooperation and broader labor strategies for improving the union's overall effectiveness in the CB process. In their findings Kochan, Katz and Mower emphasized the need to link cooperative processes to larger bargaining efforts on a strategic level. This does not imply that there necessarily need to be a total integration or merger of the participation process with the process for resolving grievances and negotiated CB agreement. McKersie (1985) cautions

that a union's increasing role in strategic decision making should not necessarily impinge upon management's discretionary role nor should the union abandon its traditional adversarial role.

Environmental Factors

The institutionalization of workplace participation processes into collective bargaining, to some degree, takes into consideration the impact of certain external and internal environmental factors (Jain, 1980). Kochan, Katz and Weber (1985) and Goodman (1980) have noted the influence of the environment, specifically organizational environment, on formal participation efforts. They stress that the internal (structure, policies) and external (competition, economy) environment are crucial to the long-term viability of WP and the union's strategic plans.

Strategy becomes more important for unions (and employers) as their environments change and competitive pressures increase due to domestic and international economies, shifts in demographics, market structures, non-union competition, and new technologies (Kochan and Plore, 1985). Thus, labor unions need to concern themselves with policies and decisions addressing their long-term health as viable organizations and also member interests.

Worker Participation Institutionalization

The institutionalizing of worker participation is based on the premise that effective cooperative efforts can be sustained through working within the traditional bargaining system, as opposed to establishing parallel organizational structures (Levitan and Werneke, 1984). Kochan, Katz, and Mower (1984) have concluded that success in handling cooperative efforts, especially

as they mature, may well lie in how successfully those participation strategies are institutionalized into collective bargaining.

The definitive characteristics of WP institutionalization is its persistence over time without some form of direct and/or immediate external control (Goodman, 1979). Selznick (1962) sees institutionalization as a way of removing participation processes from the realm of personality differences and transforming them into the formal organizational structure. [See Goodman, Conlon, and Bazerman (1980) for a more elaborate discussion of institutionalization].

Some caveats regarding institutionalization have been mentioned. For example, Bluestone (1984) cautions that "institutionalizing the process is a serious issue that requires as much or more attention than initiating the process" (p. 2). Schuster (1985) offers that integrating facets of worker participation and collective bargaining may be required. However, with any degree of institutionalization the parties should still maintain the integrity of the grievance procedure, management prerogatives, and the negotiations process.

Models of Bargaining and Participation

In essence, collective bargaining is (a) the foremost employee voice mechanism in the workplace, and (b) a process which should be governed by legal and binding commitments of both partners to the negotiated agreement. As indicated in Figure 2, both employees and employer needs and interests

can be addressed by the collective bargaining process. Traditionally, the bargaining process has focused on those issues considered mandatory by law. At times this has resulted in scant attention being given to other organizational and employee needs. As expected, the emphasis is often on maintaining and conforming to the traditional process, rather than using the process as a conduit for encompassing the total quality of work life.

Theoretically, CB is a continuous joint process for problem resolution and maintaining the relationship between the parties. Although employees and employers receive some direct feedback during the life of the contract, the system does not encourage extensive contract adjustments to address employee dissatisfactions during the life of the contract (Wallace and Driscoll, 1981). Nor is it able to immediately respond to unforeseen conditions. It often addresses general or overall issues rather than those specific to individual work groups within the plant.

Furthermore, as commonly executed the CB process is not designed to address the overall effectiveness of the organization and the quality of employees' daily work life (Wallace and Driscoll). In contrast, formal worker participation is often viewed by many as a project or program rather than an organizational process. As shown in Figure 3, WP seeks to achieve desired employee and organizational outcomes through direct employee involvement.

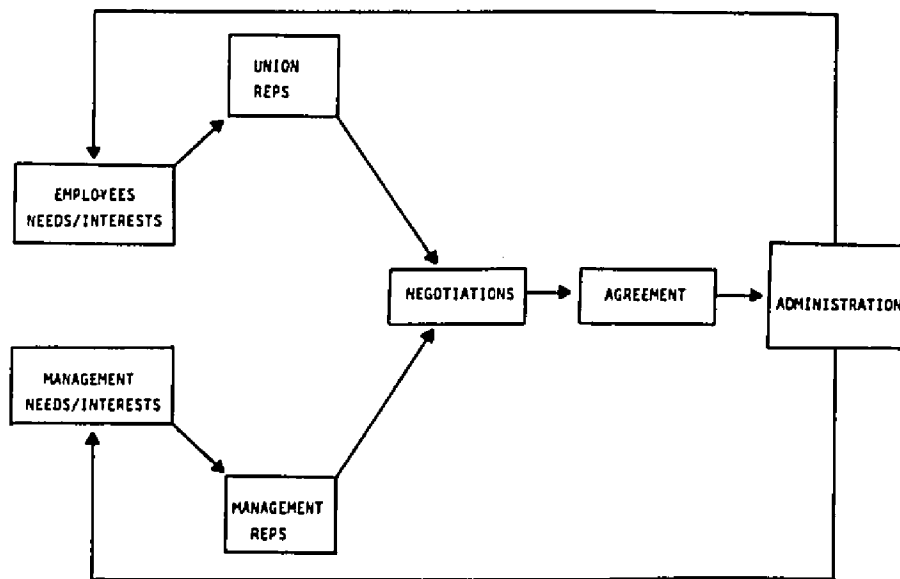


FIGURE 2. Traditional Collective Bargaining Process

Generally, (a) it is not governed by law, (b) usually can be ended unilaterally by either party, and (c) it ostensibly addresses issues not covered by collective bargaining. Theoretically, it seeks to provide a quicker-response forum for addressing specific or general issues leading to improved quality of life at the workplace and organizational effectiveness. Worker participative processes usually attempt to accomplish these goals while "by-passing" the formal collective bargaining process. Therein may lie one of the problems with separate systems. The needs and interests of employees and employers affect, and are affected by, what has occurred or not occurred through the formal system.

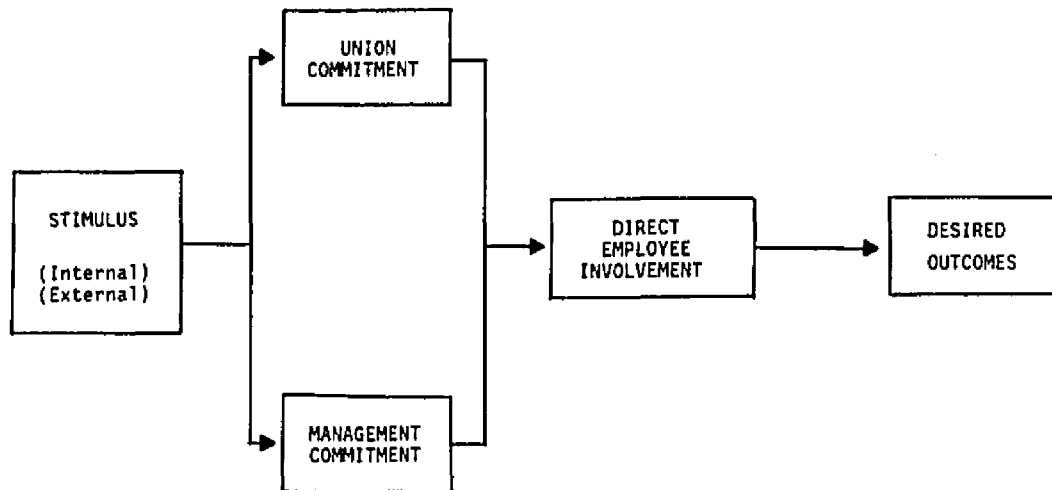


FIGURE 3. Formal Worker Participation Intervention Process

Mature participative efforts, as they begin to consider more meaningful concerns, often find it extremely difficult to avoid addressing collective bargaining issues. That is, employees seek to become more involved in issues traditionally dealt with under the formal bargaining process by representatives of employees and management (Micallef and Moore, 1986). By removing the separation of collective bargaining and worker participation, unions and management would in effect institutionalize the participative process within the collective bargaining process, as shown in Figure 4.

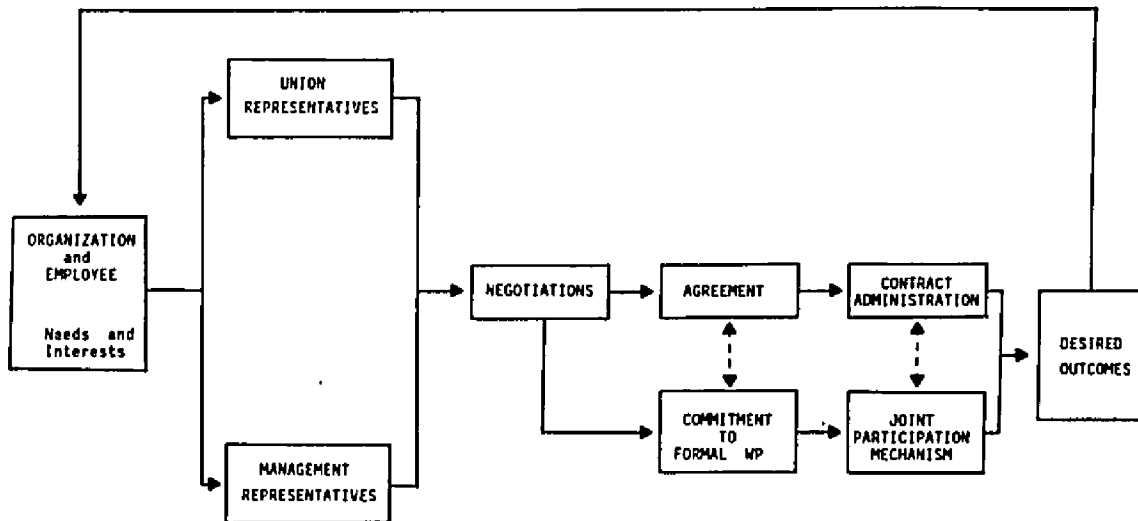


FIGURE 4. Institutionalization of Collective Bargaining and Formal Worker Participation

In essence (a) a broader scope of employee and employer needs would be addressed within the bargaining relationship, (b) commitment to workplace changes would be formalized, (c) improved quality of work life and organizational effectiveness could be desired outcomes, (d) there would be opportunities for employees to become more directly involved in decisions that impact their work environment, and (e) a coupling of the two processes would legitimize the role of the union in all areas of the relationship (Micallef and Moore, 1986).

Benefits

The concept of institutionalized or coupled worker participation and collective bargaining processes offers several potential advantages to the

individual actors as well as to the organization. Some are:

- a). An open systems approach to operating the workplace (Katz and Kahn, 1966; Van De Ven and Astley, 1981). From an organizational theory and effectiveness perspective, workers, their union and management are involved in decisions and changes regarding the various parts of the organization.
- b). Conflicts, distrust, and inefficiencies may be reduced.
- c). A more democratic workplace is created in which workers should have wider opportunity to engage in workplace decision making.
- d). Labor and management may be compelled to deal with relevant employee and organizational issues.
- e). More direct channels of communications are available to all sides.
- f). There may be a reduction in formal grievances and/or the number of steps used in the grievance procedure.
- g). A more effective and satisfactory "organizational life" may be realized.
- h). The organization may benefit from a better utilization of worker, labor and management resources.

Trust

Once we remove the union's suspicion of the employer and the employer's suspicion of the union, there is nothing in the world to prevent the most cordial relation... (from "An Interview with Samuel Gompers," Crowther, 1973).

Trust has frequently been identified as a key variable in the WP process and essential to any serious discussion of entering into a cooperation activity (Bluestone, 1984; Schrank, 1978). Trust is seen as crucially important while somewhat difficult to define or operationalize as well as measure. In recent years the labor movement has been increasingly willing to seek positive union-management relationships based on trust, than on strikes once considered the basis for union power (Reynolds, 1984).

Kochan and Piore (1985) emphasized the nature of the trust factor by what they term the "internal contradictions in American Industrial relations." Here they refer to the dual strategies followed by organizations where industrial relations policies at the corporate level are geared towards union avoidance or maintaining many common elements of the traditional adversarial approach. Concurrently, at the plant level, cooperative efforts are being supported to overcome adversarial conditions. Such contradictions may contribute to what has been found to be high levels of conflict and distrust between labor and management.

Successful models for planned organization change particularly stress the need to establish mutual trust between the parties in the initial stages of the collaborative relationship (Bennis, 1969). Hammer and Stern (1986) in

their study found the trust factor which became evident during cooperation efforts was key to the history of overcoming militant labor-management conflict at Rath. The result was that labor leaders displayed alternating behaviors. They agreed to cooperate in order to avert corporate ruin or obtain benefits, but reverted to their adversarial role when cooperation incurred costs for the union or threatens their control of union members.

Schuster (1984b) also identified trust as an important variable in the success of worker participation. He suggests that the trust established in the participative efforts could be diminished somewhat during traditional negotiations by the aggressive tactics used by the parties in pursuit of distributive bargaining goals. Goodman (1980) holds that low level of union-management trust may impact both the parties' commitment and the success of cooperation efforts resulting in relatively short-lived worker participation processes life spans.

Kochan and Dyer (1976) emphasized the need for maintaining trust between the parties and commitment to the participation process through periodic conflict and adversary shocks. They also suggest that trust is not only important for the general organizational climate, but specifically for the nature of labor relations, cooperation and the financial viability of the organization.

In general, interactions between the parties and the degree of trust established, or lacking, are based on consistent results from past transactions (Shea, 1984). As it relates specifically to WP, trust may be based on such variables as past history, respect, past negotiations, grievance history,

past bargaining posture, personal experiences, national labor leaders' views, etc. (Strauss, 1980).

Past surveys have identified evidence of widespread mistrust between labor-management (Weinberg, 1976). For example, one such survey concluded "such mistrust would need to be suspended before cooperative programs could be undertaken,..." (p. 21). At a Department of Labor (DOL) conference with 25 representatives of labor, management, and academia it was noted that "With time and experience, relationships, trust, and skills will build between the parties so that issues over inherent differences between QWL and CB [collective bargaining] will lose their force..." (U.S. DOL, 1984b, p. 3-4). Of course, the parties acknowledge the differences between the two approaches, one adversarial and relying on bargaining power for agreement, and the other cooperative, based on reaching consensus through trust and information sharing.

The issue of trust was also the most discussed topic at a similar 1985 regional symposium on labor-management cooperation. Labor expressed fears that employers would (i) use the cooperation process as a union busting technique and (b) would use the process only in a crisis or when the organization needed a quick-fix solution to problems (Bognanno and Myhr, 1985). "Each labor group believed that while management speaks of cooperation, many employers are neither committed to trust nor to the cooperation process" (p. 29).

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Obstacles to Cooperative Efforts

By far, the most serious difficulty in getting joint cooperative efforts underway in unionized firms stems from the "pervasive influence of adversarial norms, values and practices" (Jick, McKersie, Greenhalgh, 1983, p. 185). Coupled with this is the failure of employers to accept the union as a legitimate workplace entity (Bognanno and Myhr, 1985). Kochan and Dyer (1976) state that one obstacle that has led to the decline and support by workers and union representatives for WP processes was management's actions or strategy decisions that were viewed as inconsistent with high level of trust being encouraged in the participation process.

Other obstacles include management resistance; the belief that both parties have strong and irreconcilable goals; absence of a suitable model; a lack of knowledge and experience; a fear of adverse effects on the contractual agreement, and low or no conspicuous progress. In many workplaces the existing negative forces are usually stronger than those forces favoring joint projects (Lawler and Drexler, 1978).

**The Legal Underpinnings of Employee Involvement
in The Collective Bargaining Framework**

In examining the legality issue the aim is not to engage in a legal treatise on labor laws and employee involvement. Rather the objective is to discuss some of the specific considerations that should be taken into account in examining the possible impact of labor laws, specifically the NLRA, on participative programs. Also, what considerations should be taken into account by labor and management as they address the start-up, maintenance and expansion of their joint cooperative efforts?

Legal challenges, if any, aimed at employee involvement programs will probably come from those within the labor movement alleging violation(s) of the National Labor Relations Act (NLRA). Labor's challenge may come about for a number of reasons including (1) actual or perceived misuse of cooperative programs by management, or (2) perceived negative impact such programs may have on the formal collective bargaining process.

The Law

The 1935 NLRA promotes the practice of collective bargaining as a means for employees to participate in the determination of wages, hours, and other terms and conditions of work. The Act was ratified by Congress to reduce industrial conflicts and to encourage cooperative resolution of "industrial disputes arising out of differences as to wages, hours, or other working conditions by restoring equality of bargaining power between employers and employees" (Nowak, 1984, p. 150).

Taylor and Witney (1979) list the significant sections of the NLRA that may apply to formal WP processes:

Section 2(5)

Defines labor organizations as any organization, or agency or employee representation committee or plan, which exists for the purpose of dealing with employers concerning wages, hours of employment, or conditions of work.

Section 7

Gives employees the right to bargain collectively and to engage in or refrain from concerted activities.

Section 8(a)(1)

Makes it an unfair labor practice for an employer to interfere, restrain or coerce employees in the exercise of their bargaining rights.

Section 8(a)(2)

Makes it an unfair labor practice for an employer to dominate, interfere with, contribute financially or support any labor organization.

Section 8(a)(5)

Makes it an unfair labor practice for an employer to refuse to bargain with employees' representatives.

Section 9(a)

Gives exclusive rights to representatives selected by the majority of employees to bargain with employers.

At Issue

From a legal perspective the worker participation (WP) issue of paramount concern is "do they violate violate the National Labor Relations Act, particularly with regards to section 2(5) and section 8(a)(2)?" This question is particularly relevant for unionized environments since typical participation programs are jointly managed by labor and management. Some programs often bring about a positive shift in the style of management practiced by companies, in that the traditional adversarial approach is abandoned in favor of cooperation (Gold, 1986).

Two seemingly contradictory positions highlight the more prevalent views regarding violations of the Act. According to Sockell (1984) "Congress meant to bring all employee participation mechanisms, in virtually any form, within the reach of the law. Thus, most if not all of today's participation programs may be viewed as violating the statute" (p. 553). In her view a union filed section 8(a)(5) charge probably would be upheld and the employee involvement program would be dissolved. On the other hand, Fulmer and Coleman (1984) state that participative efforts are not necessarily considered dominated labor organizations in violation of the NLRA. They maintain that employee involvement committees "further the desirable end of cooperation between labor and management that is encouraged by the Act as well as the QWL Act of 1975" (p. 684).

Board's View

The National Labor Relations Board (NLRB) has in the past construed section 8(a)(2), employer domination, very narrowly as to preclude many

forms of employee interaction with management. Until very recent years the Board's traditional rigid standard in determining employer domination amounted to in effect a "per se" rule. That is, any employer support of a labor organization is illegal beyond a certain critical level, regardless of the character of the challenged organization, the intent of the employer, or the will of the employees (Morris, 1983). While certain courts have disagreed with the Board's analysis (see, e.g., *Hertzka & Knowles v. NLRB*, 1974; *Chicago Rawhide v. NLRB*, 1955; *Federal-Mogul Corp. v. NLRB*, 1968; *Modern Plastics v. NLRB*, 1967), no persuasive analytical standard has yet emerged from their decisions.

In recent years the NLRB has not been as flexible as the courts in its interpretation of the Act. But it has shown some flexibility in acknowledging whether or not employee involvement activities are labor organizations. For example in *NLRB v. Northeastern University* (1979) it examined the question of whether a faculty organization was a labor organization within the meaning of the section 2(5). It reasoned that the faculty senate did not function to present bargaining demands as found in contract negotiations, but more of an advisory committee making recommendations to the president.

The *Northeastern* decision should be viewed carefully. As was the case under *NLRB v. Yeshiva University* (1980), employee involvement in more substantive decision making could possibly be viewed as management decision making. As such, employees would be ineligible for protection of their right to organize and bargain collectively (Alexander, 1985).

Court's View

Accordingly, a long line of cases has recognized the distinction between cooperation and domination and allowed cooperation as furthering the policies of the NLRB, for example, *Chicago Rawhide v. NLRB* (1955). In recent years, however, courts have found that the assumption of an adversarial model of employee relations is not always appropriate. In many situations the interests of management and workers now coincide. Literally, almost any form of employer cooperation, however innocuous, could be deemed support or interference. Yet such a constricted view of section 8(a)(2) would undermine its very purpose and the purpose of the Act as a whole; i.e., fostering free choice, because it might prevent the establishment of a system the employees desired (Fulmer and Coleman, 1984). Thus the literal prohibition of section 8(a)(2) must be tempered by recognition of the objectives of the NLRA (see *Hertzka & Knowles v. NLRB*, 1974).

Conclusion

What constitutes a labor organization, with respect to employee involvement programs, is still inconclusive. The Board, as yet, has not had the occasion to face the issue squarely. If a challenge were to come about, Murrman (1980) offers some clues regarding possible outcomes. One recurring theme underlying cooperative programs and possible NLRA violations is the state of mind of the participants, employees, employee representatives and management. Relevant to section 8(a)(2) is whether or not such programs are motivated by the employer's "antiunion animus." Also significant is whether or not employees hold perceptions of coercion or domination on

the part of the employer. Unless it can be established that employer conduct actually interfered with the employees' free-choice selection of workplace issues and representation, it may be ruled that no violation of the Act, specifically section 8(a)(2), has occurred.

Whether or not employee involvement programs violate the Act remains an open and debatable issue. Given the essence of past NLRB and court decisions, it is unrealistic to expect a general legal position to be forthcoming. Some WP processes may very well be declared in violation of the NLRA. But, in the spirit of enhancing workplace cooperation between unions and management, such violations may be declared de minimis. That is, technically a violation but without sufficient nature to warrant a cease and desist order.

Presumably, legal challenges would come from those in the labor movement. However, unions attempting such action could, to their chagrin, be faced with defending an awkward or unpopular position. Seeking to restrict the process or scope of issues potentially places them in opposition to the desires of employees. In addition it may align the labor movement against efforts to increase workplace productivity and improve quality of work life. Of course, supporting WP efforts may also have legal drawbacks for labor unions. Some employees may file unfair labor charges against the union and management for establishing benefits for a minority or small group of employees. Pushing to expand employees participation into higher level managerial decision making activities may be viewed by courts as sufficient influence and involvement to classify union members as "managerial employees"; hence, exempt from union membership and protection.

CHAPTER III

DESIGN OF THE STUDY

Introduction

This chapter describes the conceptual framework of the study including the measures used for the dependent, moderator and various independent variables. Five research questions and hypotheses are presented which focus on the separation of CB and WP processes, and the associated level of labor officials' satisfaction. The concluding section describes the procedure used including a discussion of methodology, limitations and analysis of the data.

Conceptual Framework

Empirical research into the link between CB and WP processes particularly with regard to the level of participant satisfaction is lacking. In this study the suitable variables for assessing this relationship and satisfaction are derived from previous research regarding both processes. Listed below, Table 1, are the principal dependent, independent and moderator variables.

Dependent Variable

This study focuses on a bargaining and participation model with the overall dependent variable being the level of satisfaction of labor union

TABLE 1
Summary of Key Variables in the study

Independent	Moderator	Dependent
Background characteristics	Trust	Level of Satisfaction
Collective bargaining processes		(a) Meeting employees needs
Worker participation processes		(b) As an employee
Worker participation issues		(c) With union role
Length of process		(d) Overall
Relationship before WP		
Relationship after WP		
Current relationship		

officials. The specific satisfaction components are: (a) the extent to which the union is effectively meeting the needs and expectations of its members; (b) the extent to which the labor leader's job or employment exchange is personally satisfying, and (c) the extent to which their role/involvement as a labor official is personally satisfying.

Indices for measuring level of satisfaction have been used in previous studies (for example Porter, Steers, Mowday and Boulian, 1974; Staines and Quinn, 1979; Smith, Kendall and Hulin, 1969). Staines and Quinn in looking at how American workers evaluate the quality of their jobs used an index for general satisfaction, another for specific satisfaction, and overall satisfaction

was a combination of both. In their study they used such factor predictors as: comfort, challenge, financial rewards, relations with coworkers, resource adequacy, and promotions.

Quinn, Staines and McCullough (1974) have noted that measuring satisfaction commonly uses subjective measures. There are problems with both the measurement and interpretation of such measures. Some of the problems identified by Quinn et al. are: (a) different measures have different points at which discontent begins to register; (b) workers may respond to factors from an emotional and/or defensive reaction, and (c) employee reactions may indicate an attempt to rationalize the problems faced in their jobs.

In this study satisfaction is an index composed of mean responses to questionnaire items identified in Appendix C and listed in Appendix E. Indexes as a dependent variable in participative research efforts have been used in past studies. For example, Witte (1980) in investigating participation with respect to democracy, authority and alienation used indexes as constructed from the sum of subject responses. More specifically, the level of satisfaction variable is examined in terms of its constituent elements (Dunham and Smith, 1979; Locke, 1983) derived from previous studies. These include the degree of employee involvement, company, management, working conditions, grievances, bargaining process, bargaining issues, participation process, and participation issues.

The measurement of level of satisfaction in this study follows the lead of Hoppock (1935) and suggestions of Locke (1983) by using the direct self-reporting questionnaire format and random selected interviews. The

questionnaire utilizes the widely recommended Likert-type scale and fixed-alternative (closed) questions format. Interview questions mirror those employed in the questionnaire (see Appendix B and Appendix C).

Independent Variables

Several previous participation investigations have employed independent variables similar to those used in this study, such as: (a) personal characteristics; (b) job characteristics; (c) job involvement; (d) participation issues, and (e) bargaining issues (Witte, 1980; Kochan, Lipsky and Dyer, 1975; Grady, 1984; Ponak and Fraser, 1979; Steers, 1977; Hackman, 1977; McShane, 1986). General background characteristics were requested to provide a basis for descriptive statistics to augment the data generated by responses to issues and processes. Length of worker participation processes and relationship data were included to dimensionalize possible impact of time and environment on level of satisfaction attitudes. Two additional variables, (a) why processes ended and (b) why processes never existed, are included in the questionnaire. Subjects with discontinued formal employee participation efforts or never having experienced such processes were asked to respond accordingly.

Moderator Variable

As indicated, this study employs the construct of trust as an influencing or moderating variable. Specifically, trust refers to the risk labor officials are willing to take that management will keep or live up to its word (Giffin, 1967; Scott, 1980). Following the suggestions of Angle and Perry (1986) and Arnold (1982) hierarchical multiple regression is used to test the moderating

effects of trust on labor officials' level of satisfaction.

As identified in the literature and interviews trust can be seen as moderating the relationship between satisfaction and the independent variables identified in this study. That is, trust is said to interact with other variables in determining level of satisfaction. Or equivalently, satisfaction is a joint function of trust and another independent variable. Arnold (1982) has suggested that social sciences studies related to behavior in organizations normally focus on the form (or interaction) of the moderating relationship rather than the degree (or strength). The form of the relationship is described by the equation:

$$Y = A + B_1X + B_2Z + B_3XZ$$

The regression coefficient B_1 indicates the amount of change in Y (level of satisfaction) associated with a unit score change in variable X . B_2 represent the change associated with the change identified with the moderator, trust. The B_3XZ interaction term is the change that is a function of the moderator and variable X . Significance of the partial coefficient associated with the product term supports the hypothesis that the form of the relationship between X and Y is conditional upon Z (Arnold, 1982). Thus, our interest is not whether the relationship between satisfaction and a given independent variable (B_1X) is significantly different from zero, but rather in whether the B_1X is significantly different for different values of trust (B_2Z). The substantive issue of whether or not satisfaction (Y) is a joint function of trust

(Z) and another variable (X) depends on whether a significant XZ interaction exists is the significance of the semipartial coefficient associated with the XZ product.

Instrument

The self-reporting instrument (Appendix B) elicited responses amenable to statistical testing. In addition, several items requested general information and provided a basis for descriptive statistics to augment the data generated by the testable items.

The aim of the instrument was to tap relevant attitudes regarding worker participation and collective bargaining processes and issues. Since this investigation examines areas heretofore given separate research focus the items and measuring scales were drawn from several sources. The first was the University of Michigan's Institute for Social Research Organizational Behavior Program questionnaire (e.g., see Drago, 1984) with respect to level of satisfaction. Kochan, Dyer and Lipsky (1977), Witte (1980) and Kochan, Katz and Mower (1984) survey instruments were used to generate item scales related specifically to worker participation processes. Measures related to trust were generated from Scott's (1980) study of organizational trust.

The final instrument was constructed after personal interviews and draft reviews with individuals from academia (research and labor education), consultants and labor union officials. Special attention was given to questionnaire content, wording, form and sequence of items in an attempt to reduce possible subjectivity on the part of the respondents.

The questionnaire's format was guided by format construction (Kidder, 1981; Dunham and Smith, 1979) and need for parsimony. Due to the sensitivity of the bargaining and formal cooperation issue within the ranks of union officials, care was needed in questionnaire design, readability and length in order to increase the potential for an acceptable completion or return rate. The questionnaire coding scheme as recommended by Ohio State University's Polimetrics laboratory is shown in Appendix B.

Research Questions

This study examines selected workplace issues and processes with respect to their influence on labor officials' level of satisfaction. Among the key questions analyzed are:

- (1) To what extent is it possible to maintain a separation of the WP process and the process of CB?
- (2) Do labor officials feel the two processes (CB and WP) are and should be independent?
- (3) Is worker participation seen by labor officials as intruding upon or enhancing collective bargaining? If so, under what conditions?
- (4) To what extent do labor officials see CB and WP meeting the needs and expectations of their members?
- (5) To what extent is the personal job satisfaction of labor officials influenced by the extent of separation between WP and CB?

Hypothesized Effects

The principal hypotheses regarding the workplace relationship between worker participation and collective bargaining (issues and processes) with respect to level of satisfaction can be stated as:

Null Hypothesis: There is no difference in labor officials' satisfaction with workplace employee-management relations regardless of the range of issues covered and variety of methods used to address them.

Alternatively: It is hypothesized that:

- One: A work environment with a narrow CB process and with no formal WP process will generally lead to less satisfaction with one's job or employment exchange and personal role as a labor official.
- Two: A work environment with a broad CB process and with no formal WP process will generally lead to more satisfaction with the employment exchange and personal role.
- Three: A work environment with a narrow CB process separated from the formal WP process will generally lead to less satisfaction with the employment exchange and personal role.

- Four:** A work environment with a broad CB process separated from the formal WP process will generally lead to limited satisfaction with the employment exchange and personal role.
- Five:** A work environment with a narrow CB process not separated from the formal WP process will generally lead to more satisfaction with the employment exchange and personal role.
- Six:** A work environment with a broad CB process not separated from the formal WP process will generally lead to the most satisfaction with one's job and the personal role as a labor leader. Here it is assumed that the parties have evolved a set of mechanisms -- negotiations, grievance handling, special issue committees and formal WP-- to address a variety of mutual workplace concerns.

Procedure

Methodology

This research is an exploratory field study of the perceptions of labor union officials involved at the local or workplace level of analysis. Three of the important concerns of this study were (1) whether there is an integration of CB and WP, (2) the impact of a CB and WP integration on union leader level of satisfaction and (3) how representative is the sample. These concerns are

addressed here and later in this study.

The data gathering methods used in this study were questionnaires distributed at workshops and workplaces, and unstructured personal interviews. Although desirable, the sample selected for this study was not done by random sampling as defined by Kidder (1981) and Stone (1978). This was due to the researcher's access to the population sampled and the time and cost that would have been incurred in conducting a random sampling. Thus, this survey sample does not insure that (a) every member of the population was available for inclusion in the sample, and (b) every member of the population had an equal opportunity to be included in the sample.

The use of workplaces throughout this study is done for consistency; however, it is to connote that meetings and interviews were either at the actual workplace or the local union hall. Labor officials made the necessary arrangements for the meetings. That is, they arranged for time off and for the meeting room. The researcher did not have contact with any management representatives at the local sites.

Since the majority of subjects ($N= 527$) were from LERS workshops there are methodological limitations regarding the representation of the sample. The researcher sought to overcome or reduce the impact of this limitation by expanding the sampling selection process and by conducting personal interviews.

Questionnaires were distributed by the author to labor officials (a) attending Ohio State University's Labor Education and Research Service (LERS) workshops from July 1986 through February 1987, and (b) at their

workplaces. A total of 955 questionnaires were distributed to a sample of labor officials primarily from the American Midwest's industrial belt. Of the total questionnaires distributed 743 or 78.0 percent were returned. Of this number 712 or 96.0 percent were usable for statistical analysis. The vast majority of subjects were from the state of Ohio (N= 704), with the states of Pennsylvania (N= 3), West Virginia (N= 3) and Florida (N= 2) also represented. Table 2 shows a breakdown of questionnaires including the number by sources (LERS workshop or workplace).

TABLE 2
Questionnaire Responses

	LERS Workshops	Workplaces	Total
Distributed	630	325	955
Returned	538	205	743
Usable	527	185	712

In addition to the data shown in Table 2 the 712 subjects represented 194 separate local unions and 134 different employers. The breakdown of subjects by national and international union affiliation is shown in Table 3. A total of thirty five unions are represented. Both private (N= 646) and public (N= 66) sector union affiliation are represented in the sample.

TABLE 3
National and International Unions represented in this Study

Union	Number
Allied Industrial Workers of America	21
Aluminum-Brick-Class Workers	2
Amalgamated Clothing and Textile Workers Union	12
American Federation of Government Employees	12
American Federation of State, County and Municipal Employees	21
Bakery, Confection and Tobacco Workers	1
Communications Workers of America	94
Directly Affiliated Local Union	3
Glass Pottery Plastic Allied Workers	1
Graphic Communication International Union	9
International Association of Machinists	11
International Association of Molders and Allied Workers	30
International Brotherhood of Electrical Workers	14
International Chemical Workers Union	5
International Federation of Professional and Technical Engineers	2
International Union of Electrical Workers	59
International Union of Patrolmen Association	22
IPUE*	1
National Association of Letter Carriers	89
National Association of Postal Supervisors	1
Office and Professional Employees International Union	16
Ohio State University- Division of EMS and Fire Prevention	1
Oil, Chemical and Atomic Workers Union	10
Operative Plasterers' and Cement Masons' International Association	21
Service Employees' International Union	3
Sheet Metal Workers International Association	1
Trade and Labor Union	1
United Association of Plumbers and Pipefitters	2
United Automobile Workers	29
United Food and Commercial Workers	4
United Mine Workers of America	12
United Paperworkers International Union	7
United Rubber Workers	48
United Steelworkers of America	87
Utility Workers of America	34
No affiliation reported	26

*As reported by subject. Can not identify by these initials.

Prior to developing the questionnaire and conducting the survey, six one-on-one interviews were held with high ranking labor officials affiliated with the Communications Workers of America (CWA), United Steelworkers (USW) and United Auto Workers (UAW). These officials were selected based on recommendations from LERS faculty or they (or their union) frequently were identified in the literature with WP issues and processes. These interviews covered a range of dissertation related questions and issues such as how relevant is the dissertation topic, definitions of terms and variables, potential problems with the study, questionnaire construction, sampling procedure, and limitations of the study. The most pronounced inputs from these interviews were (a) cautions regarding linking CB and WP in discussions with local labor officials, (b) the importance of trust but the difficulty in "getting a handle on it," and (c) affirming the relevancy of the topic to the labor movement.

Also, pre-survey interviews were held with fourteen individuals from management, government and academia involved in teaching, research and consulting on worker participation processes. Those selected came from recommendations by LERS faculty, labor officials, and published research. They reside in Ohio, Michigan, Oregon, New York, Wisconsin, Maryland and Washington, D.C. The interviews were done in person and/or via telephone and covered issues and questions similar to those addressed with labor officials. From these pre-survey interviews came suggestions particularly beneficial to questionnaire construction, whether to include trust in the survey, and the measurement of survey variables. Also, caution was extended

almost universally to refrain from generalizing beyond the sample due to worker participation being too situation specific.

As mentioned earlier, the 712 subjects do not represent a randomly drawn sample nor do they represent the universe of labor officials attitudes regarding worker participation processes for reasons identified earlier. As shown in Table 2 , 704 or ninety nine percent of the sample was from the state of Ohio. Although this sample is predominantly from a midwest State, it is not necessarily representative of labor officials from all midwestern states or from Ohio. The eight subjects from the adjacent states and Florida were in attendance at LERS workshops when questionnaires were distributed. Their responses were included because this study was not intended to limit subjects to the state of Ohio and also to broaden the number of workplaces included in the survey.

Since a large portion of the population were from workshops sponsored by Ohio State's Labor Education and Research Service (LERS) some methodological issues can be raised regarding attendees at LERS workshops. For example, what are the attitudes of labor officials who generally attend LERS workshops, how the sample was selected, what unions are represented, and biases inherent in using LERS as the principal source for gaining access to labor officials. As noted, data from labor officials not directly connected with LERS workshops were also collected.

Access to other subjects was gained by asking respondents at the workshops to recommend local labor unions (with or without WP processes) that may be contacted by the researcher. In addition, nine union leaders holding

positions above the regional level [representing the National Association of Letter Carriers (NALC), Communications Workers of America (CWA), United Auto Workers (UAW) and United Steelworkers (USW)] were contacted by the researcher for recommendations of local unions to contact. Fifteen locals were identified through this process. The researcher made contact and held follow-up meetings with labor officials as a group at each local workplace. After discussing the research effort with them officials at all but one of the locals contacted agreed to participate.

Each meeting with subjects (at workshops and workplaces) consisted of a brief introduction of the study's purpose and instructions on completing the questionnaire by the researcher. Careful attention was given to avoid direct discussion of a possible relationship between CB and WP. At the request of some subjects at several workplaces questionnaires were left with the subjects to be completed and later returned to the researcher. A cover letter (Appendix A) was attached to each questionnaire distributed at the workplace along with a stamp addressed envelope. Each subject had the option of completing or not completing the questionnaire or whether or not to participate in an interview. Complete subject anonymity and data confidentiality were promised.

In addition to the 712 questionnaire responses, nineteen unstructured interviews were conducted with labor officials. The subjects interviewed and content of the content of the interviews were separate and distinct from the pre-survey interviews mentioned earlier. These interviews were sought for a number of reasons, including the need to augment the questionnaire input

and to overcome some of the limitations associated with using a survey questionnaire. For example, the interviews (a) provided an opportunity for subjects to explain responses, and (b) provided subjects with other than a forced-choice response format. Of course, the attendant limitations of interviews were recognized and carefully managed by the researcher. For example, care was exercised to reduce inadvertent interviewer bias. Also, the researcher was aware that subjects' responses may have been more emotion laden.

Selecting the subjects and conducting these interviews was designed by the researcher to be straightforward. At least one official at each workplace was solicited by the researcher for an unstructured interview. The procedure for soliciting interviews was to invite (1) the top labor official at each workplace, (2) the next in line after the top official, and (3) those recommended by the top official. Generally, subjects were reluctant to engage in on-the-record interviews. The primary reason given by respondents was concern for anonymity. The researcher gave assurances of anonymity. Interviews were conducted at the workplace, a few via telephone. Although the interviews were unstructured, the interview items (i.e., questions), but not the responses available, were predetermined based on the survey instrument (Appendix B). The responses ranged from enthusiastic support of joint worker involvement efforts to rejection and criticism of both union and management advocates of such activities. As appropriate interview data from labor officials have been included in the study to augment questionnaire results.

Analysis of Data

This examination analyzed the responses by using various statistical methods such as multivariate analyses, analysis of variance (ANOVA), t-tests, descriptive statistics and intercorrelated matrixes as used in previous related investigations (Katz, Kochan and Gobeille, 1983; Ponak and Fraser, 1979; Witte, 1980; Kochan, Katz and Mower, 1984; McShane, 1986; Steers, 1977; Dyer, Lipsky and Kochan, 1977). In performing multivariate analyses the presence of independent variables multicollinearity was also examined. The tolerance is used as indicators of interdependency between variables or the lack of orthogonality. Tolerance is defined as the the proportion of variability in an independent variable not explained by other independent variables (Cohen and Cohen, 1983; Norusis, 1983). Tolerance is calculated as $1 - R_i^2$, where R_i^2 is the squared multiple correlation where the i th independent variable is considered the dependent variable and the regression equation between it and the other independent variable is calculated (Norusis).

Multivariate or regression analyses were performed to assess the overall impact of the relevant workplace variables on level of satisfaction. Also, the analyses were to determine if personal characteristics are significant factors in any of the hypothesized categories.

In order to further illustrate the relationship of the means between the hypothesized categories, two subsidiary analyses were conducted. The t-test and one-way analysis of variance (ANOVA) were performed to test the null hypothesis about differences in means (Pedhazur, 1982; Norusis, 1986). The two-tailed probability t-test was used to evaluate differences in means

between two independent categories, those with and those without WP. ANOVA F tests were used for a multiple comparison about the differences among level of satisfaction means. Although ANOVA results indicate if the means are significantly different from each other, they do not tell which means differ from which other means. Thus, further means comparisons were performed using Tukey's test designed specifically for comparisons of the studentized range (Keppel, 1982). Tukey's comparison or honestly significant difference (HSD) test was designed for pairwise comparisons of unequal sample sizes.

Assistance and recommendations regarding data analysis were provided by Ohio State University's Polimetrics and Statistical laboratories.

Categorizing of Issues and Processes

One of the key methodological considerations addressed in this study by the researcher is what constitutes narrow and broad collective bargaining and worker participation issues and processes? Likewise, what constitutes an integration of CB and WP? These two methodological questions were raised by the researcher in the interviews with labor leaders academicians. Needless to say, the feedback was diverse and no definitive patterns emerged.

As a result a conservative approach was taken in defining narrow and broad processes and issues. They are defined as follows:

1. Narrow and broad collective bargaining processes: less than three (< 3) responses (or > 1.7 mean score) on Question 9 may indicate a narrow workplace collective bargaining process.

2. Worker participation issues separated from collective bargaining issues: greater than four (> 4) responses (or $> .10$ mean score) on Question 15 may indicate no separation of worker participation and collective bargaining issues addressed by employees involved in formal WP activities.

3. Narrow and broad worker participation processes: less than two (< 2) responses (or > 1.9 mean score) on Question 16 may indicate narrow WP processes at the workplace.

Additional Limitations

The major methodological limitations and efforts to overcome or reduce their impact on this study have been addressed above. Additionally, the measurement of relevant variables for data analysis was another limitation taken into account by the researcher. In response, care was also exercised in the construction of measures for issues, processes, trust and satisfaction variables. Admittedly, the measures used were judgement calls by the researcher. However, the decisions were based on inputs from pre-survey interviews mentioned earlier and from the relevant literature. More objective measures can be developed and pursued in the future.

The analytical procedures used in this study also reduce the generalizability of the findings. Confidence in these techniques must be tempered by the realization that basic assumptions have been made and that there are certain weaknesses in the methodology. Only to the extent that the attributes of the data are congruent with these assumptions can the analytical procedures be considered appropriate.

To reiterate, the generalizability of the data is also affected by the selection of subjects. Only replications from other geographic locations can determine whether the effects are consistent with those in other situations or whether trust exists as a moderating variable.

CHAPTER IV

FINDINGS OF THE STUDY

Introduction

This chapter covers the results obtained from statistical analyses. Addressed are the characteristics and statistics related to the independent variables, dependent and moderator variables; the research hypotheses; and the study questions. Descriptive statistics for the independent variables are listed in Table 3 and in Appendix D. A reliability coefficient (Cronbach Alpha) has been employed to perform an item analysis of the multiple item variables. Cronbach Alpha compilations are calculated to assess the reliability of a score across variables as an estimate of a case's true score (Cronbach, 1951; SPSS Inc, 1986).

Coefficient Alpha estimates the proportion of the scales variance that's due to all common factors among them. Its a measure of internal consistency. That is, it represents how much the scales single score depends upon general and group rather than specific factors (Cronbach). The reliability coefficient (Cronbach Alpha) has been used in a similar manner by Witte (1980) with regard to scales developed for his empirical worker participation

study. Verma and McKersie (1987) and Verma (1987) have also used it in their studies of employee involvement as a measure of internal reliability of Likert-type scales measuring union satisfaction.

Independent Variables

Respondents background characteristics for the overall sample, Table 4, show a wide distribution with respect to age, education, company seniority, current position and years as a union official. As expected the race and sex results were in favor of males (79.9 percent) and white (90.1 percent) respectively. See Appendix B for scales and coding.

Responses to Relevant Workplace Variables

Subjects were asked to respond to multiple items for each variable to assess the extent to which certain processes and issues relate to their workplaces. The primary multiple item variables of concern in this study are listed in Appendix F. The results listed are for labor officials with and without formal involvement efforts. They were obtained to give a preview of and set the tone for more detailed results to follow. Not surprisingly the responses are in favor of subjects with formal joint worker participation activities. For each variable the comparison of means t-test is significant. They indicate broader CB processes (mean= 1.554) and worker participation processes (mean= 1.689) than those without formal employee involvement. Of interest is that those who reported having no formal cooperative efforts did indicate having other participative processes similar to those in formal WP organizations.

TABLE 4
Personal and Relevant Workplace Characteristics

Variable Set	N	Mean	Std. Dev.	Std. Error
Personal Characteristics				
Age (years)	708	40.918	8.670	.326
Sex (1=male, 2=female)	710	1.201	.401	.015
Race (1=white, 2=other)	705	1.099	.299	.011
Position (full/part) (1=full, 2=part)	639	1.502	.500	.019
Company seniority (years)	642	17.173	8.540	.337
Years as official (years)	594	8.157	7.679	.315
Current position (1=low, 5=high)	693	3.177	1.200	.046
Education (1=low, 5=high)	696	2.557	.777	.029
Relevant Workplace Characteristics				
Length of WP (years)	499	3.892	3.946	.177
Relationship before (1=low, 5=high)	541	2.238	1.008	.043
Relationship after (1=low, 3=high)	536	1.922	.956	.041
Relationship currently (1=low, 5=high)	706	2.663	1.010	.038
CB processes (1=narrow, 2=broad)	695	1.603	.239	.009
WP processes (1=narrow, 2=broad)	693	1.703	.159	.006
WP issues (0=separation, 1=no separation)	590	.306	.226	.010
Trust (1=low, 5=high)	707	2.541	.798	.030

Correspondingly, local labor officials with formal WP efforts indicated that employees were involved in a broader number of issues on average (mean= .313) than employees in non-participatory efforts (mean= .244). Trust in management is also considered higher in their organizations than in other organizations, mean 2.584 vs. 2.431 respectively.

Dependent Variable

The relationship between worker participation and collective bargaining is examined with regard to the reported level of satisfaction. The summary in Table 5 shows the satisfaction level comparisons between subjects with and without formal WP processes. Significant comparison of means t-test results were found for the overall and each sub-scale of satisfaction level.

TABLE 5
Subjects Responses to Level of Satisfaction

Satisfaction/ Subject's Status	N	Mean	Std Dev	Std Err	Reliability (Cronbach A)	Comparison of Means (t)
Overall						3.60***
Have WP	511	3.491	.560	.025	.845	
Do not have WP	197	3.319	.586	.042	.853	
Meeting employee needs						2.46*
Have WP	511	3.491	.648	.029	.470	
Do not have WP	197	3.356	.672	.048	.451	
As an employee						3.90***
Have WP	499	3.359	.615	.028	.613	
Do not have WP	194	3.152	.650	.047	.627	
Role as union official						2.49*
Have WP	499	3.594	.705	.032	.842	
Do not have WP	192	3.439	.801	.058	.864	

*p<.05
***p<.001

The overall level of satisfaction (mean= 3.491) was reported higher for subjects with WP processes than those without ($t= 3.60$, $p<.001$). In fact, those with WP processes indicated a higher level of satisfaction in each of the subscales.

Relationships

A series of chi-square measures were generated some of which are presented below. The chi-square (X^2) or "goodness-of-fit" technique was employed as a useful first step to examine possible associations between variables that may justify further study of relationships. Each case included a statistical test of the null hypothesis (H_0) of no association. Of importance was the relationship between worker participation processes and issues, level of satisfaction and trust.

According to Table 6 there is a significant association ($X^2= 61.389$, $p<.001$) between collective bargaining and whether or not an involvement process exists. That is, the two variables are not independent of each other. Stated another way, the presence of narrow or broad CB processes depends to some extent on whether there is a formal WP process. Likewise, the relationship between satisfaction and having a participatory process (Table 7) is highly significant, $X^2= 18.586$ ($p<.001$). This indicates that there is some interrelationship between the two variables. That is, the level of satisfaction does depend in part on whether there is formal WP.

One of the central aims of this study is investigate whether there is an association between those issues dealt with in the collective bargaining arena and those addressed under formal employee involvement processes. Table 8

TABLE 6
Collective Bargaining and the Presence of Worker Participation

		Collective Bargaining Processes		
		Narrow	Broad	Total
Have	No	107	85	192
Worker				
Participation?	Yes	123	380	503
Total		230	465	695

$\chi^2 = 61.389^{***}$, $df = 1$
 $***p < .001$

TABLE 7
Level of Satisfaction and the Presence of Worker Participation

		Level of Satisfaction			Total
		Low	Neutral	High	
Have	No	22	96	79	511
Worker					
Participation?	Yes	28	192	291	197
Total		50	288	370	708

$\chi^2 = 18.586^{***}$, $df = 2$
 $***p < .001$

addresses this question and also sets the stage for further examination in this study. The results show evidence of an association ($p < .001$). Table 9 also reveals that there is an apparent relationship between WP processes and level of satisfaction ($\chi^2 = 27.559, p < .001$).

Appendix G lists additional chi-square tables which show significant associations between variables related to level of satisfaction, worker participation processes and trust. In summary, the chi-square results support further investigation. However, as recommended by Pedhazur (1982) conclusions or inferences were not drawn from these results. The researcher further recognizes that there are limitations to using the "goodness-of-fit" statistic; e.g., a large N may give misleading results. Therefore, the chi-square results in this study were used only as evidence of possible relationships which justify further statistical investigation.

Multivariate Analyses

This investigation's focus is on whether there is a separation or integration of CB and WP and the resulting level of satisfaction. Multivariate analyses were performed regressing level of satisfaction on variables common to all subjects in the hypothesized condition. Due to small N's in some research hypotheses categories regression analyses were generated for an additional category. This category included all subjects who have WP regardless of whether they are separated or not separated from CB. This grouping provided a larger sample size for which to examine the relevant workplace variables.

TABLE 8
Collective Bargaining Processes and
Worker Participation Issues Separated

		Collective Bargaining Processes		Total
		Narrow	Broad	
Worker Participation Issues Separated?	No	98	369	458
	Yes	39	51	90
Total		137	411	548

$\chi^2=19.304***$, $df= 1$
*** $p<.001$

TABLE 9
Level of Satisfaction and Worker Participation Processes

		Level of Satisfaction			Total
		Low	Neutral	High	
WP Processes	Narrow	14	47	26	87
	Broad	31	237	335	603
Total		45	284	361	690

$\chi^2= 27.559***$, $df= 2$
*** $p<.001$

A related reason for examining this category is based on Stone's (1978) position that for statistical tests to be relatively powerful (i.e., have a low probability of Type II error) large "samples" should be used. The large sample size also increases the accuracy with which the population parameters can be estimated. Thus, statistics were generated for this overall category of subjects who do have WP at their workplaces.

In performing regression analyses the tolerance was employed to examine for the presence of independent variables multicollinearity. An examination of tolerances reveal that the presence and degree of multicollinearity is not serious. Tolerances found for the variables used in this study's analyses are listed in Appendix H.

The following analyses and discussion focus on the study's hypotheses and model in Figure 1. For the most part only brief attention is devoted to background characteristics or other variables not germane to the research hypotheses. In general, background characteristics did not produce significant results.

The results of the overall equation models for each research hypotheses is reported first. This is followed by regression results for the primary variables, and results for WP and CB issues and processes. ANOVA F test comparisons of means results are also presented to further illustrate the relationship of level of satisfaction between the hypothesized categories. The data analysis concludes with testing the moderating effects of the trust interaction. Recognizing that there are small N's in some of the hypothesized

conditions, the statistical results are nevertheless interesting. Each condition pertains to the labor leaders' level of satisfaction with their own jobs and with their personal role as representatives of the employees.

Hypotheses Testing

Hypothesis One

A work environment with a narrow CB process and with no formal WP process will generally lead to less satisfaction with one's job or employment exchange and personal role as a labor official.

As revealed in Table 10 subjects with no formal WP process and narrow CB processes have a slightly higher level of satisfaction (mean= 3.297) than subjects in Table 11 (mean= 3.255). However, the regression results for this hypothesis are insignificant. In addition, no significant independent variables were found. Thus, the null hypothesis can not be rejected regardless of the level of satisfaction outcome. That is, there is no difference in labor officials' satisfaction with workplace employee-management relations regardless of the range of issues covered and variety of methods used to address them. These results should be viewed cautiously due to the presence of a very small number of subjects (N= 62). The lack of a larger N reduces the sensitivity or power of the test to provide an adequate test of the research hypothesis (Keppel, 1982).

TABLE 10
(No WP and Narrow CB)
Regression Estimates on Overall Level of Satisfaction

Independent Variable	Mean	Std. Dev.	r with Dependent Variable	b	Std. Dev.	t
Age	41.081	9.402	-.018	.013	.015	.903
Sex	1.177	.385	-.143	-.159	.248	-.642
Race	1.097	.298	.055	.230	.312	.736
Full/part-time	1.452	.502	.041	-.016	.205	.078
Seniority	14.790	9.995	-.129	-.010	.013	-.803
Years as official	7.210	8.449	.305	-.025	.013	-1.979
Current position	2.677	1.004	-.085	-.113	.090	-1.262
Education	2.403	.712	.111	.073	.127	.575
CB processes	1.876	.069	.102	.719	1.387	.518
WP processes	1.781	.134	.084	-.153	.631	-.242
Current relationship	2.210	.977	.109	-.030	.100	-.303
Trust	2.289	.808	.345	.234	.135	1.740
Constant				1.621	3.055	.531

Level of Satisfaction- Overall; Range= 4;
Mean=3.297; S.D.= .664; R^2 = .259; F= 1.430;
df= 12,49; Std. Err.= .638; N= 62.

Hypothesis Two

A work environment with a broad CB process and with no formal WP process will generally lead to more satisfaction with the employment exchange and personal role.

In contrast to the previous hypothesis the regression results in this case as shown in Table 11 are significant ($F= 2,575$, $p<.05$). Also, the level of trust (mean= 2.328) is higher than under narrow CB (means difference is n.s.). This highlights the role trust plays in cases where there is an

TABLE 11
(No WP and Broad CB)
Regression Estimates on Overall Level of Satisfaction

Independent Variable	Mean	Std. Dev.	r with Dependent Variable	b	Std. Err.	t
Age	41.052	7.361	-.193	-.011	.013	-.802
Sex	1.259	.442	.100	-.068	.193	-.353
Race	1.103	.307	.271	.319	.234	1.361
Full/part-time	1.448	.502	-.098	.027	.179	.149
Seniority	16.017	8.277	-.260	-.016	.012	-1.416
Years as official	7.517	6.949	-.134	-.003	.012	-.288
Current position	2.914	1.216	.100	-.007	.064	-.107
Education	2.603	.647	.201	.187	.113	1.651
CB processes	1.541	.152	-.011	.578	.489	1.183
WP processes	1.678	.166	-.155	-.135	.433	-.312
Current relationship	2.328	1.015	.086	.019	.078	.243
Trust	2.362	.691	.420	.411	.123	3.335**
Constant				1.534	1.349	1.137

*p<.05

**p<.01

Level of Satisfaction- Overall; Range= 4;
Mean=3.255; S.D.= .548; R²= .407; F= 2.575*;
df= 12,45; Std. Err.= .475; N= 58.

expansion of the union-management relationship. In this instance, they have broadened their use of joint committees and programs under collective bargaining. The null hypothesis in this case can be rejected, although the level of satisfaction (mean= 3.255) is slightly lower than in the previous hypothesis (mean= 3.297). However, as in hypothesis one the presence of a small number of subjects (N= 58) causes these results to be viewed with caution.

Hypothesis Three

A work environment with a narrow CB process separated from the formal WP process will generally lead to less satisfaction with the employment exchange and personal role.

The regression results for this hypothesis as presented in Table 12 are insignificant. Importantly, there are very few subjects (N= 19) in this category. Some multicollinearity problems exist for this category as evidenced by the trust variable having a tolerance of less than .010. Also, subjects did indicate a lower level of satisfaction (mean= 3.091) than subjects in the two previous categories without WP. Although the overall results are not significant the relationship after initiating WP was significant. This result is in contrast to what was found for the current relationship variable.

Hypothesis Four

A work environment with a broad CB process separated from the formal WP process will generally lead to limited satisfaction with the employment exchange and personal role.

As shown in Table 13 the regression results are a continuation of the previous condition in that few subjects (N= 28) are represented in this category and the overall results are insignificant. Although the N is small a couple of comments on comparisons can be made. These subjects have a higher level of satisfaction (mean= 3.134) than those with narrow CB

TABLE 12
 (WP Separated and Narrow CB)
 Regression Estimates on Overall Level of Satisfaction

independent Variable	Mean	Std. Dev.	r with Dependent Variable	b	Std. Err.	t
Age	37.105	5.527	.074	.002	.041	.043
Sex	1.053	.229	-.086	.277	.496	.559
Race	1.105	.315	.321	-.090	.389	-.231
Full/part-time	1.263	.452	.157	.591	.377	1.569
Seniority	15.158	7.290	.108	-.007	.041	-.184
Years as official	6.579	5.805	.138	.009	.034	.264
Current position	3.368	.831	.038	.056	.147	.381
Education	2.737	.733	.063	-.209	.170	-1.225
CB processes	1.847	.070	-.087	-.736	2.516	-.292
Length	3.105	1.823	.268	.039	.095	.417
Relationship before	2.421	.902	.007	-.046	.172	-.269
Relationship after	2.421	.902	-.656	-.586	.177	-3.312*
WP issues	.073	.026	.545	12.013	5.295	2.269
WP processes	1.789	.075	.125	.086	.166	.518
Current relationship	2.632	.895	.115	.086	.166	.518
Trust	2.612	.820	.654 (No data	.010 tolerance reached)		
Constant				9.432	7.879	1.197

*p<.05

Level of Satisfaction- Overall; Range= 4;
 Mean=3.091; S.D.= .633; R²= .944; F= 3.352;
 df= 15,3; Std. Err.= .368; N= 19.

processes. Also, they reported a higher level of trust (mean= 2.616, p<.01).

However, in contrast to their counterparts with no WP (hypotheses one and two) those with broad CB processes and CB separated from WP report a lower level of satisfaction with the employment exchange and their personal role. As was the case earlier, the trust variable is significant where the

TABLE 13
 (WP Separated and Broad CB)
 Regression Estimates on Overall Level of Satisfaction

	Mean	Std. Dev.	r with Dependent Variable	b	Std. Err.	t
Age	45.321	9.491	.137	-.010	.028	-.369
Sex	1.179	.390	-.075	-.151	.355	-.427
Race	1.036	.189	-.191	-1.185	1.049	-1.130
Full/part-time	1.500	.509	.039	.186	.274	.679
Seniority	22.036	9.090	.296	.022	.036	.623
Years as official	11.714	7.408	.234	.004	.023	.169
Current position	2.964	1.232	-.020	-.008	.094	-.084
Education	2.321	1.056	.115	.015	.119	.127
CB processes	1.564	.175	-.167	-1.431	1.197	-1.195
Length	3.071	1.464	.088	-.052	.130	-.397
Relationship before	2.464	1.232	.308	-.235	.120	-1.969
Relationship after	2.357	.870	-.060	.246	.183	1.345
WP issues	.057	.033	.415	7.710	4.157	1.855
WP processes	1.762	.152	-.070	.330	.849	.389
Current relationship	2.893	1.197	.306	.221	.150	1.474
Trust	2.616	.674	.722	.661	.201	3.287**
Constant				3.198	3.909	.818

**p<.01

Level of Satisfaction- Overall; Range= 4;
 Mean=3.134; S.D.= .686; $R^2 = .792$; $F = 2.618$;
 $df = 16, 11$; Std. Err.= .490; $N = 28$.

parties have established a number of joint committees and programs under the CB process.

Hypothesis Five

A work environment with a narrow CB process not separated from the formal WP process will generally lead to more satisfaction with the employment exchange and personal role.

As indicated in Table 14 significant results ($F= 4.210$, $p<.001$) were found for this research hypothesis. Thus, the null hypotheses is rejected. That is, there is a difference in labor leaders' job satisfaction where a narrow CB process is not separated from the formal WP process. Subjects in this condition report a higher level of satisfaction (mean= 3.409) than in any of the previous four hypotheses. In contrast to other categories there were

TABLE 14
(WP Not Separated and Narrow CB)
Regression Estimates on Overall Level of Satisfaction

Independent Variable	Mean	Std. Dev.	r with Dependent Variable	b	Std. Err.	t
Age	42.250	8.248	-.065	-.047	.014	- 3.307**
Sex	1.063	.244	.084	-.019	.252	-.075
Race	1.016	.125	.045	.413	.476	.867
Full/part-time	1.422	.498	-.002	-.109	.120	-.910
Seniority	17.828	9.392	.058	.043	.014	3.117**
Years as official	7.906	7.698	-.187	-.015	.008	- 1.809
Current position	3.125	1.162	-.024	-.029	.053	-.559
Education	2.516	.797	-.211	-.095	.076	- 1.243
CB processes	1.864	.076	.033	.318	.738	.432
Length	3.406	3.407	.185	-.019	.019	-.955
Relationship before	2.031	1.023	.165	-.024	.071	-.342
Relationship after	2.063	.974	-.449	-.216	.075	- 2.892**
WP issues	.319	.204	.085	.104	.274	.378
WP processes	1.723	.133	-.350	-.866	.583	- 1.485
Current relationship	2.672	1.009	.349	-.023	.079	-.290
Trust	2.401	.798	.576	.256	.084	3.051**
Constant				5.708	2.048	2.787**

** $p<.01$
*** $p<.001$

Level of Satisfaction - Overall; Range= 4;
Mean=3.409; S.D.= .542; $R^2= .589$; $F= 4.210$ ***;
df= 16,47; Std. Err.= .403; N= 64.

significant findings for two personal characteristics, age ($p < .01$) and seniority ($p < .01$). The negative relationship of age to level of satisfaction is contrary to that of seniority.

Significant findings were also found for the relationship between the parties after WP was initiated (mean = 2.063, $p < .01$). But, current relationship was not significant although it had a higher mean. As observed in prior hypotheses only a small number of subjects fell into this category which again indicates that caution should be used in considering these results. The significance of the trust variable ($p < .01$) lends support to trust being an especially important where there is some integration of CB and WP.

Hypothesis Six

A work environment with a broad CB process not separated from the formal WP process will generally lead to the most satisfaction with one's job and the personal role as a labor leader. Here it is assumed that the parties have evolved a set of mechanisms -- negotiations, grievance handling, special issue committees and formal WP -- to address a variety of mutual workplace concerns.

For this hypothesized condition the null hypothesis is also rejected as significant results were found where a broad process is not separated from the formal WP process ($F = 11.454$, $p < .001$). As shown in Table 15 the reported level of satisfaction for labor officials in this category is higher (mean = 3.573) than in any of the previous five hypotheses. Again, the importance of trust

TABLE 15
 (WP Not Separated and Broad CB)
 Regression Estimates on Overall Level of Satisfaction

Independent Variable	Mean	Std. Dev.	r with Dependent Variable	b	Std. Err.	t
Age	42.829	8.573	.017	.010	.005	1.991*
Sex	1.146	.354	.010	.038	.083	.456
Race	1.141	.349	-.010	-.127	.086	-1.468
Full/part-time	1.546	.499	.054	.044	.061	.718
Seniority	18.941	8.054	-.026	-.006	.006	-.988
Years as official	8.946	7.677	.011	-.001	.005	-.281
Current position	3.249	1.205	.082	.022	.024	.925
Education	2.610	.723	.187	.113	.042	2.662**
CB processes	1.452	.175	-.050	.410	.179	2.291*
Length	4.512	4.487	-.090	-.013	.007	-1.977*
Relationship before	2.259	.973	.041	-.094	.033	-2.847**
Relationship after	1.795	.948	-.404	-.061	.036	-1.677
WP issues	.350	.212	.137	.244	.141	1.726
WP processes	1.654	.159	-.316	-.449	.208	-2.162*
Current relationship	2.863	1.000	.562	.175	.039	4.483***
Trust	2.628	.826	.549	.203	.047	4.347***
Constant				2.328	.516	4.512***

*p<.05
 **p<.01
 ***p<.001

Level of Satisfaction- Overall; Range= 4;
 Mean=3.573; S.D.= .533; R²= .494; F= 11.454***;
 df= 16,188; Std. Err.= .395; N= 205.

in the union- management environment is emphasized. The level of trust is also higher (mean= 2.628, p<.001) than in any of the previous categories.

Broader WP processes (mean= 1.654, p<.05) were reported here than in any other condition regarding the separation of CB and WP. This category also has more experience with formal participation processes (length= 4.512, p<.05). Overall, more findings of significance were found for this case than

in any previously. In contrast to the other research hypotheses current relationship rather than relationship after is significant ($p < .001$). Under this hypothesis labor officials indicated broader CB processes (mean = 1.452, $p < .05$) than in other instances. This can be an indication of more formal and informal interactions between union officials and management to resolve employee and organizational needs/interests outside of formal CB.

The two poles of this study regarding level of satisfaction are represented by hypothesis one and hypothesis six. The former involves subjects with narrow CB processes and no formal WP process, and the latter subjects with broad CB processes and no separation of CB and WP. Subjects in hypothesis six ($F = 11.454$, $p < .001$) reported a higher level of satisfaction (mean = 3.573) than the satisfaction (mean = 3.297) reported in hypothesis one ($F = 1.430$, n.s.).

Comparisons of Means

The ANOVA F test results for comparisons of means are summarized in Table 16. The results indicate that the six research hypotheses overall level of satisfaction means are significantly different from each other ($F = 7.465$, $p < .001$). The findings further support the level of satisfaction relationships for the hypothesized categories found above. Where no formal WP was reported (hypotheses one and two) subjects with a narrow CB process reported a higher overall level of satisfaction than those with broad CB.

The table illustrates the monotonic nature of the relationship between level of satisfaction and the hypothesized categories with formal WP. Overall level of satisfaction was highest where broad CB processes were not

TABLE 16
ANOVA Results: Level of Satisfaction with the
Research Hypotheses as the Categorical Variable

Level of Satisfaction	Hypothesis	N	Mean	F	Hypotheses Contrasts*
Overall				7.465***	
	One	91	3.408		
	Two	53	3.343		
	Three	39	3.087		
	Four	51	3.213		
	Five	48	3.409		(5 - 3)
	Six	358	3.539		(6 - 3) (6 - 4)

*Denotes pairs of hypotheses significant at $p < .05$

*** $p < .001$

separated from the formal WP process. And, lowest where there are narrow CB processes and they are separated from formal WP.

A Tukey or honestly significant difference (HSD) test was performed to determine which pairs of means were significantly different (Keppel, 1982). Although the mean values for the six hypotheses were different, only three of the fifteen pairs ($6 [6 - 1] / 2 = 15$) were significantly different from each other. Hypothesized categories five and three, six and three, and six and four were found to be statistically significant at the 0.05 level. ANOVA results for level of satisfaction sub-scales are summarized in Appendix I.

Additional Analysis

Due to the existence of small N's in most of the hypothesized categories regression analysis was performed on an additional category. It included all

the subjects who have a formal WP process and it produced a larger number of subjects (N= 316) with which to compare the CB and WP relationship. The results for this category as listed in Table 17 are significant ($F= 14.666$, $p<.001$). None of the personal characteristics is significant. However, except for WP length and CB processes, each of the relevant workplace characteristics is significant.

Of interest from this table is that in general those who have formal WP activities indicate a lack of separation between CB and WP issues as evidenced by the significant WP issues variable (mean= .301, $p<.01$). They also report the existence of broad WP processes (mean= 1.686, $p<.01$) at their workplaces.

Equally important in this table is that trust is again significant ($p<.001$). This again underscores its importance where there is a merging of CB and WP. The significance of trust is also related to the fact that labor officials report having broad CB processes, although the variable was not significant.

Relevant Workplace Variables

Multiple regression analyses for the same hypothesized conditions were conducted on a smaller set of variables to see if they produced results which are similar or different from those in the previous categories. Norusis (1983) has suggested also looking at less variables, stating that including a large number of independent variables is not a good strategy and is difficult to interpret. The goal here is to focus specifically on the relevant workplace variables in Figure 1 and possibly build more concise CB and WP relationship models.

TABLE 17
 (Do Have WP)
 Regression Estimates on Overall Level of Satisfaction

Independent Variable	Mean	Std. Dev.	r with Dependent Variable	b	Std. Err.	t
Age	42.589	8.556	.030	.003	.005	.617
Sex	1.127	.333	.017	.006	.079	.079
Race	1.104	.306	.037	-.048	.086	-.556
Full/part-time	1.500	.501	.078	.030	.054	.554
Seniority	18.763	8.468	.037	.004	.005	.159
Years as official	8.839	7.608	-.003	-.003	.004	-.816
Current position	3.206	1.179	.056	.007	.022	.340
Education	2.573	.775	.099	.058	.034	1.708
CB processes	1.569	.235	-.166	.046	.119	.384
Length	4.076	4.012	.019	-.012	.007	-1.842
Relationship before	2.241	1.007	.082	-.067	.029	-2.318**
Relationship after	1.937	.964	-.429	-.097	.032	-3.046**
WP issues	.301	.218	.229	.381	.124	3.085**
WP processes	1.686	.156	-.340	-.436	.184	-2.362**
Current relationship	2.813	1.014	.452	.095	.033	2.864**
Trust	2.580	.809	.553	.289	.040	7.284***
Constant				3.108	.465	6.681***

**p<.01
 ***p<.001

Level of Satisfaction - Overall; Range= 4;
 Mean= 3.472; S.D.= .576; R²= .440; F= 14.666***;
 df= 16,299; Std. Err.= .443; N= 316.

A stepwise selection procedure (Cohen and Cohen, 1983) was performed to construct regression models for the relevant workplace variables. Norusis suggests that stepwise selection of independent variables is probably the most commonly used procedure in regression analysis. The criterion to determine the entry of variables is the probability associated with the F test (PIN) is less than or equal to 0.05. The removal or maximum F value probability a variable can have to remain after succeeding variables have been entered is

0.10 (SPSS Inc, 1986).

In general, multiple regression analyses and stepwise estimates for the relevant workplace variables produced results which are similar to those obtained earlier under hypotheses testing. Thus another detailed review would not add to those earlier findings. However, some tables are listed and discussed below to reiterate a few key points. Other regression and stepwise tables for relevant workplace variables are listed in Appendix J.

Listed below in Tables 18 to 21 are regression estimates and related stepwise estimates for subjects where WP and CB are not separated. Similar estimates are shown in Tables 22 and 23 for all subjects who have WP activities. Basically, the results reiterate that more significant regression results were found in Table 20 where labor leaders indicated that they had broad CB processes and where CB and WP were not separated ($F= 33.190$, $p<.001$). In this category WP issues and processes were significant and level of satisfaction was reported higher (mean= 3.553). Likewise, stepwise results in Table 21 also favored broad CB and no separation between CB and WP ($F= 44.852$, $p<.001$).

Multiple regression analyses for the relevant workplace variables indicate results which are similar to those obtained earlier under hypotheses testing. Thus, a detailed review of those results would not add to those earlier findings. Regression tables for other categories regarding relevant workplace variables and the related stepwise regression results are listed in Appendix I.

TABLE 18
 (WP Not Separated and Narrow CB)
 Regression Estimates on Overall Level of Satisfaction

Independent Variable	Mean	Std. Dev.	r with Dependent Variable	b	Std. Err.	t
CB processes	1.860	.074	.133	1.165	.672	1.732
Relationship before	2.011	1.022	.086	-.053	.058	-.917
Relationship after	2.000	.949	-.330	-.076	.060	-1.270
WP issues	.340	.221	.007	.030	.231	.132
WP processes	1.726	.133	-.326	-.437	.435	-1.004
Current relationship	2.554	1.042	.392	.091	.062	1.473
Trust	2.394	.798	.523	.309	.069	4.450***
Constant				1.257	1.520	.827

***p<.001

Level of Satisfaction - Overall; Range= 4;
 Mean= 3.395; S.D.= .570; R^2 = .379; F = 7.322***;
 df= 7,84; Std. Err.= .468; N= 92.

TABLE 19
 (WP Not Separated and Narrow CB)
 Stepwise Estimates on Overall Level of Satisfaction

Independent Variable	b	Std. Err.	t
Trust	.338	.064	5.275***
WP processes	-.941	.384	-2.452*
Constant	4.211	.715	5.893***

*p<.05
 ***p<.001 Level of Satisfaction - Overall; Range= 4;
 Mean= 3.395; S.D.= .570; R^2 = .319; F = 20.856***;
 df= 2,89; Std. Err.= .476; N= 92.

Table 20
(WP Not Separated and Broad CB)
Regression Estimates on Overall Level of Satisfaction

Independent Variable	Mean	Std. Dev.	r with Dependent Variable	b	Std. Err.	t
CB processes	1.440	.177	-.067	.240	.134	1.790
Relationship before	2.278	.991	.032	-.062	.024	-2.594**
Relationship after	1.798	.943	-.361	-.050	.027	-1.834
WP issues	.363	.211	.088	.212	.112	1.896
WP processes	1.658	.163	-.336	-.418	.151	-2.760**
Current relationship	2.827	.997	.517	.153	.029	5.209***
Trust	2.599	.816	.546	.230	.036	6.342***
Constant				3.026	.364	8.321***

**p<.01
***p<.001

Level of Satisfaction - Overall; Range= 4;
Mean= 3.553; S.D.= .537; R²= .410; F= 33.190***;
df= 7,334; Std. Err.= .417; N= 342.

TABLE 21
(WP Not Separated and Broad CB)
Stepwise Estimates on Overall Level of Satisfaction

Independent Variable	b	Std. Err.	t
Trust	.221	.036	6.114***
Current relationship	.148	.029	5.033***
WP processes	-.426	.151	-2.829**
Relationship before	-.066	.024	-2.726**
Relationship after	-.056	.027	-2.058*
Constant	3.518	.294	11.979***

*p<.05
**p<.01
***p<.001

Level of Satisfaction - Overall; Range= 4;
Mean= 3.553; S.D.= .537; R²= .400; F= 44.852***;
df= 5,336; Std. Err.= .419; N= 342.

As indicated in Table 22 more significant findings and a higher level of satisfaction were found where subjects indicated they had formal workplace activities ($F= 47.137, p<.001$). They also reported that CB and WP issues were not separated and broad collective bargaining processes were instituted.

As in previous results, the above tables support and somewhat mirror those found earlier. That is, labor officials report a higher level of satisfaction where there are broad CB and WP processes, and there is no separation between CB and WP issues. Also as found earlier, the tables above support no separation between CB and WP issues addressed. And, the existence of broad CB and WP type processes at the workplace. Again, the overall results somewhat mirror those obtained in previous models.

Trust

Moderated regression estimates were generated for trust interaction effects with each of the influencing variables listed earlier in Figure 1. Again, due to small N's the research hypotheses categories were collapsed into additional categories of (a) subjects who do have WP and (b) subjects who do not have WP activities. The resulting significant regression results are shown below in Tables 24 and 25, with current relationship as the independent variable.

When interacting with current relationship trust appears to meet the test of a true moderator variable. Current relationship explains 21.1 percent of the variance in level of satisfaction attitudes ($p<.001$). When trust is entered next, R^2 changes to 32.3 percent and F -to-enter is significant ($p<.001$).

TABLE 22
(Do Have WP)
Regression Estimates on Overall Level of Satisfaction

Independent Variable	Mean	Std. Dev.	r with Dependent Variable	b	Std. Err.	t
CB processes	1.545	.235	-.168	-.004	.089	-.042
Relationship before	2.243	1.004	.079	-.051	.022	-2.373*
Relationship after	1.892	.957	-.389	-.072	.024	-3.029**
WP issues	.322	.222	.157	.265	.094	2.812**
WP processes	1.685	.160	.344	-.368	.138	-2.667**
Current relationship	2.783	1.016	.486	.117	.025	4.581***
Trust	2.560	.813	.560	.271	.031	8.868***
Constant				3.269	.298	10.977***

*p<.05
**p<.01
***p<.001

Level of Satisfaction - Overall; Range= 4;
Mean= 3.495; S.D.= .557; R²= .419; F= 47.134***;
df= 7,457; Std. Err.= .427; N= 465.

TABLE 23
(Do Have WP)
Stepwise Estimates on Overall Level of Satisfaction

Independent Variable	b	Std. Err.	t
Trust	.271	.030	8.888***
Relationship after	-.072	.023	-3.037**
Current relationship	.117	.025	4.598***
WP issues	.266	.093	2.874**
WP processes	-.369	.136	-2.702**
Relationship before	-.051	.022	-2.377*
Constant	3.264	.272	11.990***

*p<.05
**p<.01
***p<.001

Level of Satisfaction - Overall; Range= 4;
Mean= 3.495; S.D.= .557; R²= .419; F= 55.109***;
df= 6,458; Std. Err.= .427; N= 465.

TABLE 24
Hierarchical Multiple Regression Testing the Moderating
Effect of Trust on Overall Level of Satisfaction (Do Have WP)

Steps/Variables Entered	B	F ¹	P	R ² Change	Cumulative R ²
1. Current relationship (X)	.010	134.853	.000	.211	.211
2. Trust (Z)	.138	84.088	.000	.112	.323
3. Interaction term (XZ) (1 x 2)	.051	4.820	.029	.006	.330

¹F to enter or remove
N= 505

TABLE 25
Hierarchical Multiple Regression Testing the Moderating
Effect of Trust on Level of Satisfaction (Do Not Have WP)

Steps/Variables Entered	B	F ¹	P	R ² Change	Cumulative R ²
1. Current relationship (X)	-.263	9.401	.002	.046	.046
2. Trust (Z)	.060	32.427	.000	.138	.184
3. Interaction term (XZ) (1 x 2)	.113	5.477	.020	.023	.207

¹F to enter or remove
N= 195

Somewhat surprisingly, trust does not interact significantly as a joint function with WP issues, WP processes and relationship after.

Thus, trust appears to meet the test of a true moderator variable only with current relationship interaction. It accounts for a significant increase in variance explained (Arnold, 1982). The effect of the interaction term, which had a positive regression coefficient, was to amplify the association between current relationship and level of satisfaction; the relationship covaried with trust (Angle and Perry, 1986).

Appendix K lists statistics for moderating regression for trust using WP issues, WP processes, relationship before and after worker participation as independent variables. In each model the moderating interaction was found not to be a significant interaction of level of satisfaction as a function of trust. Several interpretations are possible from these results. For instance, where there are no employee involvement efforts and trust is not significant, other factors or variables may be moderating the relationship. An example may be where the parties are jointly attempting to resolve the more overwhelming issues of layoffs, shutdowns, industry woes, etc.

CHAPTER V

SUMMARY AND CONCLUSIONS

This chapter begins with a discussion of the results obtained from the preceding statistical analyses. The research hypotheses and research questions of this investigation are the basis for this discussion. In essence, the results address whether there is a separation between CB and WP and the possible impact on labor officials' level of satisfaction. Following this discussion some conclusions are drawn and implications for industrial relations and future research are presented.

Summary

In general, this study focused on the relationship between collective bargaining and formal worker participation processes. In unionized environments formal WP efforts are usually entered into within the CB framework. Hence, this research sought to determine the extent to which the separation or integration of the CB and WP (issues and processes) may influence the level of satisfaction of union officials. To date, numerous researchers and practitioners have advocated their separation (Kochan and Dyer, 1976; Rosow

and Zager, 1982; Cole, 1982). However, there has been no direct empirical support for this position. In fact, there has been growing opposition to this stance. Lewin (1981), Schuster (1985) and Rankin (1986) among others have asserted that it is impractical as well as impossible to effect a distinct workplace separation between CB and WP. Seeking to maintain such a separation could be dysfunctional and demoralizing for both labor and management.

To some extent WP and CB may be viewed as intertwined (Schuster, 1984a; Strauss, 1980). By recognizing their intertwined relationship and effecting a merger of participative efforts with bargaining and contract administration, the two sides may be able to more effectively resolve mutual concerns and minimize conflict.

This research was an exploratory field study of the perceptions of labor union officials, utilizing a survey questionnaire and informal unstructured interviews. The sample size of 712 resulted from responses to questionnaires distributed (a) at labor union workshops conducted by Ohio State University's Labor Education and Research Service and (b) selected workplaces throughout Ohio.

The overall dependent variable is labor officials' level of satisfaction. The level of satisfaction is operationalized as their perceptions regarding: (a) the extent to which the union is effectively meeting the needs and expectations of the members; (b) the extent to which their own jobs are personally satisfying, and (c) the extent to which their role as a labor official is personally satisfying.

The independent variables included demographic and relevant workplace variables such as CB processes, WP processes, WP issues and trust. Trust is operationalized in this study following the suggestion of Giffin (1967) and Scott (1980) as the risks labor union officials are willing to take that management will keep or live up to its word.

Discussion

A data analysis of the statistical findings is discussed and summarized by addressing the research questions raised earlier.

(1) To what extent is it possible to maintain a separation of the WP process and the process of CB?

The chi-square results indicated that there were associations between CB and WP processes and issues, trust and labor officials' level of satisfaction. Out of the 712 subjects in the survey only a small number of subjects indicated their formal WP process was distinctly separated from CB; most reported very little if any separation of the two. The level of satisfaction is higher where no separation exists. This is especially the case where there are also broad CB processes .

It would appear from the regression and stepwise analyses that the vast number of subjects with formal WP processes tended to address CB issues under these processes. Thus, there is some support for what Lewin (1981), Rankin (1986) and others have suggested; i.e., it is not possible over time to maintain a distinct or clear separation between the two processes. The issues

identified by labor officials as being addressed under both CB and WP were wide ranging. Future investigations can address this and other questions regarding common CB and WP issues.

(2) Do labor officials feel the two processes (CB and WP) are and should be independent?

Interestingly, during the pre-survey interviews with key national labor leaders caution was frequently expressed regarding the labor movement's sensitivity to linking WP and CB. However, during subsequent interviews with local labor officials from the survey sample, many recognized this concern but acknowledged that some overlap is inevitable.

The survey results and interviews indicate some integration of the two. Labor and management may initially operate the two processes as independent systems. However, as WP efforts mature, issues expand, and the parties gain greater confidence in their use, the two processes may merge. Future research may need to consider how such integration comes about, the role played by key union and management officials, etc.

(3) Is worker participation seen by labor officials as intruding upon or enhancing collective bargaining? If so, under what conditions?

This study found that in workplaces with broad CB processes there were also broad WP processes and more issues considered by the parties. Of course, it was not clear whether the broad CB or WP processes led to consideration of more issues. In any case, WP is not seen as intruding upon the operation of CB.

From another perspective, the responses can be interpreted to support the view that CB is enhanced by the presence of formal worker participation processes. As gleaned from this survey the conditions under which this takes place include (a) a greater degree of trust between the parties and (b) labor officials are positively satisfied with their jobs and role as leaders.

(4) To what extent do labor officials see CB and WP meeting the needs and expectations of their members?

Labor officials were asked to respond to two components of the satisfaction variable regarding meeting members' needs and expectations. Specifically, the extent to which the union is effectively meeting the needs and expectations of its members. And, the extent to which they viewed the employment exchange or their as personally satisfying to them as an employee. As identified in Table 5, each of these satisfaction levels was reported highest where there was a WP process. Therefore, it can be said that CB and WP meet employees needs and expectations where both are present at the workplace. And, as reported in Table 15, the highest level of satisfaction exists where the CB and WP processes are broad rather than narrow; i.e., they are open to a broad variety of issues.

(5) To what extent is the personal job satisfaction of labor officials influenced by the extent of separation between WP and CB?

As noted above, the personal job satisfaction level as reported by labor officials in Table 5 was higher where both CB and WP existed at the workplace. In further analysis, the level of satisfaction was higher where there was no separation between the two. In fact, highest job satisfaction exists

where both are broad and where more CB issues are addressed under WP. From the overall results an interpretation can be made that personal job satisfaction is also highest in this category. More specific analysis in future investigations can further address this and other more detailed questions regarding labor officials' level of satisfaction.

Hypotheses Summary

The research hypotheses were addressed by conducting several statistical tests including chi-square or "goodness-of-fit" and multiple, stepwise and hierarchical regression analyses. The hypotheses were stated as:

- One: A work environment with a narrow CB process and with no formal WP process will generally lead to less satisfaction with one's job or employment exchange and personal role as a labor official.
- Two: A work environment with a broad CB process and with no formal WP process will generally lead to more satisfaction with the employment exchange and personal role.
- Three: A work environment with a narrow CB process separated from the formal WP process will generally lead to less satisfaction with the employment exchange and personal role.
- Four: A work environment with a broad CB process separated from the formal WP process will generally lead to limited satisfaction with the employment exchange and personal role.

- Five: A work environment with a narrow CB process not separated from the formal WP process will generally lead to more satisfaction with the employment exchange and personal role.
- Six: A work environment with a broad CB process not separated from the formal WP process will generally lead to the most satisfaction with one's job and the personal role as a labor leader. Here it is assumed that the parties have evolved a set of mechanisms -- negotiations, grievance handling, special issue committees and formal WP-- to address a variety of mutual workplace concerns.

The six hypothesized conditions were independently analyzed with respect to the null hypothesis. Some hypotheses did not result in significant results; for example, hypotheses one, three and four. This may be attributed somewhat to the lack of larger N's in these categories. Alternatively, the presence of small N's in these categories can be seen as confirming that there is no separation between CB and WP. That is, the majority of the 712 subjects representing thirty-five national and international unions had formal WP processes. Further, most of the officials had broad CB processes. In addition, where formal WP processes existed these labor union officials reported that in general such processes were not be separated from CB.

The resulting CB and WP impact on level of satisfaction also follow the above pattern. Subjects with no WP reported a higher level of satisfaction than their counterparts with separated CB and WP. This comparison is somewhat clouded due to the lack of significance in several categories. One explanation for this can be that labor officials who maintain separate systems collective bargaining and worker participation systems are faced with more conflicts which take away from meeting members' needs and interests.

The more significant findings were found where there is no separation between CB and WP as noted in hypotheses five and six. Hypothesis five, regarding narrow CB processes, resulted in a higher level of satisfaction than in any of the prior categories. Again, a small number of subjects was in this category (N=64). The vast majority of subjects in the sample fell into the final hypothesized category. These subjects with no separation between CB and WP also reported the highest level of satisfaction

Trust

Clearly there are questions surrounding the trust variable. As Bognanno and Myhr (1985) reaffirmed, the lack of trust and willingness to take risks are barriers to labor-management cooperation. This is not surprising since trust was identified as an important yet elusive construct during the personal interviews. Predictably further inquiry is needed to dimensionalize this construct. Perhaps more paramount is what is the meaning of trust as used by the labor movement? Is "trust" the real issue or is it used as a "smoke screen" ? Trust is a significant variable in level of satisfaction for those with

and without WP. But, trust was not found to be a consistent moderator of the form of the relationship between level of satisfaction and issues and processes.

Why then the emphasis on trust? This question obviously deserves further study. However, some insights can be offered from this inquiry. Where WP activities exist, it is perhaps possible to distrust management but still cooperate on joint efforts if employees show support for such efforts and/or organizational survival so dictates. Also, what union officials personally feel may not be congruent with their actions, what the members may want or what actually takes place in the work environment. Furthermore, the construct of trust may be a smoke screen. That is, citing "distrust" when workplace conditions are not to their liking may simply be diachronic union rhetoric. When used in this manner, the concept of trust may mask other organizational or interpersonal issues which should be addressed if cooperative efforts are to be sustained.

Conclusions

Some of the more recent studies on formal participation processes have suggested that there are commonalities between CB and WP. These commonalities have often been directly and indirectly related to the overlap of the real issues confronting organized labor and management. This study concludes that there is an overlap of issues addressed by the two processes.

There was also consensus in pre and data collection interviews that it is practically impossible to have a clear and distinct line of demarcation between CB and WP. The statistical results obtained in this investigation support the input from the survey interviews. The amount of blurring that takes place or the degree that is allowed by the two parties is perhaps situational and related to the relationship between the union and management.

Overall, labor officials generally feel that a separation of CB and WP does not mean an absolute division. There was consensus that some overlap between the two should be expected and, in fact, is inevitable. Under certain conditions they could "live with" some merging. Some of the conditions are: if it does not change or alter the negotiated agreement; it is voluntary and confined to a small group; it is jointly managed and a satisfactory labor-management relationship exists. What issues are commonly overlapped and the circumstances leading to such overlapping represent other areas which require additional investigation.

As WP activities move away from what are sometimes called creature comfort issues such as housekeeping and general maintenance to more substantive issues such as shop rules, retraining and overtime scheduling integration is more probable. Although some issues may appear to be more prone to blurring, one clear caution seems in order. There should be little if any attempt to establish specific standards or rules to separate the two, if proper safeguards are acknowledged.

Mature worker participation efforts may make it necessary for management and the union to consider modifications in their

distributive-adversarial roles towards more integrative workplace relations. It is suggested that the collective bargaining process, built upon the foundation of worker voice, should be sufficiently flexible to help institutionalize needed changes. As supported by past research, effective employee cooperative efforts can potentially bring about changes in the structure for workplace decision-making, in addition to significantly affecting traditional labor-management relations. However, any modification or extension of collective bargaining should be done with care so as to maintain the integrity of the grievance procedure and the negotiations process.

At this point a number of questions can be raised regarding the above position. The paramount one is "How to institutionalize the integration of the two processes?" The response to this question is similar to one given above in regard to overall worker participation processes; that is, attempts to generalize should be avoided. The pace and degree of integration depends on factors unique to the union-management relationship in question; for example, the maturity of the relationship, the level of trust between the two parties, the desires of union members, etc.

Recommendations

Based upon the literature search, interviews with national and local labor leaders, and the data collected in this study, the following recommendations for future research are offered:

1. Care should be exercised to avoid a broad generalization of the results of this study. The sample used was not randomly selected and represented labor officials predominantly from a midwestern state. Future replications using samples from other geographic areas are encouraged.

2. Future research should be undertaken directed more specifically at operationalizing the CB processes, WP processes and WP issues variables. Their definitions in this study represents the consensus findings from interviews with representatives from the labor movement, government and academia. Hence, the definitions used in this investigation may reflect their inherent biases.

3. Closely related to the above is a need to further address how to distinguish narrow and broad processes, and what constitutes a true separation of CB and WP. For this inquiry a conservative approach was taken in developing the hypothesized categories. It remains to be seen if the conclusions reached can be sustained through more liberal treatments of the categories.

4. An important factor in the WP process is the construct of trust. Its definition and measurement in this study are open to questions and challenges. Further study of trust should help to bring about a better definition and understanding of how it relates to WP and union-management relations. The future emphasis on trust should also be geared towards an understanding of what is referred to when labor officials mention their trust or distrust in management. That is, are they using trust as a proxy for other workplace conditions or to mask personal biases?

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Appendix A

Cover Letter

Room 02 Page Hall
1810 College Road
The Ohio State University
Columbus, Ohio 43210
(Date)

We are writing in hopes you will assist us in research on a current topic of interest to the general labor movement. The topic is "cooperation programs" that have been established at the workplace involving workers participating in decision-making. And, your opinions would be of great value to our research.

Specifically, we would like to know how you feel about cooperation programs established jointly by the union and management, such as Quality-of-Work-life (QWL) and Employment Involvement (EI). The attached questionnaire is being used to obtain your opinions. Your opinions, along with those of other union officials, will be used to come up with some overall conclusions about joint union-management programs.

If you would, **PLEASE COMPLETE THE BRIEF QUESTIONNAIRE ATTACHED** about joint Union-management programs, and **RETURN IT TO US IN THE ATTACHED STAMP ADDRESSED ENVELOPE ALSO ATTACHED.**

Please **DO NOT** include your name. Your participation is voluntary. We will maintain the confidentiality of the information you provide.

The questionnaire should take only a few moments of your time. The overall results, in addition to being included in labor related publications, will also be available to you. You may contact us at The Ohio State University (614) 292-3270 if you have any questions or want a copy of the results.

THANKS IN ADVANCE FOR YOUR COOPERATION

(Advisor)
(Researcher)

Appendix B

QUESTIONNAIRE: UNION OFFICIALS

Please respond as appropriate to each question.

1. Your age? 00 Years
2. Your Sex? 1 Male 2 Female
3. Your race?
 - 1 a. White
 - 2 b. Black or other minority
4. Is your position?
 - 1 a. Part-time
 - 2 b. Full-time
5. Your total company seniority? 00 Years
6. Your total years as a official? 00 Years
7. Your current union position?
 - 1 a. District or regional officer
 - 2 b. Local union officer
 - 3 c. Committeeperson
 - 4 d. Steward
 - 5 e. Other _____
(title)
8. Your education level?
 - 1 a. Under 12 years of school
 - 2 b. High school graduate
 - 3 c. Some college or technical courses
 - 4 d. College graduate
 - 5 e. Post graduate courses
9. Please check (✓) the committees and programs your union and management have **JOINTLY** established at your plant. (You **may check more than one.**)

	<u>YES</u>	<u>NO</u>
a. Job evaluation committee	a. <u>1</u>	<u>2</u>
b. Blood donor program	b. <u>1</u>	<u>2</u>
c. Health and safety committee	c. <u>1</u>	<u>2</u>
d. Employee outplacement program	d. <u>1</u>	<u>2</u>
e. Medical insurance cost containment committee	e. <u>1</u>	<u>2</u>
f. Joint apprenticeship committee	f. <u>1</u>	<u>2</u>
g. New employee orientation committee	g. <u>1</u>	<u>2</u>
h. Drug and alcohol abuse programs	h. <u>1</u>	<u>2</u>
i. Educational assistance program	i. <u>1</u>	<u>2</u>
j. Employee recognition/awards program	j. <u>1</u>	<u>2</u>

Appendix B (continued)

10. Please indicate **whether or not** there is a formal joint union-management problem solving or employee participation program (such as Quality Circle, Quality of Work Life, Employee Involvement, etc.) at your local plant: **(Please check (✓) only one of the responses.)**

- _1_ a. We currently **do** have such a program. Go to Question 12.
- _2_ b. We currently **do not** have, **but** had one in the past. Go to Question 11 below.
- _3_ c. We **never** had such a program. Go to Question 16

11. In your opinion, why did your joint union-management program end?
(You **may check (✓) more than one** response.)

- _1,0_ a. Management used it to get around the union.
 - _1,0_ b. Management did not really listen to the workers.
 - _1,0_ c. The workers would not volunteer for it.
 - _1,0_ d. There was too much distrust between management and the union.
 - _1,0_ e. It was a waste of time, we really did not deal with serious issues.
 - _1,0_ f. Other (explain) _____
-

12. How long have you had a joint union-management program at your local plant? _00_ Years

13. The relationship between the union and management **Before** starting your joint union-management program can best be described as:

(please check (✓) only one.)

- _1_ a. Poor; numerous conflicts.
- _2_ b. Fair; but there was often a lot of tension.
- _3_ c. It varied; sometimes good, sometimes bad.
- _4_ d. Good; the union and management cooperated most of the time.
- _5_ e. Excellent; very few problems.

14. Since your joint union-management program started, do you feel that the relationship between the union and management has been:

- _1_ a. Better
- _2_ b. Worse
- _3_ c. The Same

Appendix B (continued)

15. Please **check (✓) the items** which you and your union feel **may be topics of discussion under your joint union-management program:**
(you may check (✓) more than one item.)

- | | |
|--|--|
| a. <input type="checkbox"/> Improvement in job methods | w. <input type="checkbox"/> Work procedures |
| b. <input type="checkbox"/> Production planning | x. <input type="checkbox"/> working conditions |
| c. <input type="checkbox"/> Setting production levels | y. <input type="checkbox"/> Subcontracting of work |
| d. <input type="checkbox"/> Changes in job duties | z. <input type="checkbox"/> Retraining |
| e. <input type="checkbox"/> Promotions to supervisory positions | aa. <input type="checkbox"/> Plant location |
| f. <input type="checkbox"/> Apprenticeships | bb. <input type="checkbox"/> Use of pension funds |
| g. <input type="checkbox"/> Transfer or expansion of plant operations | cc. <input type="checkbox"/> Shop rules |
| h. <input type="checkbox"/> Incentive systems, profit sharing, and bonus plans | dd. <input type="checkbox"/> Training or upgrading |
| i. <input type="checkbox"/> Work rules | ee. <input type="checkbox"/> Opening and closing of departments/shifts |
| j. <input type="checkbox"/> Changes in wage rates | ff. <input type="checkbox"/> Job transfers |
| k. <input type="checkbox"/> Use of company bulletin boards | gg. <input type="checkbox"/> Dismissals/discharges |
| l. <input type="checkbox"/> Grievances | hh. <input type="checkbox"/> Layoffs |
| m. <input type="checkbox"/> Job evaluations | ii. <input type="checkbox"/> Attendance guidelines |
| n. <input type="checkbox"/> Seniority/job postings system | jj. <input type="checkbox"/> Leaves of absence |
| o. <input type="checkbox"/> Hiring of new employees | kk. <input type="checkbox"/> Worker discipline |
| p. <input type="checkbox"/> Work force size | ll. <input type="checkbox"/> Shift transfers |
| q. <input type="checkbox"/> Promotions in the work unit | mm. <input type="checkbox"/> Job reclassification |
| r. <input type="checkbox"/> Safety and health conditions | nn. <input type="checkbox"/> Recalls from layoff |
| s. <input type="checkbox"/> Severance pay for layoffs | oo. <input type="checkbox"/> Supervisors working |
| t. <input type="checkbox"/> Overtime scheduling | pp. <input type="checkbox"/> Holiday work schedule |
| u. <input type="checkbox"/> Medical insurance cost containment | qq. <input type="checkbox"/> Night shift premiums |
| v. <input type="checkbox"/> Employee performance standards | rr. <input type="checkbox"/> Other (explain) _____ |

16. Please **check (✓) Yes or No if workers** in your plant **NOW** are allowed to do the following:

- | | <u>YES</u> | <u>NO</u> |
|--|-----------------------------|--------------------------|
| a. Make task assignments as a group. | a. <input type="checkbox"/> | <input type="checkbox"/> |
| b. Set pace of the work. | b. <input type="checkbox"/> | <input type="checkbox"/> |
| c. Decide how the work would be performed. | c. <input type="checkbox"/> | <input type="checkbox"/> |
| d. Evaluate each other's performance. | d. <input type="checkbox"/> | <input type="checkbox"/> |
| e. Offer input into decisions about pay scales/raises. | e. <input type="checkbox"/> | <input type="checkbox"/> |
| f. Help make hiring decisions. | f. <input type="checkbox"/> | <input type="checkbox"/> |
| g. Help make firing decisions. | g. <input type="checkbox"/> | <input type="checkbox"/> |
| h. Have input into decisions about new technology. | h. <input type="checkbox"/> | <input type="checkbox"/> |
| i. Have input into the decisions as to who supervises workers. | i. <input type="checkbox"/> | <input type="checkbox"/> |
| j. Actively take part in new contract negotiations. | j. <input type="checkbox"/> | <input type="checkbox"/> |

Appendix B (continued)

16. (continued) ... Please **check (✓) Yes or No if workers** in your plant **NOW** are allowed to do the following:

	<u>YES</u>	<u>NO</u>
k. Raise grievances when they feel the contract has been violated.	k. <u>-1-</u>	<u>-2-</u>
l. Create and take part in joint worker-management committees and programs.	l. <u>-1-</u>	<u>-2-</u>

17. The current relationship between the union and management in your plant can now be described as: (Please check (✓) only one.)

- 1- a. Poor; numerous conflicts.
-2- b. Fair; but there is often a lot of tension.
-3- c. It varies; sometimes good, sometimes bad.
-4- d. Good; the union and management often cooperate.
-5- e. Excellent; very few problems.

18. **FOR WHERE YOU WORK NOW**. Please check (✓) to indicate your **agreement or disagreement** with each of the following statements:

	Strongly <u>Disagree</u>	<u>Disagre</u>	<u>Neutral</u>	<u>Agree</u>	Strongly <u>Agree</u>
a. Workers feel free to discuss work problems with their immediate supervisor without fear of having it used against them later.....	<u>-1-</u>	<u>-2-</u>	<u>-3-</u>	<u>-4-</u>	<u>-5-</u>
b. Workers have complete trust that their immediate supervisor will treat them fairly	<u>-1-</u>	<u>-2-</u>	<u>-3-</u>	<u>-4-</u>	<u>-5-</u>
c. If a worker makes a mistake, their supervisor is willing to "forgive and forget."	<u>-1-</u>	<u>-2-</u>	<u>-3-</u>	<u>-4-</u>	<u>-5-</u>
d. Most supervisors are friendly and approachable.....	<u>-1-</u>	<u>-2-</u>	<u>-3-</u>	<u>-4-</u>	<u>-5-</u>
e. Workers can count on their supervisor for help if they have a difficult problem with their job	<u>-1-</u>	<u>-2-</u>	<u>-3-</u>	<u>-4-</u>	<u>-5-</u>
f. Management has high regard for the well-being of workers in the organization	<u>-1-</u>	<u>-2-</u>	<u>-3-</u>	<u>-4-</u>	<u>-5-</u>

Appendix B (continued)

18. (continued) ... FOR WHERE YOU WORK NOW. Please check (✓) to indicate your agreement or disagreement with each of the following statements:

	Strongly <u>Disagree</u>	<u>Disagre</u>	<u>Neutral</u>	<u>Agree</u>	Strongly <u>Agree</u>
g. Management at my workplace can be trusted	<u>-1-</u>	<u>-2-</u>	<u>-3-</u>	<u>-4-</u>	<u>-5-</u>
h. Management follows through with what they agree to do	<u>-1-</u>	<u>-2-</u>	<u>-3-</u>	<u>-4-</u>	<u>-5-</u>

19. Please check (✓) to indicate your personal agreement or disagreement with each statement below about joint union-management programs:

	Strongly <u>Disagree</u>	<u>Disagree</u>	<u>Neutral</u>	<u>Agree</u>	Strongly <u>Agree</u>
a. The collective bargaining process does not need such joint programs to help meet our members' workplace needs.....	<u>-1-</u>	<u>-2-</u>	<u>-3-</u>	<u>-4-</u>	<u>-5-</u>
b. Such programs normally do not interfere with the collective bargaining agreement and its administration	<u>-1-</u>	<u>-2-</u>	<u>-3-</u>	<u>-4-</u>	<u>-5-</u>
c. Such programs generally do not cause conflicts between the union and its members	<u>-1-</u>	<u>-2-</u>	<u>-3-</u>	<u>-4-</u>	<u>-5-</u>
d. In general, such joint programs help the union's role	<u>-1-</u>	<u>-2-</u>	<u>-3-</u>	<u>-4-</u>	<u>-5-</u>
e. In general, such programs motivate the union to do the very best job it can	<u>-1-</u>	<u>-2-</u>	<u>-3-</u>	<u>-4-</u>	<u>-5-</u>
f. Such programs result in better communications between the union and management	<u>-1-</u>	<u>-2-</u>	<u>-3-</u>	<u>-4-</u>	<u>-5-</u>
g. Such programs result in better cooperation between the union and management	<u>-1-</u>	<u>-2-</u>	<u>-3-</u>	<u>-4-</u>	<u>-5-</u>
h. All things considered, my union is willing to take part in such programs.....	<u>-1-</u>	<u>-2-</u>	<u>-3-</u>	<u>-4-</u>	<u>-5-</u>

Appendix B (continued)

20. For each of the following statements regarding your workplace, **please check (✓)** whether you **agree or disagree**:

	Strongly <u>Disagree</u>	<u>Disagree</u>	<u>Neutral</u>	<u>Agree</u>	Strongly <u>Agree</u>
a. In general, I feel that my union is really helping our members solve their workplace problems ...	-1-	-2-	-3-	-4-	-5-
b. Where I work, management is willing to listen to workers and their ideas	-1-	-2-	-3-	-4-	-5-
c. All in all, I feel that where I work is a good place to work	-1-	-2-	-3-	-4-	-5-
d. The company treats my union members in a fair and honest manner.	-1-	-2-	-3-	-4-	-5-
e. Besides being a union official, I really like the job that I work on.	-1-	-2-	-3-	-4-	-5-
f. My company's pay and benefits are fair	-1-	-2-	-3-	-4-	-5-
g. All in all, I am satisfied with my role as a union official	-1-	-2-	-3-	-4-	-5-

21. What union are you a member of? Local _____
International? _____

22. What is your employer's name? _____
And City/or Town? _____

23. **ONLY ANSWER THIS QUESTION IF YOU NEVER HAD A JOINT UNION-MANAGEMENT PROGRAM: Why has a program never existed in your plant? (You may check (✓) more than one.)**

- 1,0_ a. Management would use it to get around the union.
- 1,0_ b. Management does not really listen to the workers.
- 1,0_ c. There is too much distrust between management and the union.
- 1,0_ d. It would be a waste of time and workers would not volunteer for it.
- 1,0_ e. Other (explain) _____

24. Do you have any other comments about joint union-management programs?

THANKS FOR YOUR COOPERATION

Appendix C

Variables List

Variable	Questionnaire Item
<u>Independent</u>	
Background Characteristics	
Ages?	1
Sex?	2
Race?	3
Full/Part-time union position?	4
Company seniority?	5
Years as union official?	6
Current union position?	7
Education?	8
Collective bargaining processes?	9
Why process ended?	11
Length of process?	12
Joint relationship before process?	13
Joint relationship after process?	14
Worker participation issues?	15
Worker participation processes?	16
Current joint relationship?	17
Trust?	18
Why process never existed?	23
<u>Dependent</u>	
Level of satisfaction?	
(a) Meeting employee needs?	19(a)(b); 20(a)(b)
(b) As an employee?	19(c); 20(c)(d)(e)(f)
(c) Role as union official?	19(d)(e)(f)(g)(h); 20(g)
(d) Overall?	19(a) - 20(g)

Appendix D

Descriptive Statistics - Total Survey

Variable	N	Mean	Dev.	Mean Range	t	PR> T ¹	
Age	708	40.918	8.670	.326	49	125.58	.000
Sex	710	1.201	.401	.015	1	79.77	.000
Race	705	1.099	.299	.011	1	97.53	.000
Full/Part-time	639	1.502	.500	.019	1	75.90	.000
Seniority	642	17.173	8.540	.337	43	50.95	.000
Years official	594	8.157	7.679	.315	43	25.89	.000
Current position	693	3.177	1.200	.046	4	69.68	.000
Education	696	2.557	.777	.029	4	86.82	.000
CB Process	696	1.603	.239	.009	1	177.01	.000
Why WP ended	53	.333	.185	.025	1	13.12	.000
Length	499	3.892	3.946	.177	35	22.03	.000
Relationship before	541	2.238	1.008	.043	4	51.67	.000
Relationship after	536	1.922	.956	.041	2	46.55	.000
WP issues	590	.306	.226	.010	1	32.03	.000
WP processes	693	1.703	.159	.006	1	281.10	.000
Current relationship	706	2.663	1.010	.038	4	70.03	.000
Trust	707	2.541	.798	.030	4	84.67	.000
Why never existed	145	.265	.248	.021	1	12.85	.000
Level of Satisfaction							
Meet employee Needs	708	3.453	.657	.025	4	139.90	.000
As an employee	693	3.301	.631	.024	4	137.67	.000
Role as union official	693	3.551	.736	.028	4	126.84	.000
Overall	708	3.443	.572	.021	4	160.17	.000

¹The probability of a greater absolute value for Student's t under the hypothesis that the mean is zero.

Appendix E

Dependent Variable Results - Level of Satisfaction

Decision	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean	r
Meeting employee needs							
CB needs WP	8.6	10.7	14.6	41.7	24.5	3.643	.397
WP does not interfere	6.9	14.9	26.1	41.6	10.5	3.346	.540
Union helping	2.6	5.8	9.5	63.6	18.5	3.916	.256
Management listens	10.9	24.6	27.4	34.0	3.2	2.947	.449
As an employee							
WP not cause conflicts	8.6	30.7	24.2	33.5	2.9	2.913	.547
Good workplace	4.7	9.5	25.5	51.2	9.2	3.520	.427
Company fair	11.8	27.6	34.0	24.9	1.7	2.779	.499
Like job	3.1	6.5	18.8	53.3	18.2	3.780	.243
Pay/benefits fair	4.8	11.5	15.7	57.6	10.3	3.584	.227
Role as union official							
WP helps Union	6.5	13.5	25.1	48.8	6.2	3.344	.663
WP Motivates Union	5.7	12.4	27.2	48.5	6.2	3.361	.629
Better Communications	5.4	11.9	19.9	52.1	10.6	3.505	.727
Better Cooperation	5.4	16.5	26.5	42.6	9.0	3.333	.706
Union Willing	5.4	5.4	12.0	58.3	18.8	3.805	.615
Role Satisfying	1.8	4.7	12.0	59.8	21.7	3.952	.246

N= 642

Scaling information: Mean = 51.729; S.D. = 8.510;
Cronbach A = .849; r= Pearson correlation of item
with scale minus item.

Appendix F

Subjects Responses to Relevant Workplace Variables

Variable/ Subject's Status	N	Mean	Std Dev	Std Err	Reliability (Cronbach A)	Comparison of Means (t)
Collective bargaining processes						-9.24***
Have WP	503	1.554	.236	.011	.701	
Do not have WP	192	1.731	.196	.014	.647	
Worker participation issues						2.06*
Have WP	510	.313	.224	.010	.937	
Do not have WP	50	.244	.243	.034	.956	
Worker participation processes						-3.56***
Have WP	500	1.689	.158	.007	.578	
Do not have WP	193	1.737	.157	.011	.610	
Trust						2.29*
Have WP	509	2.584	.808	.036	.883	
Do not have WP	198	2.431	.764	.054	.879	

*p<.05
***p<.001

Appendix G

Chi-Square Tests

G-1

Level of Satisfaction and Worker Participation Issues Separated

		Level of Satisfaction			
		Low	Neutral	High	Total
WP	No	23	169	273	465
Issues	Yes	14	49	30	93
Separated					
Total		37	218	303	558

$\chi^2 = 27.226^{***}$ (df= 2)
 $^{***}p < .001$

G-2

Level of Satisfaction and Collective Bargaining Processes

		Level of Satisfaction			
		Low	Neutral	High	Total
Collective	Narrow	19	112	98	229
Bargaining	Broad	30	170	263	463
Processes					
Total		49	282	361	692

$\chi^2 = 12.067^{***}$ (df= 2)
 $^{***}p < .001$

Appendix G (continued)

G-3
Worker Participation Processes and
Worker Participation Issues Separated

		Worker Participation Processes		Total
		Narrow	Broad	
WP Issues Separated	No	34	426	460
	Yes	26	62	88
Total		60	488	548

$\chi^2 = 37.184^{***}$ (df= 1)
***p<.001

G-4
Level of Satisfaction and Trust

		Level of Satisfaction			Total
		Low	Neutral	High	
Trust	Low	40	189	109	338
	Neutral	9	96	197	302
	High	0	3	62	65
	Total	49	288	368	705

$\chi^2 = 127.536^{***}$ (df= 4)
***p<.001

Appendix H

Tolerances

H-1

Tolerances for Common Independent Variables - Total Sample Survey

	Meeting Employee Needs	As an Employee	Role as Union Official	Overall
Age	.416	.413	.413	.416
Sex	.926	.920	.920	.926
Race	.909	.921	.921	.909
Full/Part-time	.872	.874	.874	.872
Seniority	.357	.351	.351	.357
Years as Official	.625	.622	.622	.625
Current position	.923	.920	.920	.923
Education	.908	.915	.915	.908
CB Processes	.819	.810	.810	.819
WP Processes	.818	.815	.815	.818
Current Relationship	.663	.662	.662	.663
Trust	.660	.659	.659	.660

N=453

Appendix H (continued)

H-2
Tolerances for Common Independent Variables - Do Have WP

	Meeting Employee Needs	As an Employee	Role as Union Official	Overall
Age	.373	.365	.365	.373
Sex	.947	.940	.940	.947
Race	.902	.917	.917	.902
Full/Part-time	.874	.877	.877	.874
Seniority	.302	.291	.291	.302
Years as Official	.601	.596	.596	.601
Current position	.928	.924	.924	.928
Education	.907	.915	.915	.907
CB Processes	.833	.820	.820	.833
WP Processes	.816	.812	.812	.816
Current Relationship	.648	.645	.645	.648
Trust	.639	.635	.635	.639

N=333

Appendix H (continued)

H-3
Tolerances for common Independent Variables - Do Not Have WP

	Meeting Employee Needs	As an Employee	Role as Union Official	Overall
Age	.451	.451	.451	.451
Sex	.806	.806	.806	.806
Race	.858	.858	.858	.858
Full/Part-time	.806	.806	.806	.806
Seniority	.491	.491	.491	.491
Years as Official	.651	.651	.651	.651
Current position	.815	.815	.815	.815
Education	.837	.837	.837	.837
CB Processes	.835	.835	.835	.835
WP Processes	.833	.833	.833	.833
Current Relationship	.754	.754	.754	.754
Trust	.740	.740	.740	.740

N=120

Appendix H (continued)

H-4
Tolerances for Independent Variables - Do Have WP

	Meeting Employee Needs	As an Employee	Role as Union Official	Overall
Age	.343	.330	.330	.343
Sex	.910	.901	.901	.910
Race	.888	.900	.900	.888
Full/Part-time	.845	.842	.842	.845
Seniority	.245	.271	.271	.285
Years as official	.590	.586	.586	.590
Current position	.916	.912	.912	.916
Education	.899	.907	.907	.899
CB processes	.788	.778	.778	.788
Length	.873	.864	.864	.873
Relationship before	.732	.722	.722	.732
Relationship after	.660	.652	.652	.660
WP issues	.856	.857	.857	.856
WP processes	.756	.748	.748	.756
Current Relationship	.555	.555	.555	.555
Trust	.604	.595	.595	.604

N=316

Appendix H (continued)

H-5
Tolerances for Independent Variables - Do Not Have WP (Never)

	Meeting Employee Needs	As an Employee	Role as Union Official	Overall
Age	.456	.456	.456	.456
Sex	.802	.802	.802	.802
Race	.803	.803	.803	.803
Full/Part-time	.784	.784	.784	.784
Seniority	.514	.514	.514	.514
Years as official	.626	.626	.626	.626
Current position	.816	.816	.816	.816
Education	.792	.792	.792	.792
CB processes	.860	.860	.860	.860
WP processes	.837	.837	.837	.837
Current Relationship	.634	.634	.634	.634
Trust	.610	.610	.610	.610
Why Never Existed	.637	.637	.637	.637

N=87

Appendix I

ANOVA: Results: Level of Satisfaction with the
Research Hypotheses as the Categorical Variable

Level of Satisfaction	Hypothesis	N	Mean	F	Hypotheses Contrasts*
Meeting employee needs	One	91	3.394	7.244***	(6-3;6-4;6-5)
	Two	53	3.420		
	Three	39	3.058		
	Four	51	3.240		
	Five	98	3.339		
	Six	358	3.570		
As an employee	One	90	3.173	4.326***	(6-1;6-3)
	Two	52	3.131		
	Three	38	3.038		
	Four	50	3.372		
	Five	97	3.271		
	Six	350	3.385		
Role as union official	One	88	3.624	7.528***	(1-3;1-4)
	Two	52	3.489		
	Three	38	3.132		
	Four	50	3.109		
	Five	97	3.562		
	Six	350	3.634		

*Denotes pairs of hypotheses significant at $p < .05$
*** $p < .001$

Appendix J

Regression and Stepwise Results

J-1
 (WP Separated and Narrow CB)
 Regression Estimates on Level of Satisfaction

Independent Variable	Mean	Std. Dev.	r with Dependent Variable	b	Std. Err.	t
CB processes	1.844	.071	-.001	1.497	1.293	1.158
Relationship before	2.200	.957	.116	-.248	.120	-2.065
Relationship after	2.360	.907	.634	-.262	.139	-1.882
WP issues	.064	.031	.534	8.090	3.351	2.414*
WP processes	1.803	.079	-.026	-.482	1.282	-.377
Current relationship	2.600	.913	.289	.100	.127	.782
Trust	2.460	.851	.621	.292	.165	1.768
Constant				.844	3.063	.276

*p<.05

**p<.01

Level of Satisfaction - Overall; Range= 4;
 Mean= 3.06; S.D.=.634; R²= .696; F= 5.551**;
 df= 7,17; Std. Err.= .415; N= 25.

Appendix J (continued)

J-2
(WP Separated and Narrow CB)
Stepwise Regression Estimates on Level of Satisfaction

Independent Variable	b	Std. Err.	t
Relationship after	-.390	.097	-4.023**
WP issues	8.810	2.797	3.149**
Constant	3.422	.325	10.540***

**p<.01 Level of Satisfaction - Overall; Range= 4;
p<.001 Mean= 3.061; S.D.=.634; R²= .588; F= 15.703;
df= 2,22; Std. Err.= .425; N= 25.

J-3
(WP Separated and Broad CB)
Regression Estimates on Level of Satisfaction

Independent Variable	Mean	Std. Dev.	r with Dependent Variable	b	Std. Err.	t
CB processes	1.565	.160	-.169	-.332	.566	-.586
Relationship before	2.326	1.128	.245	-.091	.088	-1.040
Relationship after	2.442	.854	-.087	.037	.103	.358
WP issues	.053	.034	.282	5.247	2.421	2.167*
WP processes	1.789	.157	-.038	.676	.519	1.303
Current relationship	2.628	1.134	.275	.151	.093	1.632
Trust	2.578	.651	.601	.509	.136	3.737**
Constant				.575	1.459	.394

*p<.05 Level of Satisfaction - Overall; Range= 4;
p<.01 Mean= 3.135; S.D.=.596; R²= .459; F= 4.245;
df= 7,35; Std. Err.= .480; N= 43.

Appendix J (continued)

J-4
(WP Separated and Broad CB)
Stepwise Regression Estimates on Level of Satisfaction

Independent Variable	b	Std. Err.	t
Trust	.550	.114	4.812***
Constant	1.717	.304	5.653***

***p<.001 Level of Satisfaction - Overall; Range= 4;
Mean= 3.135; S.D.=.596; R²= .361; F= 23.155***;
df= 1,41; Std. Err.= .482; N= 43.

J-5
Regression Estimates on Level of Satisfaction - Total Sample Survey

Independent Variable	Mean	Std. Dev.	r with Dependent Variable	b	Std. Err.	t
CB processes	1.548	.234	-.161	.013	.090	.146
Relationship before	2.229	1.010	.072	-.056	.021	-2.607**
Relationship after	1.918	.956	-.384	-.070	.024	-2.921**
WP issues	.318	.224	.180	.332	.095	3.507***
WP processes	1.689	.162	-.350	-.425	.137	-3.100**
Current relationship	2.749	1.017	.460	.117	.025	4.740***
Trust	2.552	.803	.538	.274	.031	8.938***
Constant				3.294	.298	11.058***

**p<.01 Level of Satisfaction - Overall; Range= 4;
p<.001 Mean= 3.464; S.D.=.573; R²= .404; F= 47.931;
df= 7,494; Std. Err.= .445; N= 502.

Appendix K

Hierarchical Results

K - 1

Hierarchical Multiple Regression Testing
the Moderating Effect of Trust on Level of Satisfaction (Do Have WP)

Steps/Variables Entered	B	F ¹	P	R ² Change	Cumulative R ²
1. WP issues (X)	.339	11.056	.001	.021	.021
2. Trust (Z)	.368	223.745	.000	.301	.322
3. Interaction term (XZ) (1 x 2)	.035	.120	n.s.	.000	.322

¹F to enter or remove
N= 507

K-2

Hierarchical Multiple Regression Testing
the Moderating Effect of Trust on Level of Satisfaction (Do Not Have WP)

Steps/Variables Entered	B	F ¹	p	R ² Change	Cumulative R ²
1. WP issues (X)	2.372	2.937	n.s.	.059	.059
2. Trust (Z)	.546	12.354	.001	.199	.258
3. Interaction term (XZ) (1 x 2)	.683	1.683	n.s.	.027	.285

¹F to enter or remove
N= 49

Appendix K (continued)

K-3
 Hierarchical Multiple Regression Testing
 the Moderating Effect of Trust on Level of Satisfaction (Do Have WP)

Steps/Variables Entered	B	F ¹	P	R ² Change	Cumulative R ²
1. WP processes	-1.011	64.933	.000	.116	.116
2. Trust	.130	165.757	.000	.222	.338
3. Interaction Term (1 x 2)	.123	.541	n.s.	.001	.338

¹F to enter or remove
 N= 498

K-4
 Hierarchical Multiple Regression Testing
 the Moderating Effect of Trust on Level of Satisfaction (Do Not Have WP)

Steps/Variables Entered	B	F ¹	P	R ² Change	Cumulative R ²
1. WP processes	.979	.964	n.s.	.005	.005
2. Trust	1.071	39.947	.000	.175	.180
3. Interaction Term (1 x 2)	-.431	1.589	n.s.	.007	.187

¹F to enter or remove
 N= 190