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CRITICAL INCIDENTS OF THE I.R. MANAGER'S BEHAVIOR:
AN EXPLORATORY STUDY OF PERCEPTIONS OF
MANAGERS AND UNION REPRESENTATIVES

by

J. David Whitehead

School of Business Administration

Submitted in partial fulfilment
of the requirements for the degree of
Doctor of Philosophy

Faculty of Graduate Studies
The University of Western Ontario
London, Ontario
August 1986

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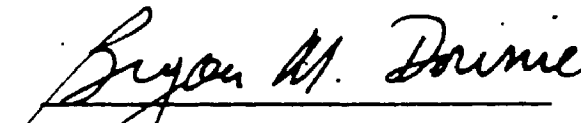
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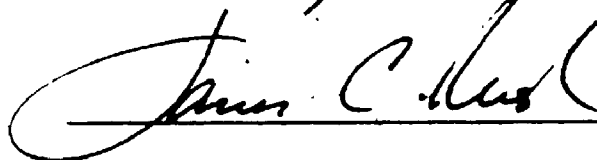




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The Thesis by
J. David Whitehead

entitled
Critical Incidents of the I.R. Manager's Behavior:
An Exploratory Study of Perceptions of
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is accepted in partial fulfilment of the
requirements for the degree of
Doctor of Philosophy

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ABSTRACT

Statement of the Problem: This study is a conceptual replication of Yukl and van Fleet's (1982) new critical incident method and managerial taxonomy. The study is also an exploratory study of the behaviors of the I.R. manager perceived to be critical to effectiveness by line managers, I.R. managers, and union reps.

Method: Critical incidents of perceived effective behavior by I.R. managers and data on respondents' function, level, and perceptions of the I.R. climate in their bargaining situation were collected by self-administered questionnaire from 365 respondents in 101 bargaining situations in Canada during the summer and fall of 1985. The survey was of private sector companies, excluding those in the construction industry, with bargaining situations of 500 or more employees. The critical incidents were coded into the 19 categories of the managerial behavior taxonomy by three raters. Reliable codes were cross-classified with variables representing respondents' function and level, task (negotiation, administration) on which the I.R. manager was engaged, perceived effectiveness of the behavior, and measures of perceived I.R. climate in the respondents' bargaining situation. Results for I.R. managers were compared with Yukl and van Fleet's results for military leaders.

Results: Significant differences were found in the patterns of I.R. managers' behaviors for respondents' function (line and I.R. manager, union rep), managerial function controlling for level, level controlling for managerial function, task, effectiveness, effectiveness controlling for administration task, union-management relations, and productivity and product quality of Unionized employees. The behavior patterns for I.R. managers and military leaders were significantly different. Perceptions of the I.R. climate in the bargaining situation were found to differ significantly with respondents' function and managerial function.

Although the results were statistically significant, the degree of association was weak. The nature of the differences in distributions was explored by examining cell contributions to overall chi-square and by conducting one and two sample Z tests of proportions.

types and situational contingencies of perceived effective and ineffective behavior of Industrial Relations managers in different situations in Canadian companies with large bargaining units. The third objective was to generate and set out the implications of the research for the practice, education, and development of Industrial Relations managers.

1.3 IMPORTANCE OF THE RESEARCH -- THE STUDY TO BE REPLICATED

The study to be replicated was recently selected by the award committee of the Academy of Management's O.B. Division to be the first recipient of its "Showcase Study Award" in recognition of "superior conceptual and empirical work within the field of Organizational Behavior" (Brett, 1983). The present replication of this award winning study directly addresses the authors' suggestion "for greater application of these methodological innovations in the future, particularly with managers and administrators" (Yukl and van Fleet, 1982, p. 107), and is the first such extension to be done to date.

There are a number of reasons why it is important to replicate this new critical incident methodology:

(1980), Legge and Exley (1975), McAfee (1980), and Ritzer and Trice (1969).

(4) Management's role in labor relations is the explicit focus but treatment is not comprehensive.

In the United States, the period between the publication of Kochan's textbook (1980 A) and the writing of the reviews of the book published in a review symposium (especially those by Cummings and Derber, and the reply by Kochan in Ashenfelter et al., 1982) was the watershed after which attention has become more broadly focussed on the need for more research on the roles and behaviors of labor relations managers.

Earlier calls for an explicit focus on management's role had been made (Gospel, 1973; Walker, 1977) and earlier articles had been written on specific aspects of labor relations managers' performance (such as Gandz, 1979, on conflict resolution roles).

British researchers have produced a string of studies on various aspects of the management of labor relations. For example, Ogden (1981) and Purcell (1981) are case studies of the reform at-

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Iron Ore Company of Canada Inc.

John Labatt Limited
Johnson & Johnson Inc.
Kruger Inc.
Laura Secord Limited
Lear Siegler Industries Ltd.
Livingston International Inc.
Loblaws Companies Limited
Lornex Mining Corporation Ltd.
MacMillan, Bloedel Limited
Manitoba Forestry Resources Ltd.
Manitoba Hydro
Maple Leaf Mills Limited
Maritime Telegraph and Telephone Co.
Microtel Ltd.
Motor Transport Industrial Relations Bureau of Ontario
Noranda Inc.
North-Cariboo Forest Labour Relations Association
Northern Telecom Limited
Northwood Pulp and Timber Ltd.
Nova Scotia Power Corporation
Ontario Northland Transport Commission
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Standard Tube Canada Inc.
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1.0 OBJECTIVES AND OVERVIEW OF THE STUDY

1.1 BACKGROUND

This study originated in a longer term research project on industrial relations management effectiveness. The objective of this project was to generate some empirical data that would be useful in improving the education and training of potential I.R. managers and the appraisal and development of I.R. managers now in the function. This data was needed because very little research has been conducted on I.R. management and no research has been done on effective behaviors of individual I.R. managers.

During the first stage of the project, extensive personal interviews were conducted in seven companies and additional interviews were conducted with selected other individuals. During the interviews, descriptions of effective and ineffective behavior by I.R. managers were collected, as well as perceptions of other factors that impacted on individual performance effectiveness.

Alternative methods for analyzing this qualitative data were considered. The new critical incident method de-

veloped and used by Yukl and van Fleet (1982) on critical incidents of military leader behaviors offered the possibility of doing a quantitative content analysis of qualitative performance related data where objective measures of individual performance effectiveness are either not available or at least not available to researchers.

Conducting a conceptual replication of Yukl and van Fleet's study of military leaders on a data base of critical incidents of I.R. managers' behaviors offered the possibility of making a contribution to the study of managerial leadership at the same time as progress was made on meeting the more applied objectives of the research project. Therefore, a mail questionnaire was designed to collect critical incidents of effective and ineffective behaviors by I.R. managers. This report will describe the questionnaire stage of the project.

1.2 RESEARCH OBJECTIVES

The present study had three main objectives. The primary objective of the study was to provide a conceptual replication of a methodological innovation published in a recent award winning article on military leader effectiveness (Yukl and van Fleet, 1982). A secondary, but related, objective was to conduct an exploratory study of the basic

types and situational contingencies of perceived effective and ineffective behavior of Industrial Relations managers in different situations in Canadian companies with large bargaining units. The third objective was to generate and set out the implications of the research for the practice, education, and development of Industrial Relations managers.

1.3 IMPORTANCE OF THE RESEARCH -- THE STUDY TO BE REPLICATED

The study to be replicated was recently selected by the award committee of the Academy of Management's O.B. Division to be the first recipient of its "Showcase Study Award" in recognition of "superior conceptual and empirical work within the field of Organizational Behavior" (Brett, 1983). The present replication of this award winning study directly addresses the authors' suggestion "for greater application of these methodological innovations in the future, particularly with managers and administrators" (Yukl and van Fleet, 1982, p. 107), and is the first such extension to be done to date.

There are a number of reasons why it is important to replicate this new critical incident methodology:

(1) the potential usefulness of the method in studying effective performance of managers, including I.R. managers, for whom objective measures of effectiveness are either not available or are difficult to access for research purposes;

(2) problem areas internal to the Yukl and van Fleet study including a sample of only 114 incidents in study 2, a very low measure of inter-judge agreement (.64) for the managerial behavior classification scheme as a whole, failure to report measures of inter-judge agreement for each of the categories, and possible limits to the generality of those findings based on a sample of student military cadets;

(3) the prestige of the study, given the award it won, and the importance of the critical incident method to the study; and

(4) a recently published critique of a method of analyzing verbal reports as data which has been used frequently in the analysis of think-aloud protocols of cognitive processes (Ericsson and Simon, 1984, pp. 204-215) and which is very similar in form and function to the method proposed by Yukl and van Fleet. Ericsson and Simon discuss such issues as the problematic assumptions concerning the encodability of processes and the segmentation of protocols which under-

lie the method, artifactual or weak results, and standards of inter-judge agreement.

1.4 IMPORTANCE OF THE RESEARCH -- REPLICATION USING I.R. MANAGERS

The importance of improving labor-management relations and, therefore, the performance of I.R. managers, has been well-documented in Canada and elsewhere.

The Macdonald Royal Commission on the Economic Union and Development Prospects for Canada recently reviewed 1000 written submissions and held 57 days of hearings across Canada. In its preliminary report (1984), the Commission noted that

- improving labour-management relations is considered in every part of the country and every sector of the economy as a vital underpinning of improved economic performance.

Furthermore, the report noted that

the challenge of labour-management relations is more wide-ranging and basic than the question of how to reduce the time lost because of strikes and lockouts.... Relationships between employers and employees are fundamental in how well and how quickly adaptation to competition takes place (p. 41).

Two decades ago in the mid to late 1960s, the Woods Task Force on Labour Relations also stressed the importance

of the employer-employee relationship at the level of the firm and, in particular, the important role that management plays within that relationship. The Woods Report noted that

the history of industrial relations in this country reveals that the posture of management is a critical determining factor in the nature of the union-management relationship.

In addition, the report emphasized that poor labor relations is often the result of the poor quality and quantity of a firm's labor relations managers and their lack of status and influence in the firm's management hierarchy.

- there are firms and industries...that seriously neglect the industrial relations function. The turbulence of labour relations in these firms and industries may be traced to the lack of sufficient expertise and concern by employers...Until employers put their own industrial relations in order, an improved statutory framework will not solve their problems. In other cases the difficulty is not so much the quality or quantity of the industrial relations personnel as their position and influence within the managerial hierarchy. A glance at the organization charts of many enterprises shows how little importance is attached to the industrial relations function. Perhaps even more critical is the tendency to compartmentalize the function that everyone else in management abdicates responsibility for union-management relations.

According to the preliminary findings of the Macdonald Commission quoted earlier, the need to improve the management of labor relations in Canada has not decreased significantly since the time of the Woods Report.


7

This problem is not unique to Canada. For example, in the mid to late 1960s while the Woods Task Force was studying labor relations in Canada, the Donovan Commission was studying British industrial relations. Like the Woods report, the Donovan Commission also stressed the relative importance of problems in firm-level/plant-level labor relations as opposed to industry-wide collective bargaining.

The central defect in British industrial relations is the disorder in factory and workshop relations and pay structures promoted by the conflict between the formal (that is, industry-wide bargaining at the national level between employers' associations and trade unions) and the informal (actual behaviors of local managers, shop stewards, workers, and trade unions at the local shop floor level) systems (of industrial relations) (p. 262, parentheses added).

American researchers have also drawn attention to the importance of key individual employee relations managers and labor relations managers, in addition to the significance of the management role per se and the importance of labor-management relations at the level of the firm and nation-wide. For example, Foulkes (1980, p. 92), in a recent study of personnel policies in large American non-unionized firms, noted that

one cannot do justice to personnel's role without discussing the nature or calibre of the top people found in these personnel departments, for they obviously make a difference.

Over twenty years earlier, Slichter  and Livernash (1960, p. 957) also found that individual differences among labor relations managers were extremely important.

Variation in response to similar economic and technological environments is extremely interesting. Various firms in an industry, or closely comparable firms or various plants within a company show significant differences in the character and results of collective bargaining, and it is often unrewarding to search for the explanation in external circumstances. Even working within the framework of the same general policies and procedures, differences in leadership qualities of management and union officials appear very important. Dramatic changes in the quality and character of union-management relations often result from changes in leadership. While it is desirable to search for other causes beyond variation in the ability and personality traits of individuals, the obvious importance of this variable in many comparisons should not be ignored (emphasis added).

In a more recent popular book on ways to improve the management of North American companies, Kanter (1983) discussed the need to manage unions and unionized employees in the drive to unite and integrate the various factions of today's North American companies with a view to "eradicating a historical commitment to segmentation, (so) that a new strategy of success by innovation is made possible" (p. 351). According to Kanter, the "ghosts of segmentalism" may "rise to haunt" companies that experience even dramatic early successes in introducing change toward a more participatory relationship with their unionized em-

ployees. Kanter devotes an entire chapter to illustrate this by means of describing General Motors' attempts to implement a QWL program with the UAW for its unionized employees.

In summary, improving the labor-management relationship and, therefore, the performance of individual I.R. managers have been topics of documented importance for some time. Therefore, any significant findings from a replication of the military leader study using critical incidents involving I.R. managers would have important practical, as well as theoretical, implications.

1.5 OVERVIEW OF YUKL AND VAN FLEET (1982)

The original article on military leadership was distinctive for three reasons, namely, (1) the development of a new measurement instrument (the leader behavior taxonomy), (2) the development of an innovative methodology for analyzing critical incident data (the new critical incident method), and (3) the successful use of this new instrument and methodology in a multi-situational (combat/noncombat; drill/nondrill) and multi-method (critical incident/correlational) research design. In the present study, the use of Yukl and van Fleet's leader behavior taxonomy and critical incident method was replicated on a

sample of critical incidents of effective and ineffective behaviors by Industrial Relations managers in different situations. Although the present study is multi-situational, it is not multi-method.

In the military leadership study, two judges were used to classify critical incidents of effective military leader behavior into one or more of the nineteen categories of a classification scheme of basic types of leader behavior. Inter-judge agreement was measured and statistical analyses of the frequency distributions of the judges' codes across the nineteen categories were made to identify significant differences either within a given distribution or between two different distributions. In this way, the authors were able to identify different patterns of relatively frequently mentioned types of behavior which characterized effective military leaders in different situations. Furthermore, the authors identified several method effects by using the more traditional questionnaire/correlational method (two samples) along with the new critical incident method they developed (two samples).

1.6 CONCEPTUAL REPLICATION: COMPARISON OF YUKL AND VAN FLEET (1982) AND THIS STUDY

The four separate samples of effective military leadership could best be characterized as conceptual replications

themselves because the differences across the samples distinguished them from both exact replications (essentially reliability measures obtained by taking independent samples from the same population but holding all other aspects of the study constant) or systematic replications narrowly defined (a series of samples with any differences being directly manipulated or controlled in order to test generalizability of results to other carefully defined conditions) (Carlsmith, Ellsworth and Aronson, 1976). While exact replications and systematic replications may be common in the natural sciences, the nature of behavioral phenomena and the state of behavioral science makes such controlled repeatability virtually impossible (Carlsmith, Ellsworth and Aronson, 1976).

Although the researchers, the judges, the nineteen category construct of leader behavior, and the population broadly defined as "military leaders" remained constant across the studies, the authors identified a number of differences in addition to method and situation. Uncontrolled differences across the four studies included type of military leader (university student cadet vs. full time military personnel), level of leader (rank and file vs. officer), time (Korean War vs. present), people responsible for collecting the incidents (two of the studies involved re-analyzing data originally collected by others), and var-

ious other aspects of the situation such as simulated combat vs. actual combat.

Conceptual replications vary in the extent to which they differ from the original studies. The differences between the present study of I.R. managers and the original military leadership study are greater than the differences across the four military leader samples.

The present conceptual replication differed from the original study in a number of ways, including the following: (1) critical incidents described the behavior of I.R. managers instead of military leaders; (2) respondents were practicing managers in companies with large bargaining situations instead of students training to be leaders; (3) both effective and ineffective behaviors were analyzed instead of only effective behaviors; (4) a larger number of situational differences relating to both the I.R. managers whose behavior was being described and the respondents who provided the descriptions were identified and measured; and (5) only the critical incident method was used.

Because of differences numbered 1 to 4 above, a successful replication in the present study would be cause for increased confidence in the generality of the original

findings concerning the usefulness of the new measurement instrument and methodology.

1.7 OUTLINE OF CHAPTERS

The next chapter, chapter 2, briefly describes what the organizational behavior and industrial relations literatures have to say about the effectiveness of I.R. managers. This review assumes a general knowledge of the fields of organizational behavior and industrial relations. The chapter concludes with a conceptual framework of the determinants of an I.R. manager's effectiveness.

Chapter 3 presents a conceptual framework of perceived managerial effectiveness and the more limited research framework. Specific hypotheses and research questions are developed.

In Chapter 4, the methodology employed in the study is described including the sample selected, the quantitative scales developed, and the approach taken to the collection, coding, and subsequent quantitative analysis of the qualitative critical incident data.

Chapter 5 describes the results obtained from the questionnaire data. The response rate is discussed and the

individuals and companies who participated in the study are described. The results obtained from the analysis of the questionnaire data, both quantitative and critical incidents, are described in this chapter.

In chapter 6, the results of the study are evaluated, interpreted, and critically reviewed as to the level of support provided for the original hypotheses. Chapter 6 concludes with a discussion of the strengths and weaknesses of the study.

In the final chapter, chapter 7, the conclusions reached in the study are summarized and the implications of the study for theory, research and the management practice are identified. This chapter concludes with suggestions for further research in this area.

2.0 LITERATURE REVIEW

- the study of management in collective bargaining has historically fallen between the cracks of different academic disciplines. Prior to 1940, most management researchers did not acknowledge the legitimacy of unions. Modern personnel and organizational behavior research still does not pay much attention to the role of unions and collective bargaining. Those studying collective bargaining problems have not yet filled this void. In fact, the last comprehensive study of the role of management in collective bargaining was the 1960 encyclopedic study, The Impact of Collective Bargaining on Management by Sumner Slichter, James J. Healy, and E. Robert Livernash...It is clearly time, therefore, to re-examine the role and behavior of management in the U.S. bargaining system (Kochan, 1980 A, p. 177).

In spite of the documented importance of effective performance by labor relations managers, there has been little relevant research on the topic. In fact, the role of labor relations managers and of the labor relations function in general has been largely ignored in both the industrial relations literature and the behavioral science literature. Although the importance of the topic, the lack of relevant research, and the need for more research in this area are being mentioned increasingly in the literature, as in the quote by Kochan above, the development of mid-level conceptual frameworks on the role of management in labor re-

lations has only just begun (Kochan, 1981; Gospel, 1983), and no empirical tests of these models have yet been published.

One of the reasons this topic has fallen through the cracks is its position on the boundary between the I.R. literature and the literature on managerial effectiveness in general. To develop the general background for the study, this chapter briefly reviews what each of these literatures have to say concerning the effectiveness of the I.R. function and I.R. management in general, and the effectiveness of the individual manager in general, respectively. Then a conceptual framework of the determinants of the I.R. manager's effectiveness is developed, drawing on related literature as required. The chapter assumes a general knowledge of both fields and has not attempted an exhaustive historical review of either.

2.1 THE INDUSTRIAL RELATIONS LITERATURE

The literature on labor relations management effectiveness (Gandz and Whitehead, 1984, 1982) can be considered in terms of five main phases or categories. Classification of individual articles or books within this classification scheme is partly a function of the research tradition or school within which the study was done and partly a func-

tion of the time when the study was conducted. The five categories are as follows:

- (1) Management's role in labor relations exists by implication only, that is, there is no explicit mention of, let alone treatment of, management. The voluminous early economic literature on the union wage differential is an example of this type of literature.
- (2) Management's role in labor relations is placed in the proverbial "black box", that is, management is explicitly mentioned as an actor in a system or another component in a model, but no effort is made to examine any details of management's role. Most of the literature on industrial relations theories and paradigms, with the possible exception of the suggestive comments made by Adams (1983) and Walker (1977) on the role of management, for example, would be categorized here.
- (3) Management's role in labor relations is treated as one component in a multivariate analysis focussed on other issues, that is, management is explicitly mentioned and considered, but as a means to other ends. Examples in this category would include (a)

studies of grievances such as Thomson and Murray (1976) and Peach and Livernash (1974); (b) studies of collective bargaining such as Walton and McKersie (1965) (who do deal with intra-management processes, but only in passing), and empirical tests of Walton and McKersie's theories (Peterson and Tracy, 1976 and 1977; Peterson, Tracy and Cabelly, 1981; Turkington and Smith, 1982); (c) studies of the public sector bargaining system by "new wave" researchers (Kochan, 1975; Kochan, Huber and Cummings, 1975; Kochan and Wheeler, 1975; Kochan and Baderschneider, 1978; Anderson, 1979; Anderson, 1982 A); (d) a British study of strike incidence (Turner, Roberts and Roberts, 1977); (e) studies which focus broadly on personnel or human resource management but which do deal with labor relations management in that context (Janger, 1966 and 1977; Murray and Dimick, 1977); and (f) studies which focus on personnel managers broadly defined and include, either implicitly or explicitly, labor relations managers within that definition. Examples of this last type of study include Berra and Blitstein (1979), Cawsey (1980), Crichton and Collins (1966), French and Henning (1966), Harmon (1966), Kumar (1975, 1976), Leach

(1980), Legge and Exley (1975), McAfee (1980), and Ritzer and Trice (1969).

(4) Management's role in labor relations is the explicit focus but treatment is not comprehensive.

In the United States, the period between the publication of Kochan's textbook (1980 A) and the writing of the reviews of the book published in a review symposium (especially those by Cummings and Derber, and the reply by Kochan in Ashenfelter et al., 1982) was the watershed after which attention has become more broadly focussed on the need for more research on the roles and behaviors of labor relations managers.

Earlier calls for an explicit focus on management's role had been made (Gospel, 1973; Walker, 1977) and earlier articles had been written on specific aspects of labor relations managers' performance (such as Gandz, 1979, on conflict resolution roles).

British researchers have produced a string of studies on various aspects of the management of labor relations. For example, Ogden (1981) and Purcell (1981) are case studies of the reform at-

tempts under recommendations of the Donovan Commission. Studies by Brown (1973), Armstrong, Goodman and Hyman (1981), and Goodman (1982) deal with the structures, policies and practices of managers (including labor relations specialists) in the everyday conduct of employer-employee relations on the shop floor. Issues examined include wage drift in piecework pay schemes and the legitimization of management rules and practices on the shop floor. Poole and Mansfield (1981) is also in this tradition of broadly conceiving the terms "management" and "industrial relations."

- (5) Management's labor relations roles and activities are the primary focus and are subjected to comprehensive theoretical and empirical treatment.

There have been some early (Slichter, Healy and Livernash, 1960) and some more recent (Freedman, 1979; Kochan, 1980 A; Brown, 1981) relatively comprehensive treatments of the management of labor relations. There have also been some recent calls for research, and some mid-level framework development on management's role in labor relations (Gospel, 1983; Kochan, 1982; Kochan, McKersie and Cappelli, 1984). However, no comprehensive the-

oretical or empirical studies on the topic have appeared to date.

The studies categorized above in five main phases have utilized a number of approaches, research methodologies and data analysis techniques. Broadly speaking, the studies can be classified as (a) descriptive, (b) explanatory/analytical, or (c) normative/prescriptive, and then cross-classified as (1) "how to, point of view" pieces, (2) theoretical/literature review, or (3) empirical research. An example of such a nine-cell classification scheme of macro-level studies of labor relations management effectiveness is set out in Figure 1.

The studies reviewed used a wide variety of research designs and methods, including direct observation, single case studies, small and medium sized sample case studies, unstructured and semi-structured interviews and large sample questionnaires. In terms of data analysis, there were examples of qualitative content analysis of interview schedules; qualitative scoring of interview schedules, collective agreement provisions, and other documents; and statistical techniques including correlation, factor analysis, and regression analyses. No examples of field experiments on the management of labor relations were found.

Current research on I.R. management effectiveness in Britain can be characterized, on the whole, as (a) more ideologically diverse (there is a strong Marxist stream); (b) concerned with a broader range of phenomena (defining both "industrial relations" and "management" very broadly); (c) more concerned with shop floor, plant level custom and practice; and (d) making relatively more use of "softer" research methods such as single or very small size case studies and observation. The study of labor relations generally in Britain is lively -- the current period has been dubbed Britain's "golden age" of labor relations research.

The current literature on I.R. management effectiveness in North America is more directly related to our topic as can be seen from the following examples:

- (1) the study of the integration of labor relations management into strategic business management generally (Kochan, McKersie, and Capelli, 1984);
- (2) the development of mid-level theories or conceptual frameworks of the management of labor relations (Kochan, 1982, p.203; Kochan, 1981, p.19; Gospel, 1983, p.168),

"HOW TO" POINT OF VIEW	DESCRIPTIVE	EXPLANATORY, ANALYTICAL	NORMATIVE, PRESCRIPTIVE
THEORETICAL/ LITERATURE REVIEW	<p>A. Primarily Literature Review:</p> <p>Straus & Feuille ('78) Kerr ('78) Adams ('83) Walker ('77) Craig ('75) Therpinley ('80) Brewster & Richbell ('83) Kochan, McInnis, & Cappelli ('84) Gordon & Nurick ('81) Hyman ('82)</p>	<p>B. Primarily Model Development:</p> <p>Malton & McKensie ('65) Dunlop ('58) Gospel ('73) Gospel ('83) Peterson & Lewin ('81) Poole & Mansfield ('81) Shirom ('83) Goodman & Sandberg ('81)</p>	<p>Foulkes & Morgan ('77) Doyle ('69) Rohet ('71)</p>
EMPIRICAL A. Primarily Direct Observation Case Studies Interviews	<p>Slichter, Healy & Livermash ('60) Foulkes ('80)</p>	<p>Thomson & Murray ('76) Peach & Livermash ('74) Murray & Djanick ('77) Purcell ('81) Turner, Roberts, Roberts ('77) Armstrong, Goodman, Hyman ('81) Brown ('73) Goodman ('82) Ogden ('81)</p>	<p>"Best Practice" "Bad Practice"</p>
B. Primarily Questionnaires	<p>Freedman ('79) Janger ('77) Janger ('64) Zippo et al. ('83) Brown ('81)</p>	<p>Kochan ('80) (A) Ehrenberg ('73) Kochan, Huber & Cummings ('75) Kochan ('75) Kochan & Wheeler ('75) Kochan & Baderschneider ('78) Anderson ('79) Marginson ('84)</p>	

Figure 1. Types of Literature Reviewed on I.R. Management Effectiveness

especially frameworks which can reflect intramanagement processes (Kochan, Huber and Cummings, 1975) and individual manager's behavior (Adams, 1983; Walker, 1977) and

(3) the bottom-line impact of variations in management responses to unions on work performance, productivity and effectiveness (Lewin and Feuille, 1983).

However, as noted above, no comprehensive empirical or theoretical studies have appeared to date on the effectiveness of the I.R. function, the effectiveness of I.R. management in general, or the effectiveness of the individual I.R. manager.

2.2 THE MANAGERIAL EFFECTIVENESS LITERATURE

"... despite the importance of modern managers to our present and future, ... we know relatively little about them ... about who they are, what they do, and why some are more effective than others" (Kotter, 1982, p.1)

"... because of the state of the literature on executive work and behavior, a literature review would tend to be extremely short (if it included only comparable studies or real theories of executive behavior) or extremely long (if it included all the work in management and the applied social sciences that is in some way relevant). The former isn't very useful, and the latter isn't very practical. Finally, I agree with Mintzberg that we know very little in this area (though perhaps more than "18"). I have found that, when little good empirical or theoretical work exists in an area, literature reviews can distract more than help" (Kotter, 1982, p.197 n.13).

Much of the existing literature on effective human performance is focussed broadly on the study of all human task performance. For example, Dunnette describes a job/person characteristics matrix formed from the combination of task taxonomies (44 categories) and person characteristic taxonomies (65 categories) with 2,860 cells in all (Dunnette, 1982, pp.1-4). Fleishman and Quaintance (1984) is a comprehensive overview of taxonomic theory and research with a focus on developing "a taxonomy of human performance to facilitate generalizations of research" (p.436).

However, Hunter and Schmidt (1982, p.264) note that jobs should be subdivided into at least broad categories such as skilled trades, semi-skilled and unskilled jobs, clerical jobs, and managerial-professional jobs. As Hunter and Schmidt note, "... it is well-known that optimal prediction of job performance requires different ability combinations for different jobs" (p.264).

Only a relatively small portion of the total job/person characteristics matrix would be relevant for managers and managers' jobs. Therefore, much of the literature on effective human performance is either irrelevant or only marginally relevant for managerial effectiveness. For example, McCormick's Position Analysis Questionnaire

"focusses most heavily on work behavior in blue-collar skilled and semi-skilled manual jobs The principal focus of the PAQ elements is on physical and perceptual work activities highly characteristic of skilled and semi-skilled blue-collar jobs. Fewer elements are included that focus on dealing with other people, handling paper work, making decisions in the field, and other areas. Although such functions are covered in the PAQ, they do not receive the intensive sampling that manual activities do ... there are at least 55 items (of the total of 183 items with standard scale responses and 11 additional open-ended items) that appear to deal exclusively or primarily with manual trades ... and only about 20 elements that seem to deal primarily with relatively high-level, white-collar positions (e.g., importance of combining or synthesizing information, importance of advising or counselling others, importance of writing (composing) information, number of persons supervised or responsible for). Whereas some coverage is thus provided for higher-level and white-collar activities, most of the PAQ's discriminatory power is centered on the blue-collar positions" (Peterson and Bownas, 1982, 56-57)..

There has been a considerable amount of work done on managerial effectiveness. However, assessments of the contributions made by this research vary greatly. Hunter and Schmidt (1982, 264) echo the sentiments of Kotter quoted at the start of this section when they claim that "we have not yet successfully measured special skills for managerial-professional jobs (presumably emotional control, social skills, etc.)" so that an assumption "that selection at this level is done solely on general ability" is a reasonable one "because initial selection for such jobs in our economy rests primarily on school achievement, which is highly correlated with general ability."

However, according to Fleishman and Quaintance (1984, pp.117-122), there is at least a basis now for a classification system for managerial jobs. This basis rests on the early Ohio State Leadership studies, which identified the dimensions of consideration and initiating structure, and two later taxonomic investigations of managerial jobs (Hemphill, 1959; Tornow and Pinto, 1976).

These studies focussed on behaviors performed by individual managers. Behavior description ratings were collected by questionnaires or interviews and the measures were factor analyzed to identify broad dimensions of performance by means of intercorrelations of job behaviors. Hemphill's original work identified 191 position elements which measured 10 dimensions (1. Providing a staff service in a nonoperative area; 2. Supervision of work; 3. Internal business control; 4. Technical aspect of products; 5. Human, community and social affairs; 6. Preservation of assets; 7. Long-range planning; 8. Personal demands; 9. Exercise of broad power and authority; 10. Business reputation).

Tornow and Pinto's extension of Hemphill's study identified thirteen job factors which overlapped considerably with Hemphill's, although the labels were not identical. "Coordination of other organizational units" and "personnel

and advanced counselling" were the two factors which were not related to Hemphill's.

Yukl's 19 category managerial behavior taxonomy and his military leader study (Yukl and van Fleet, 1982) belong in this broad stream of research. Yukl and Tabor (1986) have recently reviewed the major managerial taxonomies developed over the last 30 years for the purposes of exhaustively describing the activities of managerial work (Mintzberg, 1973, for example), describing the position responsibilities, duties and requirements (such as Tornow and Pinto, 1976), or identifying the behaviors critical for managerial effectiveness (Yukl and van Fleet, 1982, for example). Yukl and Taber (1986) also developed a revised 13 category version of the original 19 category taxonomy, with revised definitions for the categories. (Note that this revised 13 category taxonomy was not used in the I.R. managers study being reported in this document. The investigator did not have the revised taxonomy and category definitions until after the coding of the I.R. managers incidents was finished. Although the reduced number of categories and the revised definitions in the 13 category scheme would no doubt have increased inter-rater agreement in the I.R. managers study, one of the objectives of this study was to compare the results for I.R. managers with the results for another group of managers, namely, military

leaders. This could not have been done as directly if the revised taxonomy had been used.)

Campbell, Dunnette, Lawler, and Weick (1970) is the most recent monograph length review of research on managerial behavior, performance and effectiveness. Some of the authors' major conclusions from their extensive review have been summarized below:

- (1) Not much research has been conducted on managerial effectiveness, relative to the importance of the subject;
- (2) What has been done on the subject has not focussed on the most appropriate and important aspect, namely, effective managerial behaviors -- behaviors are often relegated to a black box between individual characteristics which predict success and global outcome measures of success, or are aggregated via factor analysis to levels of abstraction which are too high to be useful in a practical way.
- (3) Studies have generally focussed on similarities over a wide range of managerial jobs, rather than

on significant differences between managerial jobs or classes of similar jobs.

- (4) There is a marked discontinuity between (a) what is actually done in the real world of managerial practice to enhance managerial performance effectiveness, and (b) what is studied by researchers in this area.

With respect to point 3 above, some large sample statistical, rather than clinical, studies of general management effectiveness have focussed on similarities across a wide range of functions, including personnel. For example, in these studies, data on personal qualities, such as biographical information and test scores, have been used in a multiple regression equation in order to explain the variance in measures of managerial success or potential statistically (Campbell, Dunnette, Lawler and Weick, 1970, pp.152, 164-165). The Standard Oil Company of New Jersey study, the Sears, Roebuck studies, and several other similar studies, found that "from 30 to 50 percent of the variance in estimates of overall general managerial effectiveness can be expressed in terms of personal qualities claimed by managers/taking part in the investigations" (Campbell, Dunnette, Lawler and Weick, 1970, pp.169, 187). Results varied across the studies and the studies had se-

veral methodological problems. They also focussed on personal qualities, many of which were measured by standard psychological test batteries, instead of on situational factors or actual behaviors.

However, the results of these large sample statistical studies of general management effectiveness do support the existence of a general managerial effectiveness component in all effective managers, including I.R. managers, which would account for a significant proportion of the variance in effectiveness over a group of effective and ineffective I.R. managers combined. While findings such as these may help large organizations predict managerial success, they are not helpful in identifying the ways in which the behavior of effective managers differed from ineffective managers. As Campbell, Dunette, Lawler, and Weick (1970, p.198) noted, "global estimates of effectiveness need to be supplemented with observations of managers' actual job behaviors. These observations should help to discover the various 'roads to effectiveness...'"

The quotes earlier in this section have shown that there are differences of opinion on how far the research on managerial effectiveness has come in the 15 to 20 years since this last comprehensive survey. The study to be replicated and this study do, however, specifically address

three of the deficiencies in the research prior to 1970 which were listed above by adding to the research on managerial effectiveness, focussing on effective managerial behaviors, and identifying distinctive features of jobs and significant differences between jobs. This study also has implications for enhancing I.R. performance effectiveness in the real world of managerial practice.

In conclusion, although some studies have been done comparing the basic job responsibilities, requirements, and duties of general personnel jobs to those of jobs in other functions such as sales (Hemphill, 1959, p.61; Tornow and Pinto, 1976; p.417), no studies of the effectiveness of I.R. managers in general or of the I.R. manager's behavior effectiveness in particular were found in this review.

2.3 DEVELOPMENT OF A CONCEPTUAL FRAMEWORK OF THE DETERMINANTS OF THE I.R. MANAGER'S EFFECTIVENESS

This section describes the development of a conceptual framework of the determinants and results of the individual I.R. manager's effectiveness. This framework was developed on the basis of the literature reviewed above and a broader review of relevant literature in organizational behavior.

The framework is being developed in order to generate lists of related determinants of effective behaviors. Each

list of determinants will be used to construct a taxonomy with category levels and definitions to use in coding the critical incidents to be collected for this study. While the focus of the study is on basic types of managerial behavior, the results from coding the incidents with these additional taxonomies will be useful in further describing the content of the incidents and in identifying any significant contingencies in the use of behaviors. These taxonomies and their use in the study are described in the following two chapters.

A framework of the determinants of managerial effectiveness was set out in Campbell, Dunnette, Lawler, and Weick (1970, p.11). It was an open social systems framework in which "person" factors (characteristics of the individual manager) determined the process (managerial behavior as a function of the manager's ability, motivation, and opportunity), and process factors determined the product (organizational results). In this framework, organizational environment factors impacted on each of the person, process, and product components. Finally, the products of the system impacted in turn on both the process factors and the person factors via feedback loops.

Specific individual characteristics identified in the framework included intelligence, aptitudes, knowledge, tem-

perament, preferences, and expectations. Organizational results identified included profit maximization, organizational efficiency, and high productivity.

Similar frameworks of the determinants and results of individual behavior in organizations can be found as integrating devices in almost every introductory textbook on organizational behavior. Almost all list a series of individual level determinants of behavior, group level determinants, organizational level determinants, and environmental level determinants, all interrelated with feedback loops indicating multi-directional causal linkages.

The framework of the determinants of the I.R. manager's effectiveness to be developed here will have a basic outline similar to those described above. However, the references to the fact that it is an I.R. manager working in an I.R. department and dealing with I.R. related elements in the organization's environment will be made explicit. The items selected for inclusion will be those identified in the literature as affecting or being related to managerial performance effectiveness. Organizational variables selected for inclusion will be those over which managers have some degree of control.

As the review in the previous section indicated, there is no consensus in the literature on the number of items, the names of items, or the definitions of items to be included in performance related taxonomies. For example, Yukl (1986) reviewed eight major taxonomies of managerial behavior alone. Given the scope of this section and the volume of relevant literature, the following review will be highly selective.

2.3.1 Individual Level Factors in the I.R. Manager's Effectiveness

A review of the literature identified twelve individual level determinants of managerial effectiveness, five components of performance effectiveness, and two outcomes of performance effectiveness. The twelve determinants of managerial effectiveness were as follows:

1. role clarity and consensus (Graen, 1976; Kahn, et al., 1964; McGrath, 1976)
2. intelligence (Krech, Crutchfield and Livson, 1969; Kerlinger, 1973)
3. personality traits (Kerlinger, 1973; Nunally, 1978)
4. interests (Nunally, 1978)
5. attitudes (Kerlinger, 1973)
6. values (Kerlinger, 1973; Nunally, 1978)
7. areas of knowledge (Kerlinger, 1973)

8. skills (Hinrichs, 1976; Dunnette, 1976; Campbell, Dunnette, Lawler, & Weick, 1970; McCormick, 1976)
9. aptitudes (Kerlinger, 1973; Dunnette, 1976)
10. abilities (Hinrichs, 1976; McCormick, 1976; Dunnette, 1976)
11. motivation (including expectancies and valences; Campbell & Pritchard, 1976; Campbell, Dunnette, Lawler, & Weick, 1970)
12. job/task requirements (Locke, 1976; Graen, 1976; Kahn, 1964; McGrath, 1976; Fleishman and Quaintance, 1984; McGrath, 1984)

The three components of performance effectiveness were as follows:

1. behaviors (emergent and required; Yukl & van Fleet, 1982; Cohen, Fink, Gadon, & Willits, 1984)
2. results (emergent and required; Campbell, Dunnette, Lawler, & Weick, 1970; Cohen, Fink, Gadon, & Willits, 1984)
3. performance effectiveness (Campbell, Dunnette, Lawler, & Weick, 1970);

The two outcomes of performance effectiveness identified were as follows:

1. rewards (Campbell & Pritchard, 1976; Campbell, Dunnette, Lawler, & Weick, 1970)
2. job satisfaction (Locke, 1976)

Definitions of each of these items can be found in "Appendix I. Individual Factors Classification Scheme Definitions" on page 271. The citations in the list above were the primary sources for the definitions selected.

The reasons why role clarity and consensus are important for I.R. managers are discussed in the next section on organization factors.

The task of the I.R. manager was defined in a Conference Board survey to include union avoidance, contract administration, grievance and arbitration handling, unfair labor practice cases, representation elections, contract negotiation, strike preparation, communication on labor matters, research and other preparations for dealing with union. The following were specifically excluded from the labor relations task: compliance with legislation on equal employment opportunity and occupational safety and health, administration of wages and benefits, and job evaluation (Freedman, 1979).

The specific I.R. tasks listed above have been categorized into three more general I.R. task types called the three phases of the collective bargaining cycle (Phillips, 1981) or the three union challenges to management. (Peach and Kuechle, 1985). These three general task types are union organizing, negotiations, and contract administration.

Walton and McKersie have identified four subprocesses of the labor negotiations task called distributive bargaining (power bargaining on zero-sum disputes), integrative bargaining (problem solving on common problems), attitudinal structuring (influencing attitude changes in others), and intraorganizational bargaining (bargaining with others in your own party).

Relevant areas of general I.R. knowledge include labor law, labor economics, labor history, behavioral science (e.g. interpersonal skills, conflict resolution). Examples of relevant areas of more specific I.R. knowledge include local contract provisions, local arbitration awards, plant rules, regulations, policies, and past practices.

With respect to performance effectiveness, the formal assessment of I.R. managers and of the I.R. function is not widely practiced (Freedman, 1979). Some of the reasons why

this is so are discussed in the next section on organizational factors.

2.3.2 Organizational Factors in the I.R. Manager's Effectiveness

A review of the literature identified eight organizational level determinants of managerial effectiveness. The eight organizational determinants of managerial effectiveness were as follows: structure, processes, task, rewards, people, organizational climate/I.R. climate, constraints, and strategy. Definitions of most of these items can be found in "Appendix J. Organization Factors Classification Scheme Definitions" on page 275. I.R. climate is that part of organizational culture relevant for I.R. activities. I.R. climate refers to the pattern of relationships between unions and management and includes associated behaviors, feelings, beliefs, values, and motivational tendencies.

The primary source for the definitions of these items was Galbraith (1977). The primary source for the discussion of I.R. climate was Gandz (1978).

The department or function created to deal with I.R. issues is the I.R. department. In over 90% of companies, the I.R. department is a subunit of the personnel or human resources function (Janger, 1977, 1966).

There are a number of factors which impact on the effectiveness of the I.R. manager due to some distinctive features of his role in the organization. The I.R. department is a boundary spanning unit created to buffer the technical core of the organization from the uncertainties in the labor relations system (Thompson, 1967), namely, the perceived union threat (Lawrence and Lorsch, 1967). Management creates I.R. departments to search, gather, and filter I.R. information, to handle I.R. transactions, and to get increased control over the threat that I.R. legislation, ministry of labor bureaucrats, I.R. boards, arbitrators, and mediators are perceived to be (Adams, 1980).

I.R. departments share with other boundary spanning units three distinct features: increased psychological or geographical distance from other organization members, limited bases of interpersonal power over members and nonmembers of the organization, and dynamic dual conflicts with both insiders and outsiders. These conflicts result from acting simultaneously as instruments for, and targets of change (Adams, 1980; Perry and Angle, 1979). To paraphrase and extend Adams (1976), the I.R. manager is at the "crunode" of a dynamic, dual relationship in which the outcomes of his interactions in one relationship (inside the company, for example) become simultaneously the inputs to

the other relationship (with the union, for example). This cycle repeats continuously. To be effective, the I.R. manager must be effective in his relationships inside and outside of the company.

However, evaluating the performance effectiveness of I.R. managers is more difficult than that of other managers who are not in boundary spanning roles because of the factors of distance and time spent outside of the organization but on behalf of the organization. Because of the difficulty in getting more reliable information on which to base the assessment in situations like these, Adams (1976) notes that, it is easy for managers to make the fundamental mistake of inferring a boundary spanning manager is functioning well just because the company is doing well.

The framework being developed is a model of the individual I.R. manager's behavior effectiveness. However, this discussion of continual cycles of interactions with union representatives and company managers emphasizes that to think of an I.R. manager performing behaviors without the cyclical interactions with other union reps and third parties, for example, is only to see one phase of one cycle. This model must be supplemented by a number of other models (interpersonal communication, power/dependency, and conflict resolution cycles, for example) which are interac-

tive process models (Emerson, 1962; French and Raven, 1960; Pondy, 1967; Thomas, 1976; Schmidt and Kochan, 1972; Murray, 1974; Gandz, 1979).

2.3.3 Environmental Factors in the I.R. Manager's Effectiveness

A review of the literature identified seven categories of environmental level determinants of managerial effectiveness. The seven categories of environmental determinants of managerial effectiveness were as follows:

1. bargaining structure (Anderson, 1982 B; Kochan, 1980 A)
2. unions and the union-management relationship (Gandz, 1978)
3. government(s), laws
4. community
5. customers, suppliers
6. competitors
7. other factors (e.g. economic, social)

Definitions of each of these items can be found in "Appendix K. Environmental Factors Classification Scheme Definitions" on page 279.

The I.R. department was created to deal with the subsection of the organization's environment called the labor

relations system (Shirom, 1983). The labor relations system for a particular organization is part of the province's or country's general I.R. system (Dunlop, 1958). Where other specific sources have been the primary source for the definitions, these have been cited after the category name above.

CONCLUSION

In concluding this section of the literature review, Figure 2 sets out a diagram of the conceptual framework developed above. The framework

(a) sets out the individual level determinants and results of the I.R. manager's behavior (large box, top half of the diagram);

(b) sets out the components of organizational and functional effectiveness (large box, bottom left of the diagram), in the context of organizational strategy and environment (two small boxes, bottom right of the diagram); and

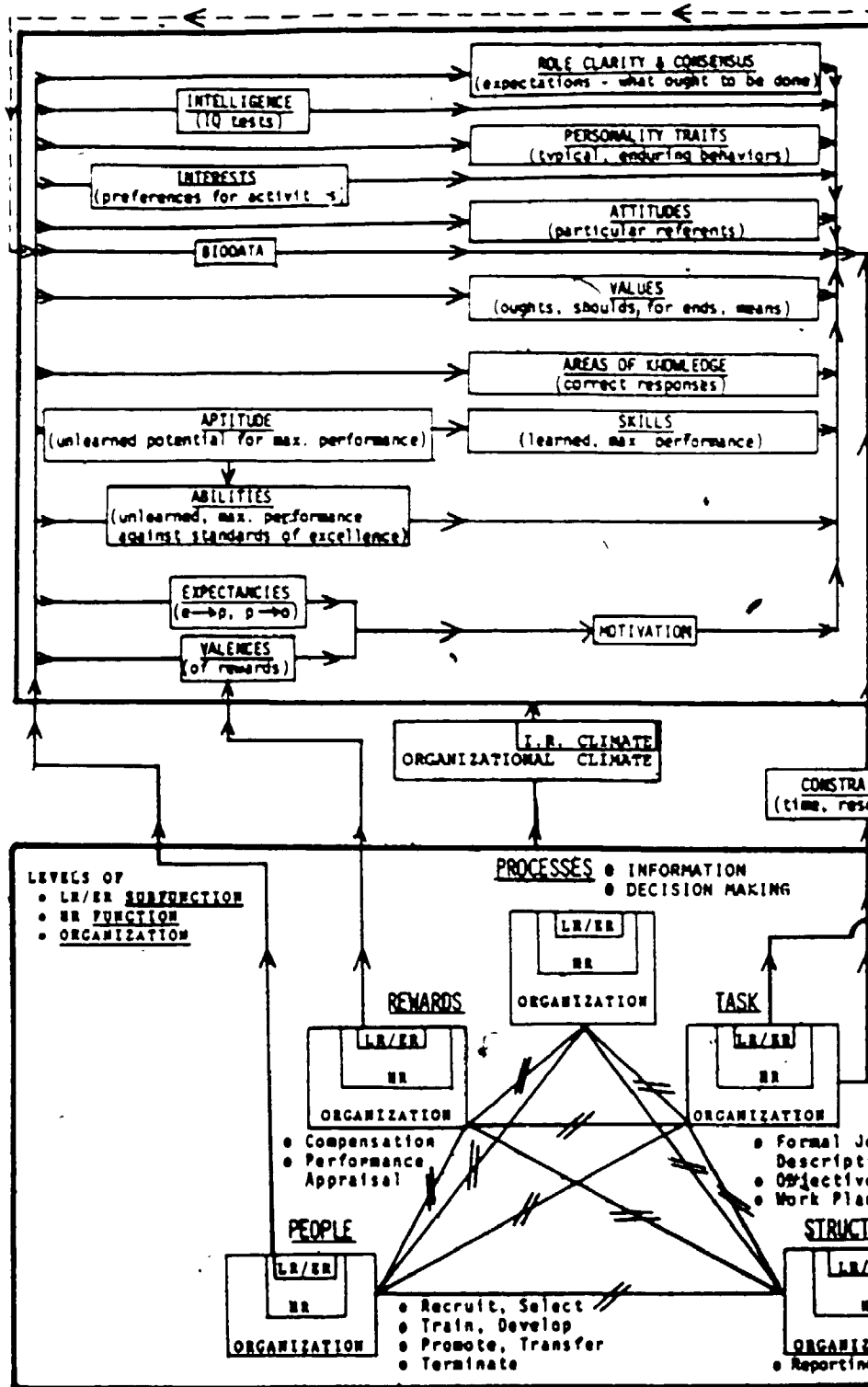
(c) specifies the connections between the micro individual level and the macro organizational and environmental level of the framework, namely, the strategic and organizational

determinants of the individual I.R. manager's performance effectiveness, including the effects of (i) organizational and I.R. climate, (ii) organizational constraints (time, resources), and (iii) the requirements of the I.R. manager's job.

Focussing first on the macro level of organizational and environmental factors, note the following.

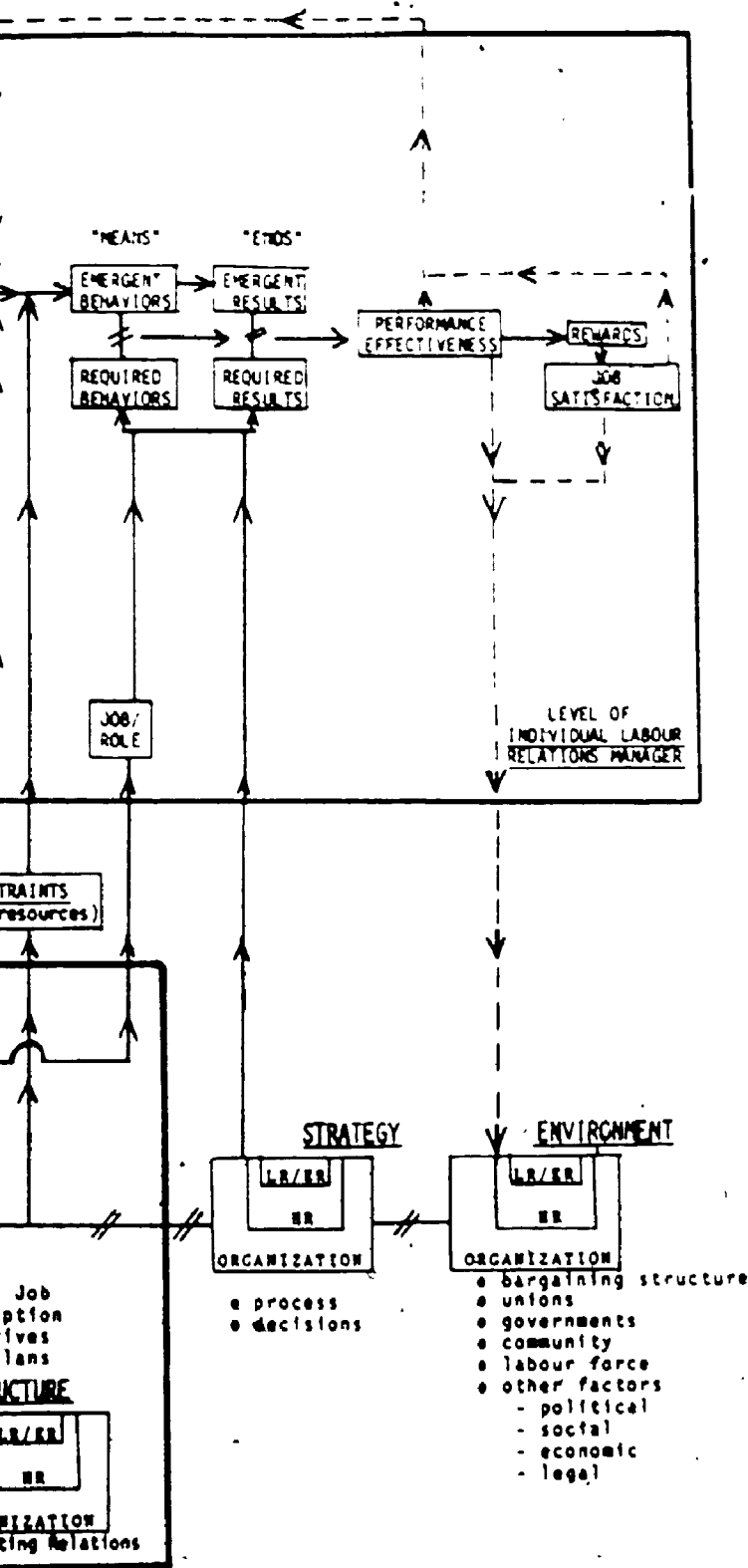
(a) Organizational effectiveness is shown to result when a basic fit or congruence is achieved (i) among the five organizational design components (task, structure, people, rewards, and processes), and (ii) among these organizational design components and strategic and environmental factors such as those indicated; and

(b) the relationships among the macro level components listed in (a) above are shown to exist at three distinct levels in the organization, namely, the I.R. subfunction, the Human Resources function or department, and the organization as a whole. Within each component, such as structure or strategy, the I.R. subfunction is graphically depicted as nested within the Human Resources department which is, in turn, depicted as nested within the organization as a whole.



ORGANIZATION DESIGN FACTORS

Figure 2. The Basic Conceptual Framework: Determinants and Outcomes of an I.R. Managerial Behavior



etermi-
ger's

Secondly, focussing on the explicit connections between the macro and micro levels of the diagram, note the following.

(a) The systems which are used to involve employees more fully in the organization (the People component of organizational design) are shown to impact directly on each of the individual level determinants of the I.R. manager's behavior through placement activities such as selection, promotion, transfer, and termination. Training and development activities also have a direct effect on individual level determinants such as skills and areas of knowledge.

(b) Organizational reward systems such as compensation and performance appraisal are shown to impact on the individual I.R. manager's motivation by means of their effect on the manager's expectancies that performance will lead to specified outcomes, given the individual manager's valences for the rewards expected.

(c) Organizational constraints such as the availability of time and resources are shown to be key mediating variables between the set of individual level determinants of behavior and the behaviors which actually emerge.

(d) The organizational and I.R. climates are shown to result from the interaction of the set of other organizational design factors and to impact, in turn, on the set of individual level components of the I.R. manager's motivated performance effectiveness.

(e) The individual I.R. manager's job requirements are shown to be determined by the tasks of the I.R. department within the context of the tasks of the Human Resources function and the organization as a whole. In turn, these formal job requirements as specified in formal job descriptions, personal objectives, and individual work plans, interact with those activities which are really required by strategic decisions at the organizational and functional level, to determine the behaviors and results required of the individual I.R. manager for effective performance. Thus, the framework recognizes that there is a possibility of a lack of fit developing between an I.R. manager's formal task and job requirements (job description, personal objectives and work plans, etc.) and those activities which are really required if the I.R. manager is to assist in meeting strategic objectives and to assist in ensuring that there is a fit between the organization and its environment. The framework suggests that reduced effectiveness would result if such a lack of fit developed.

(f) The outcomes of the I.R. manager's behavior (results, effectiveness, rewards, job satisfaction) also have an impact on the other components of the macro level of the framework through the specified feedback loop at the bottom right of the diagram. For example, the framework shows that the I.R. climate determines the I.R. manager's behaviors (solid arrow) and that the I.R. manager's behaviors assist in determining the I.R. climate (broken line feedback loop from the micro level of the model to the environment and on to the other components of the macro level of the framework, including I.R. climate).

Finally, focussing on the top half of the diagram and the individual level determinants and results of behavior, note the following.

(a) Aptitudes (the unlearned potential for maximum performance against standards of excellence) determine both abilities (unlearned maximum performance against standards of excellence, such as basic cognitive or motor abilities) and the potential for the development of skills (learned maximum performance against standards of excellence, such as problem solving or report writing skills).

(b) The I.R. manager's motivation to behave is determined by both (i) the subjectively held expectancies that effort

will lead to performance and that performance will lead to specific outcomes, and (ii) the subjective valences of the expected outcomes for the individual I.R. manager.

(c) The I.R. manager's performance effectiveness is defined by the extent to which there is a fit or congruence between what the I.R. manager is actually doing and achieving (emergent behaviors and results) and what the I.R. manager ought to be doing and achieving (required behaviors and results).

(d) The outcomes of the I.R. manager's behavior (results, effectiveness, rewards, job satisfaction) also have an impact on the other components of the micro level of the framework through the specified feedback loop at the top of the diagram. For example, the rewards actually received for past behaviors and results determine subsequently held expectancies that performance will lead to specified outcomes and, thus, determine motivation and subsequent behaviors. Therefore, the framework shows that behaviors determine rewards, and that rewards determine behaviors.

Although directional arrows or indicators of fit or congruence have been placed on each of the relationships and feedback loops depicted in the framework, the examples of the relationships between (i) rewards and motivation and

(ii) I.R. climate and behaviors given above have been provided to emphasize the point that the diagram represents an open social systems framework of the I.R. manager's performance effectiveness. Although the diagram has been laid out to emphasize the determinants of individual behavior, the reader can start anywhere in the diagram and trace the possible effects of changes in one component on the other components of the framework.

This framework is too complex in its present form to be used to generate hypotheses and identify specific variables for use in this study. A more concise research framework with specific research hypotheses will be presented in the next chapter.

The volume of the literature reviewed and the complexity of the model developed above have provided a striking illustration of an observation made many years ago by Slichter, Healy, and Livernash (1960). They noted that labor relations management, like other aspects of organizational behavior, is complex and can only be modelled by the use of complex, contingency frameworks with multi-directional causal paths that are extremely difficult, if not impossible, to map given the present state of behavioral science knowledge and technology. The words of Slichter, Healy, and Livernash (1960) on this topic pro-

vide, therefore, an appropriate conclusion for this review of the literature.

Each union-management relationship had its particular history, its particular leadership, its particular economic and technological environment, and its particular problems. All of these many elements combined into an interrelated whole...The suspicion exists that it would have been much easier to write a concluding chapter in a book on union-management relations if it had not been preceded by three years of field work. The stubborn facts of reality do not permit easy generalizations (Slichter, et al., 1960, pp.954-955).

3.0 RESEARCH FRAMEWORK AND RESEARCH HYPOTHESES

The purpose of this chapter is to develop an empirically testable research model, with hypotheses and research questions, on the basis of the literature reviewed and the conceptual framework developed in the previous chapter.

There were a number of factors which constrained the selection of variables for study, beyond the suggestions found in the literature reviewed above. This study was, first and foremost, a conceptual replication of another study. A number of suggestions for this study came directly from the results reported by Yukl and van Fleet (1982). In particular, the primary focus of the study was necessarily at the micro level of the individual manager's behaviors and the most immediate determinants of perceptions of the effectiveness of those behaviors. The relationship of other contextual factors associated with differences in perceived behaviors could be investigated where possible within the practical limitations of a single study.

In addition, replicating Yukl and van Fleet's study involved using a multilevel dependent variable with up to 19 levels, and the need to collect detailed critical incidents of effective behavior from practicing managers. The multilevel dependent variable placed practical limitations on the number of classification variables which could be studied simultaneously, given the requirements of the statistical analyses for minimum cell frequencies. The detail and qualitative nature of the critical incident data to be collected placed practical limitations on the sample size of incidents which could be collected and analyzed.

Furthermore, the priority of getting the agreement of organizations and, after that, of individual respondents within those organizations, to participate by providing detailed critical incidents limited the amount of other data that could reasonably be collected. The task of generating critical incidents required more time and effort from respondents than the simpler and faster category check marks of more typical surveys. In addition, I.R. management effectiveness was a potentially sensitive topic for I.R. managers and others in their organizations. All of these factors constrained the number of variables that could be included.

Thus, the combined effects of the requirements associated with replicating Yukl and van Fleet's study and method, and the practical constraints of getting the agreement of organizations and practicing managers to participate meant that the investigator had to be content (a) with setting priorities on which of the many variables in the conceptual framework to emphasize in data collection and analysis, and (b) with testing the significance of a series of bivariate relationships in sequence instead of simultaneously testing the effects of many variables in a multivariate model such as the conceptual framework developed in the previous chapter.

In the subsequent sections of this chapter, a series of bivariate hypotheses will be developed which set out hypothesized relationships between selected variables and the I.R. manager's behavior, other things being equal. Therefore, in this study, it will not be possible to measure the combined effects of the variables selected for study on differences in behavior, nor will it be possible to establish the relative importance of the variables studied in terms of proportion of variance in the behavior variable explained.

3.1 THE EFFECT OF THE OBSERVER'S PERCEPTIONS IN A CRITICAL INCIDENTS STUDY

This replication of Yukl and van Fleet's new critical incident method involved collecting critical incidents of I.R. managers' behaviors. A critical incidents study has the following characteristics:

- (1) Perceptions of behavior are studied rather than more objectively measured behaviors such as those which have been videotaped or directly observed.
- (2) The perceptions of behavior are typically recalled by the informants after a considerable period of time rather than, for example, subjects' immediate retrospective or concurrent reports of problem solving or other cognitive processes.
- (3) The observers' own subjectively held criteria of effectiveness are employed in selecting incidents rather than more objective criteria such as the number of units produced per hour or the proportion of grievances that go to arbitration.

Therefore, the role of the observer/informant in critical incident studies is very important. This implies that the observer should be explicitly included in the research

framework, and the effects of the observer(s) and other actors on the process should be studied.

In Figure 3, the observer/informant and other actors have been explicitly included in the conceptual framework developed in the last chapter. The processes of observing, perceiving, inferring, committing to memory, and evaluating effectiveness which mediate between the observer's recall of an incident and the original behavior observed have been indicated.

In addition, the complexity of much of the detail in that framework has been compressed into a smaller number of summary constructs. For example, the 14 constructs of individual level personal determinants of behavior in Figure 2 have been summarized in one construct by that name. Similarly, the seven constructs associated with the effect of organizational and departmental level factors on individual behavior have been summarized in two constructs, company/organization, and I.R. function/department/climate.

The model also includes the construct of the I.R. manager's task/job, environmental determinants of behavior, and the causal chain of outputs aggregating as individual results merge into departmental and organizational results.

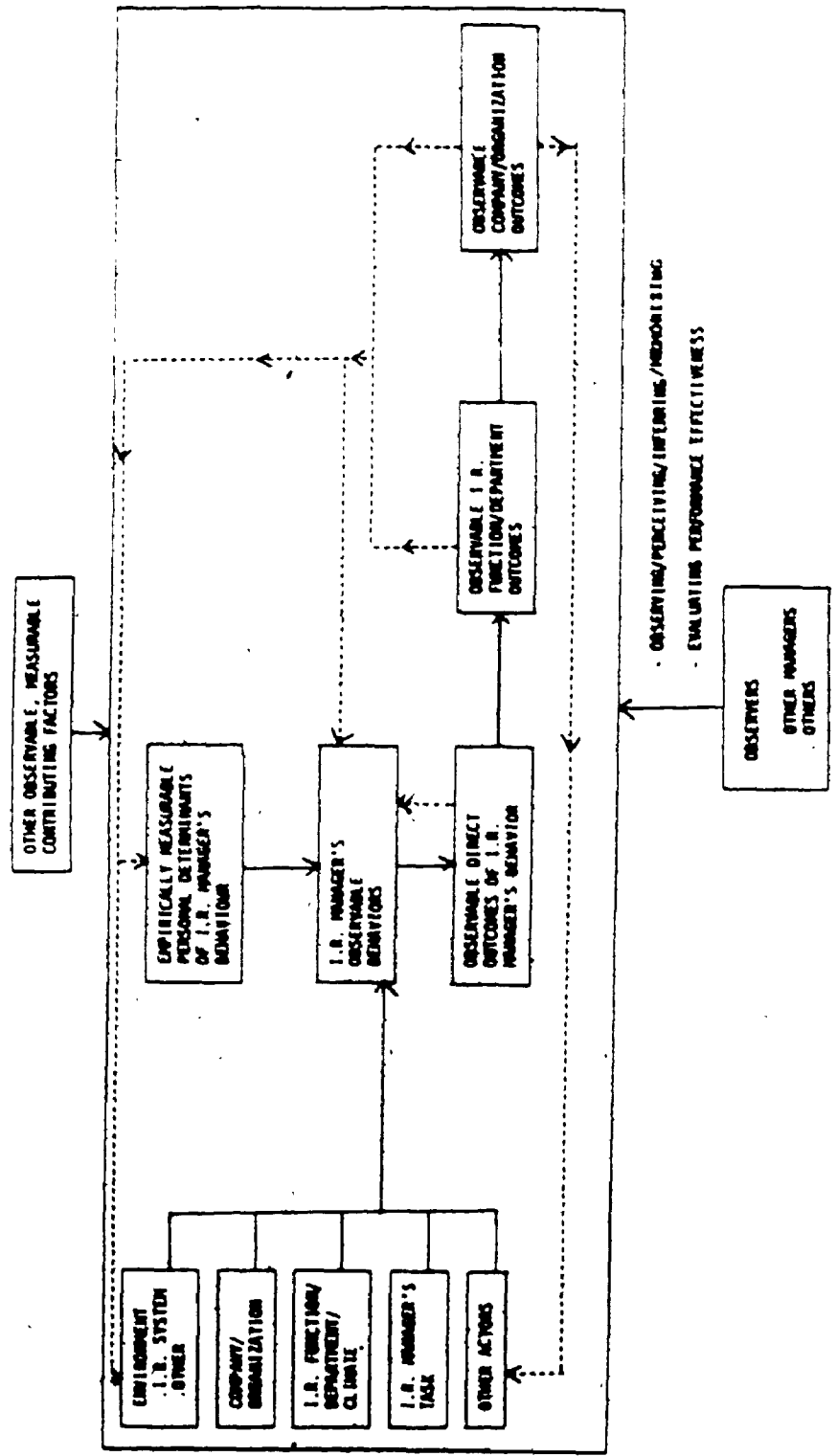


Figure 3. Concise Conceptual Framework: Perceived Effectiveness of an I.R. Manager's Behavior

The use of verbal reports as data and the processes involved in generating verbal reports have recently been critically reviewed elsewhere (Ericsson and Simon, 1984). Ericsson and Simon developed an information processing model of the verbalization process and reviewed a number of empirical studies which made use of verbal reports of cognitive processes.

According to their model, critical incident reports are more reliable verbal report data than other types of after-the-fact recall which involve interpretative probing into assumptions about what the observer must have thought or done (Ericsson and Simon, 1984, pp.23-24).

Although this new conceptual framework is more concise, it is still not in a form that would permit an empirical test. However, putting the observer into the framework does suggest that constructs related to the role of the observer need to be included in an empirical test.

3.2 THE EFFECT OF THE OBSERVER'S FUNCTION AND LEVEL

Yukl and van Fleet's study raised the issue of the role of the observer when they identified "consideration" as a critical incidents method effect. They noted that many of the incidents were written from the perspective of a subor-

dinate and discussed the reasons why a subordinate's subjective criterion of assessment might differ from independent ratings of group performance. They also noted that function and level differences among respondents (cadets, regular military officers) were among the uncontrolled differences in their study.

In the preceding section, the filtering effect of each individual observer's perceptual, memory, and recall processes between (a) the I.R. manager's observed behavior, and (b) the critical incident behavioral data collected for this study was discussed. Role theory suggests that patterned differences in perceptions develop among individuals in different groups, and that these differences in perceptions are related to patterned differences in behavior by group members (McGrath, 1984; Shaw and Costanzo, 1982; Turner, 1982; Menzies, 1982; Haire, 1955).

Role theory is very helpful in suggesting how the effects of psychological variables, such as perceptions, attitudes, and stereotypes, and sociological variables, such as level and function in the organization, can be integrated in determining an individual's behavior.

Thus, using observers in different function and level subgroups was not just a constraint, filter, or otherwise

limiting factor introduced into the study due to the use of the critical incident method. Using subgroups of observers as informants also provided an opportunity to study some of the key determinants of the I.R. manager's behavior. The expectations contained in role messages and differences in these expectations among subgroups comprising major interdependent roles are examples of such determinants which can be studied indirectly by controlling for the respondent's function and level.

Other studies have found that perceptions differ significantly by function and level in the organization (Myers and Turnbull, 1956; Henning and Mosely, 1970). Several studies have identified differences in perceptions, attitudes, and values by function, such as (a) manager vs. union rep (Walker, 1962; Spillane, 1980; Schwartz, Schiffman and Stark, 1972; England, Agarwal and Terise, 1971); (b) union rep, line manager, and personnel manager (Tracy and Peterson, 1977/78; Smith and Turkington, 1982); or (c) among an even larger number of functions (Frederickson, 1969). In addition, some studies have identified differences in level within a function (line manager vs. line executive, for example) as well as between functions (line management vs. personnel, for example) (French and Henning, 1965; Bohlander, White, and Wolfe, 1983). Some studies have also addressed the issue of the connection between

patterned differences in role perceptions and patterned differences in behavior by role occupants (Haire, 1955).

This suggests the importance of controlling for the observer's function and level in the hierarchy in a critical incidents study of I.R. manager's behavior. I.R. managers, line managers, and union reps are key actors in the I.R. system, and it is reasonable to assume that their perceptions of an I.R. manager's effectiveness may well be different.

The perceptions of both of the key interacting parties in the union-management relationship are obviously important. However, the primary focus of this study is on the management of I.R. Thus, while the perceptions of union reps are important, the perceptions of line and I.R. managers, and any differences between those perceptions, are even more important for the purposes of this study.

Other important actors and interested parties in the I.R. system such as neutral third parties, government officials in labor related ministries and agencies, and employees who are represented by their union will not be included as informants in this study for the pragmatic reason of putting practical limits on the study's scope. However, other actors and interested parties, when mentioned in the

critical incidents of the informants, will be identified in another stage of the coding process discussed immediately below.

The three hypotheses to be tested in this study are as follows:

Other things being equal, the types of behavior perceived to be critical for the effectiveness of an I.R. manager will vary depending on:

H1. The observer's function (line manager, I.R. manager, union rep);

H2. The management observer's function (line manager, I.R. manager);

H3. The management observer's level in the hierarchy (high, low).

Although not a primary focus of this study, the role of other actors and interested parties will be addressed with the following research question.

Q1. With whom is the I.R. manager interacting in incidents perceived to be critical for performance effectiveness?

3.3 THE EFFECT OF THE PERCEIVED EFFECTIVENESS OF BEHAVIOR

Differences in subjective criteria of effectiveness between or among occupants of different functions and levels are covered by the three hypotheses listed above. Given that respondents from a particular group are agreed on the criteria of effectiveness, the question remains whether the types of perceived effective and ineffective behaviors still differ. Alternatively, the types of behavior may be the same in both effective and ineffective incidents, with the difference lying solely in how well or poorly a type of behavior is performed. Are managers who are behaving ineffectively doing the right types of things poorly, or are they doing the wrong types of things altogether for the situation?

To explore this issue, Yukl and van Fleet (1982) collected examples of both effective and ineffective behaviors, most of which were only one or two sentences long. The ineffective examples were not analyzed because "they were more ambiguous, less specific, and more involved with leader traits, skills, and appearance than were the positive incidents" (p.91). The hypothesis to be explored in this study is as follows:

H4. Other things being equal, the types of behavior perceived to be critical for the effectiveness of an I.R. manager will vary depending on the perceived effectiveness of the I.R. manager's behavior (effective, ineffective).

3.4 THE EFFECT OF THE TASK SITUATION

The effect of the task or job requirements on behavior effectiveness was discussed in the literature review in the preceding chapter. Task is one of the main variables in organizational design and, at a more micro level, one of the main variables in the individual performance literature.

Yukl and van Fleet (1982) explicitly controlled for the effect of difference between combat and noncombat situation behaviors and drill and nondrill behaviors. They identified behavior types which were constant across different situations for military leaders, and other behavior types which differed between the situations.

In the I.R. literature, the three major phases in the collective bargaining cycle (Phillips, 1981), or the three major challenges to management (Peach and Keuchle, 1985), are union organizing, negotiating collective agreements, and contract administration, including handling grievances.

and arbitrations. These three phases or challenges are at a similar level of generality as the combat/noncombat distinction for military leaders used by Yukl and van Fleet (1982). The union organizing phase would be a major concern in predominantly nonunionized companies or in predominantly nonunionized industries such as financial services. However, in companies with established, mature industrial relations, such as those to be sampled in this study, the negotiation and contract administration phases would be the most important.

The hypothesis to be tested is as follows:

H5. Other things being equal, the types of behavior perceived to be critical for the effectiveness of an I.R. manager will vary depending on the type of task situation within which the I.R. manager's behavior is taking place (contract administration, negotiation).

Although not a primary focus of the study, more specific content issues, rather than process issues, will be addressed with the following research question:

Q2. What specific issues are I.R. managers perceived to be handling effectively and what issues are they perceived to be handling ineffectively?

3.5 THE EFFECT OF THE I.R. CLIMATE

Yukl and van Fleet's study of military leaders did not include measures of any aspects of organizational climate that might be relevant for military leader behavior effectiveness. However, as noted in the literature review above, there is a large body of theoretical and empirical work in the I.R. literature on the importance of an organization's I.R. climate to the practice of industrial relations.

For purposes of this study of individual I.R. managers' behaviors, perceptions about the performance effectiveness of I.R. managers as a group seemed especially relevant. Perceptions about the performance of other groups such as the unionized employees as a group, first line supervisors, union stewards, and union negotiators, also seemed relevant. However, due to the practical constraints on respondents' time, it was arbitrarily decided to focus on employee performance and attitudes, and on a more encompassing I.R. climate variable, namely, the union-management relationship.

Therefore, three of the hypotheses related to I.R. climate to be tested in this study are as follows:

Other things being equal, the types of behavior perceived to be critical for the effectiveness of an I.R. manager will vary depending on:

H6. The perceived overall performance effectiveness of the company's I.R. people as a group (effective, ineffective);

H7. The perceived productivity, product quality and attitudes (morale, motivation) of the unionized employees (high, low);

H8. The perceived overall union-management relationship (cooperative, conflictful).

The perceptions mentioned in the three hypotheses above are the perceptions of informants in a single bargaining situation, all other things including function and level being equal. However, the discussion above of the effect of the observer's function and level on perceptions also applies to perceptions of I.R. climate. Therefore, three additional hypotheses related to I.R. climate are as follows.

Other things being equal, perceptions of the state of the I.R. climate (the effectiveness of the I.R. people as a group; the unionized employees' productivity, product qual-

ity and attitudes (morale, motivation); the state of the union-management relationship (positive, negative)) will vary depending on:

H9. The observer's function (line manager, I.R. manager, union rep);

H10. The management observer's function (line manager, I.R. manager);

H11. The management observer's level in the hierarchy (high, low).

3.6 THE EFFECT OF PERCEPTIONS OF INDIVIDUAL LEVEL DETERMINANTS OF BEHAVIOR

Individual level determinants of behavior were discussed in the literature review and included in detail in the conceptual framework developed in the previous chapter. Examples of individual level factors include personality traits, attitudes, task related knowledge, skills and abilities. Nineteen percent of the effective incidents collected by Yukl and van Fleet were classified as miscellaneous and not analyzed further. These incidents involved factors such as "personality, appearance, technical knowledge, observance of role requirements, . . .willingness to admit mistakes. . . traits, skills" (Yukl and van Fleet, 1982, p.91). The in-

effective incidents which were discussed above also included a greater proportion of traits, skills, and appearance factors than the positive incidents.

While the primary focus of this study is on perceived behaviors, perceived individual level determinants of behavior will be addressed with the following research question.

Q1. Other things being equal, what individual level factors other than behaviors are perceived to be determinants of an I.R. manager's performance effectiveness?

3.7 THE EFFECT OF PERCEPTIONS OF ORGANIZATIONAL AND ENVIRONMENTAL LEVEL DETERMINANTS OF BEHAVIOR

Organizational and environmental level determinants of behavior were discussed in the previous chapter and a list of each was set out in the general conceptual framework. The focus of the study is at the micro level of individual behavior. Differences in individual behavior are hypothesized based on differences in mid-level classification variables such as function, level, and perceived I.R. climate which represent the impact of group processes on an individual's perceptions. Differences in behavior are also hypothesized based on differences in function-specific organizational factors such as I.R. climate when I.R. climate

is operationally defined not as perceived by members of a function or hierarchical level, but as perceived by the members of a bargaining situation, all other things including function and level being equal. If the primary focus of the study were on differences in behavior related to organizational and environmental differences, the design of the study would have been entirely different. However, organizational and environmental factors that are mentioned in examples of individual behavior will be addressed in the study through the following research questions.

Q4. Other things being equal, what organizational level factors are perceived to be determinants of an I.R. manager's performance effectiveness?

Q5. Other things being equal, what environmental level factors are perceived to be determinants of an I.R. manager's performance effectiveness?

3.8 THE EFFECT OF DIFFERENCES IN THE OBSERVED MANAGER'S FUNCTION

All the hypotheses and research questions discussed this far have focussed on relationships involving perceptions by others of an I.R. manager's behavior. One of the benefits of using a standard managerial behavior taxonomy is that comparisons across studies of different types of managers

are possible. In this case, comparison of the results of this study is possible with the results of Yukl and van Fleet's study of military leaders.

In the literature reviewed above, no examples comparing the behaviors of I.R. managers with the behaviors of other types of managers were found. However, reference was made to studies which found different patterns of job responsibilities and duties across different managerial functions including sales managers and personnel managers, for example (Hemphill, 1959; Tornow and Pinto, 1976). We would also expect the behavioral requirements for effective I.R. managers to be significantly different than the behavioral requirements for effective military leaders. Although both are boundary spanning roles created to deal with inter-organizational conflict, the differences are many including (a) the tasks performed (combat--negotiations; noncombat--contract administration), (b) the type of organization involved (public sector bureaucracy or private sector company), and (c) the level of conflict to be handled (company-union or country-country).

The final hypothesis is as follows.

H12. Other things being equal, the types of behavior perceived to be critical for the effectiveness of a manager

will vary depending on the manager's function (I.R. manager, military leader).

3.9 SUMMARY OF RESEARCH MODEL, HYPOTHESES, AND QUESTIONS

The model set out above has identified the major constructs to be included, hypotheses to be tested, and research questions to be addressed in this study. These constructs and their hypothesized relationships have been set out in a summary research model in Figure 4. The only relationship not made explicit in Figure 4 is the direct relationship hypothesized between (a) the observer's function and level and (b) the company's perceived I.R. climate.

The research hypotheses and questions developed above have also been summarized in Figures 5, 6, and 7.

As mentioned above, the research model is not intended to be comprehensive or complete. It is not intended to include all the variables with significant relationships to differences in perceived behaviors, nor is the relative importance of all variables in the model intended to be the same for purposes of this study. The focus of the model and of the study is on the micro level of perceived individual behavior. Differences in mid-level classification variables such as function and level have been hypothesized

to be significantly related to differences in perceived behaviors. Relationships between macro level organizational and environmental variables and micro level perceived behaviors have also been addressed by means of research questions. However, the relationships of these macro level variables to perceived behaviors were not the focus of the study.

The model is incomplete in another sense as well. Although significant relationships between classification variables and perceived behaviors have been predicted, specific patterns of behavior differences have not been predicted. This is an exploratory study designed to provide the first empirical description of what the nature of those patterns for I.R. managers is.

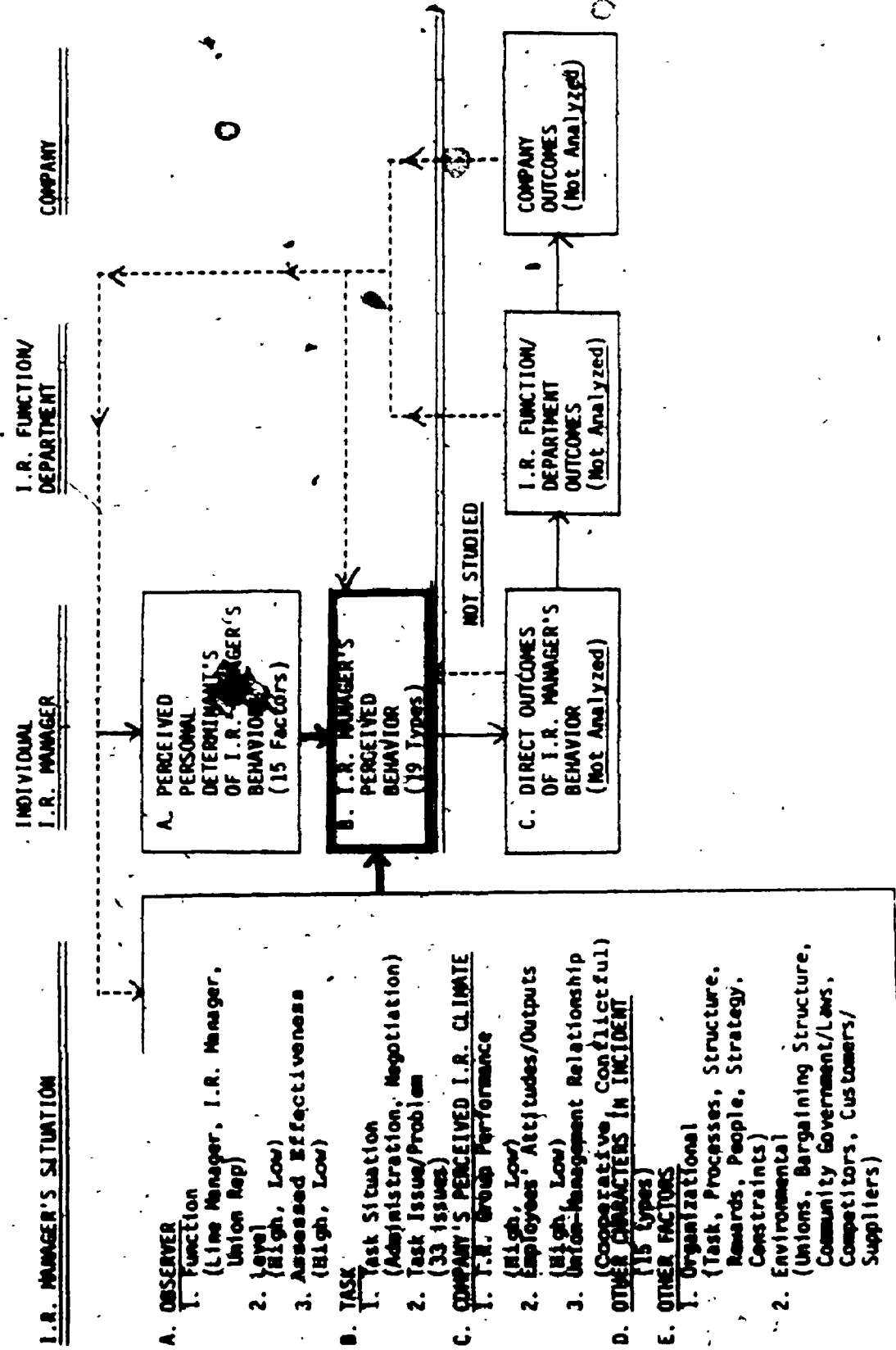


Figure 4. The Research Framework: Perceived Effectiveness of an I.R. Manager's Behavior

- A. Other things being equal, the types of behavior perceived to be critical for the effectiveness of an I.R. manager will vary depending on:
 - H1. The observer's function (line manager, I.R. manager, union rep);
 - H2. The management observer's function (line manager, I.R. manager);
 - H3. The management observer's level in the hierarchy (high, low);
 - H4. The perceived effectiveness of the I.R. manager's behavior (effective, ineffective);
 - H5. The type of task situation within which the I.R. manager's behavior is taking place (contract administration, negotiation);
 - H6. The perceived overall performance effectiveness of the company's I.R. people as a group (effective, ineffective);
 - H7. The perceived productivity, product quality and attitudes (morale, motivation) of the unionized employees (high, low);
 - H8. The perceived overall union-management relationship (positive, negative).

- B. Other things being equal, the types of behavior perceived to be critical for the effectiveness of a manager will vary depending on:
 - H12. The manager's function (I.R. manager, military leader);

Figure 5. Summary of the Behavior Hypotheses: Summary of the Nine Hypotheses related to the Behavior Classification Scheme

- A. Other things being equal, perceptions of the state of the I.R. climate (the effectiveness of the I.R. people as a group; the unionized employees' productivity, product quality and attitudes (morale, motivation); the state of the union-management relationship (positive, negative)) will vary depending on:
- H9. The observer's function
(line manager, I.R. manager, union rep);
 - H10. The management observer's function
(line manager, I.R. manager);
 - H11. The management observer's level in the hierarchy (high, low);

Figure 6. Summary Hypotheses about the Relationship of Respondents' Function & Level to I.R. Climate Measures: Summary of the 3 Hypotheses about the Relationship between Observers' Function and Level and Scores on the 3 Summed Scales Measuring I.R. Climate

1. With whom is the I.R. manager interacting most frequently in incidents perceived to be critical for performance effectiveness?
2. What specific issues are I.R. managers perceived to be handling effectively and what issues are they perceived to be handling ineffectively?
3. Other things being equal, what individual level factors other than behaviors are perceived to be determinants of an I.R. manager's performance effectiveness?
4. Other things being equal, what organizational level factors are perceived to be determinants of an I.R. manager's performance effectiveness?
5. Other things being equal, what environmental level factors are perceived to be determinants of an I.R. manager's performance effectiveness?

Figure 7. Summary of the Five Research Questions: Summary of the Five Research Questions Relating to the Five Nonbehavioral Classification Schemes (Individual, Organizational, Environmental, Content, Target)

4.0 RESEARCH METHOD

This chapter describes the operationalization of the variables in the research framework, the measurement issues involved in the questionnaire and coding stages of the study, sample selection, collection of the questionnaire data and the critical incident codes, and the methods to be used in the analysis of the data.

The choice of the methodology, given the research framework and hypotheses developed in the previous chapter, was constrained by a number of factors. This was an exploratory study. It was the first attempted validation of a new methodology and taxonomy which yielded data with low inter-rater agreement on its first use. It was also the first study of effective and ineffective behaviors by I.R. managers. Given the previous low inter-rater agreement, the 19 categories in the behavior taxonomy, and the decision to increase the number of bargaining situation specific cross-classification variables, it was important to get a large number of critical incidents for analysis.

The ideal method for this critical incident research would have involved random sampling, multiple responses focussed explicitly on the same target I.R. manager's behaviors, and objective criteria of effectiveness as a check on the subjective criteria of the critical incident method. These design features remained an ideal which was considered impractical from the start. The method chosen was a compromise for pragmatic reasons between this ideal and other easier but still less satisfactory alternatives.

3.1 OPERATIONALIZATION AND MEASUREMENT OF THE CLASSIFICATION VARIABLES

The seven classification variables in the research framework presented in the previous chapter can be divided into two groups, namely, the four variables which were part of the research design and sampling plan, and the three summed scales which were constructed from quantitative item responses on the questionnaire.

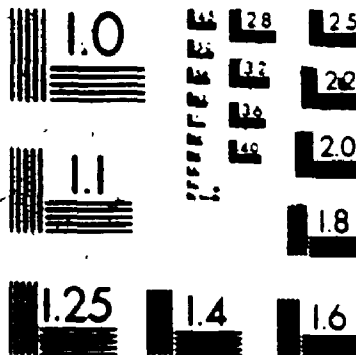
The four classification measures which were part of the research design and part of the stratified sampling plan included two measures of the respondent's position in the company (function, level in the hierarchy), a measure of the perceived effectiveness or ineffectiveness of the behavior reported, and a measure of the task situation of the observed behavior.

Contact people were asked to distribute questionnaires to 3 other I.R. managers, three line managers and two union reps. One item on the questionnaire, part 3, #1 ("Appendix A. Self-Administered Questionnaire" on page 249), dealt specifically with function. The contact people were also asked to distribute the questionnaires to managers in such a way that each management function had one respondent from high, medium and low in the hierarchy.

In summary, contact people were asked to distribute the questionnaires as follows ("Appendix B. Cover Letter to Contact Person" on page 257): one first-level foreman, supervisor or general supervisor (low level line); one first level I.R. rep who need not be a manager (low level I.R.); one plant manager or manufacturing manager or other mid-level manager (middle level line); one plant level I.R. manager or other mid-level I.R. manager (middle level I.R.); the president, general manager of a separate business unit or other very senior line manager (high level line); and the top personnel/I.R. manager or other top level I.R. manager (high level I.R.).

Because the primary focus of this research was on the perceptions of managers, (a) the initial mailing of the package of questionnaires was to a company manager rather than a union official; (b) relatively fewer questionnaires

2



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS
STANDARD REFERENCE MATERIAL 1010a
(ANSI and ISO TEST CHART No. 2)

were included for distribution to union reps (2 out of 9); and (c) the instructions to the contact person explicitly recognized that distribution of the two questionnaires to union reps may not be feasible in all situations. The latter note was added to ensure that companies would not decide against participation in the study just because they felt that they could not include union reps in their company in the distribution of questionnaires.

One item on the questionnaire dealt specifically with level (part 3, #2; "Appendix A. Self-Administered Questionnaire" on page 249). In addition, another item, part 3, #3, dealt with function and level combined, and the first three categories of part 3, #4, also dealt with the function and level of I.R. managers. This redundancy was designed into the questionnaire because of the difficulty in constructing measures of hierarchical level which permit valid comparisons across a large number of companies with different organizational designs. Middle level managers were the most difficult to operationally define and, in the end, were combined with high level managers to form a high/low level dichotomy.

Respondents were asked to write their critical incident examples on each of four pages in the questionnaire (part 2, A-D). One page was reserved for each of the fol-

lowing: ineffective contract administration, effective contract administration, ineffective negotiating, and effective negotiating. The investigator changed the code for task situation and effectiveness only in the very few cases where the content of the incident obviously suggested that the respondent had written the incident in the wrong place.

Ineffective was operationally defined as "examples of very poor performance." Effective was operationally defined as "examples of very good performance."

Contract administration was operationally defined by including the following examples for respondents: "handling grievances and arbitrations, and improving the productivity, product quality, morale, or motivation of unionized workers." The following examples operationally defined negotiating agreements: "actual face to face interactions across the negotiating table, plus related activities such as preparing for negotiations, meetings of the bargaining team, meetings with the steering committee, communicating with principals and other managers, strike preparations, etc."

The three summed scales which were constructed from quantitative item responses on the questionnaire were measures of I.R. climate, namely, (a) I.R. group performance;

(b) productivity, product quality, and attitudes (morale, motivation) of unionized employees; and (c) the state of the union-management relationship. As mentioned above, others could have been included except for the pragmatic reasons of constraints of space, respondents' time and energy, and the priority of gathering high quality critical incidents.

Six items were developed to measure the respondent's assessment of the overall performance of the I.R. people as a group in his or her location. These included items on the I.R. group's performance effectiveness on contract administration, negotiations, strikes, improving employee attitudes, and building harmonious union relations. These items were chosen to operationalize two of the three major phases in the collective bargaining cycle, namely, negotiating agreements and contract administration (Phillips, 1981; Peach and Kuechle, 1985). The third phase, managing union organizing drives for the company side, was not included in this research because the focus was on large bargaining units where industrial relations was presumably a well established, mature, function. The two phases of contract administration and negotiations were the phases which were dealt with in the other parts of the questionnaire.

The five-point response format and verbal anchors on the scale points, as well as the content for some of the items, was taken from a Conference Board survey of labor relations management in the United States (Freedman, 1979). The items can be found in part 1, A, of the questionnaire ("Appendix A. Self-Administered Questionnaire" on page 249).

Item and scale descriptive statistics are set out in Table 1 on page 84. The item on strikes was eliminated because the response on this item was considerably lower than on the other items (334 vs. 361-365). The item was worded "managing work stoppages, legal and illegal strikes." Several respondents who left the item blank noted in the margin that their company had never had a strike. When the item was deleted, Cronbach's alpha for the scale improved from .75 to .82, and the mean inter-item correlation improved from .44 to .48. The final five item summed scale had a mean of 18.2 and a standard deviation of 3.2. Because low scores on the scale represented effective performance and high scores ineffective performance, the measures on each item were reverse scored before analysis.

Three items were used to form the second summed scale, namely, productivity of unionized employees, attitudes (morale, motivation) of unionized employees, and product qual-

A. ITEM STATISTICS:

ITEM LABEL & QUESTIONNAIRE NO.	MEAN	S.D.	N	MIN	MAX
GRIEVANCES & ARBITRATIONS (1AA)	3.9	0.8	364	1.0	5.0
NEGOTIATIONS (1AB)	3.8	0.9	361	1.0	5.0
STRIKES (1AC1)	3.9	0.9	334	1.0	5.0
MORALE (1AC2)	3.1	0.9	364	1.0	5.0
UNION-MANAGEMENT RELATIONS (1AD)	3.7	0.9	365	1.0	5.0
IR GROUP 1-ITEM MEASURE (1AE)	3.8	0.8	364	1.0	5.0

B. CORRELATION MATRIX:

	1A1	1A2	1A3	1A4	1A5	1A6	TOTAL
1A1	1.0000						
1A2	.3695	1.0000					
1A3	.3356	.2807	1.0000				
1A4	.3803	.3639	.3788	1.0000			
1A5	.5231	.3522	.3758	.5901	1.0000		
1A6	.5771	.5020	.4193	.5901	.6523	1.0000	
TOTAL	.5817	.4866	.4660	.6030	.6790	.7456	1.0000

C. SCALE STATISTICS:

SCALE	MEAN	INTER-ITEM CORR.	MEAN	S.D.	N	MIN	MAX	ALPHA	STAND. ALPHA
6 ITEM		.44	22.1	3.7	329	8	30	.75	.79
5 ITEM (LESS STRIKES)		.48	18.2	3.2	358	5	25	.82	.83

Table 1. Descriptive Statistics for I.R. Group Performance Scale: Item Statistics, Correlation Matrix, and Scale Statistics

ity of unionized employees. These items were chosen to operationalize both the hard and soft outcomes of the involvement of unionized employees in the company's I.R. system.

As with the previous scale, the five-point response format for the items as well as the content and wording for

A. ITEM STATISTICS:

ITEM LABEL & QUESTIONNAIRE NO.	MEAN	S.D.	N	MIN	MAX
EMPLOYEE PRODUCTIVITY (1BA)	3.4	0.8	364	1.0	5.0
EMPLOYEE ATTITUDES (1BB)	3.2	0.8	364	1.0	5.0
EMPLOYEE PRODUCT QUALITY (1BC)	3.6	0.8	364	1.0	5.0

B. CORRELATION MATRIX:

	1B1	1B2	1B3	TOTAL
1B1	1.0000			
1B2	.5129	1.0000		
1B3	.5913	.6309	1.0000	
TOTAL	.6103	.6401	.7028	1.0000

C. SCALE STATISTICS:

SCALE	MEAN INTER-ITEM				N	MIN	MAX	ALPHA	STAND. ALPHA
	CORR.	MEAN	S.D.						
FULL 3 ITEM	.58	10.2	2.0		362	5	15	.80	.80
2 ITEM (LESS (ATTITUDES))	.59	7.0	1.4		363	3	10	.74	.74

Table 2. Descriptive Statistics for Employee Outcomes Scale: Item Statistics, Correlation Matrix, and Scale Statistics

the productivity and attitudes items were borrowed from Freedman (1979). The items are set out in part 1, B of the questionnaire ("Appendix A. Self-Administered Questionnaire" on page 249). Descriptive statistics for the three items and the scale can be found in Table 2.

The three item summed scale had a mean inter-item correlation of .58, a mean of 10.2, a standard deviation of 2.0, and internal consistency as measured by Cronbach's alpha of .80. Although these statistics support use of the

three item scale, it was not clear from the content of the three items whether the three items should be summed or whether productivity and product quality were conceptually distinct from employee attitudes and should be kept so. Therefore, it was decided to take both the three item summed scale and a two item summed scale comprised only of productivity and product quality into the analysis stage. The correlation between the two variables in the two item scale was .59. The scale had a mean of 7.0, a standard deviation of 1.4, and an alpha of .74. Measures on all three items were reverse scored before analysis so that high measures would correspond with higher levels of employee outcomes.

The nine items for the final summed scale measuring the state of the union-management relationship were developed by Gandz (1979, 1978). Details of the scale's development and psychometric properties are set out in Gandz (1979). Because the items were developed to operationalize Walton and McKersie's dimensions of the union-management relationship, higher scores, after reverse scoring of the first six items, represent higher levels of cooperation while lower scores represent higher levels of conflict.

The descriptive statistics for the items and scale in this sample are set out in Table 3 on page 87. The nine

A. ITEM STATISTICS:

ITEM LABEL AND QUESTIONNAIRE NO.	MEAN	S.D.	N	MIN	MAX
RESPECT (1C1)	2.7	0.7	363	1.0	4.0
TRUST (1C2)	2.6	0.7	363	1.0	4.0
COOPERATION (1C3)	2.6	0.8	361	1.0	4.0
LEGITIMATE (1C4)	2.7	0.7	361	1.0	4.0
FRIENDLY (1C5)	3.1	0.7	362	1.0	4.0
UNDERSTANDING (1C6)	2.7	0.7	361	1.0	4.0
ANIMOSITY (1C7)	3.2	0.6	363	1.0	4.0
SUSPECT INTENTIONS (1C8)	2.9	0.6	363	1.0	4.0
HOSTILE (1C9)	3.3	0.6	363	1.0	4.0

B. CORRELATION MATRIX:

	1C1	1C2	1C3	1C4	1C5	1C6	1C7
1C1	1.0000						
1C2	.6357	1.0000					
1C3	.5723	.6237	1.0000				
1C4	.4354	.5111	.5109	1.0000			
1C5	.4375	.5455	.5153	.4621	1.0000		
1C6	.6334	.6396	.6255	.4920	.5717	1.0000	
1C7	.4210	.4717	.4466	.3992	.5286	.4392	1.0000
1C8	.4000	.4573	.3696	.4074	.3534	.3776	.4714
1C9	.3925	.5199	.4991	.4108	.5329	.4777	.5756
TTL	.6663	.7532	.7078	.6066	.6631	.7275	.6236

	1C8	1C9	TOTAL
1C8	1.0000		
1C9	.4500	1.0000	
TOTAL	.5411	.6445	1.0000

C. SCALE STATISTICS:

	MEAN	INTER-ITEM	SCALE	CORR.	MEAN	S.D.	N	MIN	MAX	ALPHA	STAND	ALPHA
9 ITEM	.49	25.8	4.5	357	11	36	.90	.90				

Table 3. Descriptive Statistics for Union-Management Relations Scale: Item Statistics, Correlation Matrix, and Scale Statistics

item summed scale had a mean inter-item correlation of .49, a mean of 25.8, a standard deviation of 4.5, and internal consistency as measured by Cronbach's alpha of .90.

	1C1	1C2	1C3	1C4	1C5	1C6	1C7	1C8	1C9	1B1
1C1	1.00									
1C2	.62	1.00								
1C3	.55	.59	1.00							
1C4	.41	.49	.49	1.00						
1C5	.41	.54	.49	.43	1.00					
1C6	.63	.61	.61	.47	.58	1.00				
1C7	.40	.46	.45	.39	.53	.44	1.00			
1C8	.39	.42	.34	.39	.34	.34	.48	1.00		
1C9	.39	.53	.52	.41	.54	.51	.55	.49	1.00	
1B1	.36	.31	.29	.30	.21	.36	.27	.26	.28	1.00
1B2	.44	.44	.40	.33	.29	.43	.30	.34	.35	.53
1B3	.32	.36	.23	.28	.29	.35	.26	.31	.28	.59
1A1	.31	.41	.29	.29	.35	.33	.34	.23	.38	.21
1A2	.30	.35	.28	.34	.26	.32	.30	.19	.29	.32
1A3	.19	.32	.29	.29	.22	.21	.23	.16	.21	.15
1A4	.35	.37	.35	.34	.24	.29	.23	.25	.33	.25
1A5	.43	.51	.44	.38	.45	.46	.40	.41	.50	.25
1A6	.37	.45	.37	.35	.39	.42	.36	.30	.41	.23
	1B2	1B3	1A1	1A2	1A3	1A4	1A5	1A6		
1B2	1.00									
1B3	.63	1.00								
1A1	.35	.30	1.00							
1A2	.33	.36	.38	1.00						
1A3	.23	.21	.33	.29	1.00					
1A4	.49	.35	.38	.36	.37	1.00				
1A5	.51	.40	.53	.36	.38	.60	1.00			
1A6	.40	.37	.57	.51	.41	.53	.66	1.00		

Table 4. Correlation Matrix, All 18 Items: Items from All Three Scales (Correlations Truncated after the Second Decimal Place)

The correlations between all pairs of the 18 items for the three summed scales are set out in Table 4 on page 88. Factor analyses were made of all 18 variables to confirm that there were three, and only three, distinct variables represented. The resulting factor pattern, when principal components were rotated orthogonally, is set out in Table 5 on page 89. The three factors identified support

VAR.	FACTOR1	FACTOR2	FACTOR3	VARIABLE LABEL
1C6	74 *	17	27	UNDERSTANDING
1C5	74 *	22	3	FRIENDLY
1C3	73 *	21	14	COOPERATION
1C9	71 *	27	9	HOSTILE
1C2	71 *	32	21	TRUST
1C7	69 *	20	7	ANIMOSITY
1C1	65 *	16	33	RESPECT
1C4	59 *	26	18	LEGITIMATE
1C8	58 *	12	21	SUSPECT INTENTIONS
1A6	29	78 *	14	IR GROUP 1-ITEM MEASURE
1A5	41	69 *	20	UNION-MANAGEMENT RELATIONS
1A4	16	68 *	28	MORALE
1A1	26	68 *	9	GRIEVANCES & ARBITRATIONS
1A3	14	65 *	0	STRIKES
1A2	19	54 *	30	NEGOTIATIONS
1B1	23	5	82 *	EMPLOYEE PRODUCTIVITY
1B3	16	26	81 *	EMPLOYEE PRODUCT QUALITY
1B2	28	32	72 *	EMPLOYEE ATTITUDES

NOTE: Printed values are multiplied by 100 and rounded to the nearest integer. Values greater than 0.441306 have been flagged by an '*'.

VARIANCE EXPLAINED BY EACH FACTOR

FACTOR1	FACTOR2	FACTOR3
4.762557	3.338976	2.410038

FINAL COMMUNALITY ESTIMATES: TOTAL = 10.516571

1A1	1A2	1A3	1A4	1A5	1A6
0.539813	0.417450	0.439246	0.574213	0.676501	0.717309
1B1	1B2	1B3	1C1	1C2	1C3
0.721336	0.705248	0.742229	0.555516	0.643465	0.597364
1C4	1C5	1C6	1C7	1C8	1C9
0.441203	0.590550	0.645637	0.526541	0.399395	0.583554

Table 5. Principal Components Factor Pattern for All 18 Variables: Orthogonally Rotated

the existence of three separate and distinct constructs being tapped by the item measures as intended:

A four factor solution with principal components rotated orthogonally was conceptually interpretable with the union-management relations scale subdivided into positive (items 1 to 6 loading onto Factor 1) and negative (items 7 to 9 loading onto Factor 4) subscales. To determine whether subscales such as these are conceptually meaningful, Zeller and Carmines (1980) recommend analyzing each subscale as if it were a scale and measuring the correlations of each with relevant external variables. The correlations of each subscale with the other scales were identical in terms of direction and consistency but differed in terms of strength. This difference in strength was consistent with the reverse scoring of the items. This analysis confirmed that the four factor solution was an artifact of the reverse scaling for the last three items.

Common factor analyses with both oblique and orthogonal rotations were also made of the same 18 variables as a group. The results were essentially the same but the factor pattern was not quite as simple. In each case, one or, at most, two of the 18 variables were found to load significantly on the factor intended and on one other factor.

Principal components and common factor analyses of the three sets of items separately also showed that only one

factor was statistically significant and conceptually interesting.

In summary, operationalization and measurement issues for four summed scales and four other classification variables which were part of the research design and sampling plan were discussed in this section. The final four summed scales included a five item I.R. group performance effectiveness measure, a three item unionized employee outcomes measure, a two item unionized employee outcomes measure (without attitudes), and a nine item union-management relations measure. The four other classification variables were function, level, task situation, and perceived effectiveness of the behaviors.

4.2 OPERATIONALIZATION AND MEASUREMENT OF THE DEPENDENT ANALYSIS VARIABLES

The six dependent analysis variables can be divided into two groups, namely, effective managerial behaviors, and the other six. The other six include individual, organizational, and environmental level determinants of behavior, as well as the specific issues of content addressed by I.R. managers (content of incidents) and the people with whom I.R. managers are interacting or are otherwise explicitly concerned about in the critical incidents (target).

Perceived behavior was the primary dependent measure in the study. The operationalization of this variable took place in two phases. The first phase involved instructions to respondents on the questionnaire to generate the critical incident examples of behavior. The second phase involved instructions to the raters who generated the behavior codes after analyzing the incidents which the respondents had provided. The operationalization of effectiveness and ineffectiveness of behaviors was described in the section above.

Behaviors were operationally defined in the questionnaire instructions as "specific things an I.R. manager said or did in their dealings with you (He did or said such and so...)." A critical incident was operationally defined to include behaviors as defined above plus "necessary details and background information." A whole page, exclusive of the question, was left blank for respondents to provide "one or two examples." Asking for necessary details and background information and leaving blank a large block of space were the manipulations used to encourage lengthy, detailed and specific incidents, rather than short phrases or a sentence or two.

For purposes of coding the incidents, Yukl's leader behavior taxonomy was used as set out in the military

leader study (Yukl and van Fleet, 1982). The taxonomy operationally defined 19 basic types of managerial behavior such as problem solving and goal setting by naming the type and providing succinct definitions. For example, goal setting was defined as "the extent to which a leader emphasizes the importance of setting specific, challenging, but realistic performance goals for each important aspect of a subordinate's job" (Yukl and van Fleet, 1982, p.90).

For this study, the 19 behavior types and names were retained. The definitions were changed only as required to customize them for the I.R. manager's role. One important change was to broaden the coverage from just subordinates to include others with whom the I.R. manager had to deal, as manager, in his boundary spanning role. The definition for goal setting used in this study was as follows: "the extent to which an I.R. manager emphasizes the importance of setting specific, challenging, but realistic performance goals for each important aspect of another's job" (emphasis added to highlight the changes). The behavior list and definitions for each of the 19 behavior types can be found in "Appendix H. Behavior Classification Category List and Definitions" on page 268.

Five other classification schemes were prepared for use in coding the critical incidents. The manipulations

for encouraging lengthy and detailed incidents were described above. These five other schemes were designed to study the "necessary details and background information" which respondents included in their incidents. Although the questionnaire was designed to collect examples of individual behavior, these instruments were designed to identify information related to the determinants of behavior or the specifics of the task on which the individual manager was engaged that respondents might include.

For the individual, organizational, and environmental level determinants of behavior, a survey of the literature identified a number of factors for each level of analysis. For example, the individual level factors included items such as personality traits, attitudes, values, task related knowledge, skills, and abilities. A list of 15 individual determinants was compiled, with operational definitions for each category. This list is set out in "Appendix I. Individual Factors Classification Scheme Definitions" on page 271. While the other lists were designed to be used along with the behavior scheme in coding each incident, the individual scheme was designed to code only those incidents which were identified during the behavior coding as not containing any behaviors. Fortunately for the study, but unfortunately for the use of the individual taxonomy, there were too few non-behavioral examples in the incidents to

warrant classifying them. Therefore, the individual taxonomy was not used in this study.

Similar lists were constructed for the organizational and environmental determinants of individual managerial behavior. The list of seven items for the organizational classification scheme included task or job characteristics, information processes, organizational structure, rewards, people, strategy, and constraints. The list and definitions were based on Galbraith's work on organization design (1977). The operational definitions used for classifying the incidents can be found in "Appendix J. Organization Factors Classification Scheme Definitions" on page 275.

The list of six environmental level determinants included union(s), bargaining structure, community, government/laws, competitors, and customers/suppliers. This list was compiled after a review of the I.R. literature, with a focus on the factors in both the I.R. system and the company's environment that affect behavior on I.R. matters. The list of environmental definitions is set out in "Appendix K. Environmental Factors Classification Scheme Definitions" on page 279.

A list of other roles in the I.R. manager's role network was also compiled. This list was subdivided into the four following categories: direct reports, other managers, union and employees, and others. The list included roles such as boss, subordinate, foreman, consultant, chief spokesman for the union bargaining team, and third party neutrals. The full list of 16 roles with operational definitions can be found in "Appendix L. Target Classification Scheme Definitions" on page 281.

The final list for coding purposes was a list of specific I.R. issues to use in identifying what the I.R. manager was working on, rather than how he was doing it. This list was compiled after a review of the I.R. literature and in particular, Brown and Beatty's (1977) and Palmer's (1983) works on grievance arbitration issues. The list included items such as assigning work outside the bargaining unit, job reclassification, technological change, sexual harassment and merit pay. The full list of 33 items, subdivided into nine categories, can be found in "Appendix M. Content Classification Scheme Definitions" on page 283.

The use of five of these six classification schemes for coding the critical incidents and the measures of inter-rater agreement for each are set out in subsequent sections of this chapter.

4.3 THE UNIT OF ANALYSIS

The basic unit for analysis of the critical incident data in this study was the part of an incident to which a rater supplied a single code. That is, in the data analysis of the critical incident codes, the code, not the incident, was the unit analyzed. However, raters provided one or more codes for each incident without explicitly identifying the parts of incidents to which single codes were attached. Therefore, while the single code is the basic unit that was analyzed, only the incident for which it was provided could be identified.

In contrast to this method, Yukl and van Fleet collected category frequencies by codes but converted frequencies to percentages by dividing code frequencies by the total number of incidents, not the total number of codes. Column percentages totalled 125% for study 1 and 198% for study 2 (Yukl and van Fleet, 1982, p.97, Table 3). Because of this, the principal reason for converting frequencies to percentages, that is, to aid readers in comparing across categories when frequency totals differ, was defeated.

For purposes of cross-classifying the codes,

(a) task and effectiveness measures were common to all incident subunits from the same incident;

(b) function and level measures were common to all incident subunits from the same respondent;

(c) measures on the three summed scales (I.R. group's effectiveness; employees' productivity, quality and attitudes; and union-management relationship) were aggregated over all respondents from the same bargaining situation and common to all incident subunits from the same bargaining situation.

For purposes of sampling and in the printed guidelines for contact people and on the questionnaire, the "bargaining situation" was the bargaining unit used for purposes of negotiating the collective agreement with the company's largest group of unionized employees. However, I.R. managers in each company distributed the questionnaires according to the guidelines provided. In some cases, these I.R. managers and the individual respondents may have interpreted how the scope of the guidelines and questions applied in their particular circumstances in slightly different ways.

4.1 SAMPLE SELECTION

One package of nine questionnaires was sent to each of 329 large Canadian private sector companies, exclusive of construction, where industrial relations was a well-established and significant factor in the business. The survey was a census of these companies as operationally defined below. As distributed within each company, the survey was a non-random, stratified, convenience sample of nine individuals chosen by the contact person in each company according to guidelines provided by the investigator. In providing critical incidents on the questionnaire, the respondents are assumed to have randomly sampled from an infinite population of examples they have observed and hold in memory.

The criteria used to identify these companies were as follows. The package was sent to the address of each company contact person listed by Labour Canada for bargaining situations of 500 or more employees, excluding those in the following industrial classifications: Public Administration and Defence; Education, Health and Welfare; Construction; Finance, Insurance and Real Estate; Agriculture, Fishing and Trapping; Religious, Business Management, Amusement and Recreation, Personal, and Miscellaneous Services. The package was sent to all companies listed in the

Transportation, Communication, and Utilities classification including public sector or third sector employers such as Air Canada or Canadian National Railways. The package was also sent to all companies listed in the Accommodation and Food subsection of the Community, Business and Personal Services classification.

Each contact person was asked to fill out one questionnaire and to distribute the eight additional questionnaires within the largest bargaining unit as follows: two to union reps, three to I.R. managers, and three to line managers. One line manager and one I.R. manager were to be selected from positions which were relatively high, medium and low in the hierarchy. However, less than nine questionnaires may have been distributed in some companies. Because the primary focus of the study was on managerial perceptions, companies were encouraged to participate even if they did not wish to involve their unions in the study. The cover letter to contact people noted that the investigator realized that distribution to union reps may not be possible in all cases.

Contact people were asked to provide a balance between those known not to be critical of the I.R. function and those known to be critical. Contact people were also asked to distribute the questionnaires to those who had had some

experience in contract administration and negotiations in the past three years.

A cover letter addressed to the contact person was included in the package of nine questionnaires. A different cover letter addressed to each respondent was attached to each of the other eight questionnaires in the package. This initial mailing was twice followed up, first with a postcard and finally with a letter. See ("Appendix B. Cover Letter to Contact Person" on page 257) and the three following appendices for these letters and the postcard. The design of the questionnaire and follow-up letters incorporated numerous suggestions found in Dillman (1978).

The characteristics of the final sample are described in the next chapter.

4.5 DATA COLLECTION - THE QUESTIONNAIRE

There were three main parts to the self-administered questionnaire. In the first part, respondents were asked to indicate their opinion on the following:

(a) the performance of the I.R. people as a group (6 items);

(b) the productivity, product quality, and attitudes of the unionized employees (3 items); and

(c) the state of the union-management relationship (9 items).

In the second part, they were asked to provide one or two examples each of effective administration incidents (one page), ineffective administration incidents (one page), effective negotiating incidents (one page), and ineffective negotiating incidents (one page). These questions solicited open-ended responses.

In the final part, respondents were asked to provide some information about their position (3 items) and experience in I.R. (12 items). See ("Appendix A. Self-Administered Questionnaire" on page 249).

Five managers attending a management development course participated in a pilot test of the questionnaire. Final changes to the questionnaire based on their suggestions included keeping the quantitative questions to a minimum because generating the critical incidents, which was the primary goal of the questionnaire, took considerable time and effort. The questionnaire took 45 minutes to an hour to complete, depending on the detail included in

the critical incidents. Some of those who participated in the pilot test reported that they had to leave the answers to the critical incident questions for a while to give themselves time to think about them.

For those companies which participated in the study, the name of the union which represented the employees in the largest bargaining situation, the number of employees in the largest bargaining situation, and the industry in which the company operated were obtained from Labour Canada files. Therefore, this information did not have to be collected on the questionnaire.

4.6 DATA COLLECTION - JUDGES' RATINGS OF CRITICAL INCIDENTS

(1) Where individual critical incidents began and ended was, for the most part, clearly indicated by the respondents on the questionnaire by their use of numbers, dashes, or spacing. In the very few cases where this was not the case, the investigator used his judgement to make the division between two separate but contiguous incidents on the basis of the content. Individual incidents were not further segmented by the investigator into more micro sub-units.

(2) Student judges were hired to encode the critical incidents into the categories of the classification schemes. Two MBA students who were enrolled in an industrial relations course encoded the incidents for the content and target classifications. Two undergraduate business students who had written research cases the previous summer for an I.R. research project encoded the incidents for the organizational and environmental classifications. Two of the three judges who encoded incidents for the behavior classification were graduate students in business (one MBA, one Ph.D. with specialization in I.R.). The third was a graduate student in Sociology (MA, Sociology of Work). These different backgrounds helped guard against any bias in the behavior classification which may have resulted from judges making inferences about what the respondent must have meant rather than encoding what the respondent actually did say (Ericsson and Simon, 1984). Three judges were used to code for the behavior classification scheme because an initial encoding involving only the investigator and one additional judge encoding 25 percent of the incidents resulted in unacceptably low measures of inter-judge agreement. This initial encoding is discussed more fully below.

(3) The judges were not told about the design of the study or the specific hypotheses to be tested in order to guard

against any bias toward confirmation of hypotheses (Ericsson and Simon, 1984).

(4) Training for the judges (with the exception of two of the judges for the behavior classification encoding) was limited to briefly explaining the task, reviewing the coding manual, and answering any questions after a number of incidents had been coded. The two main judges for the behavior classification received about ten hours of training over two days in order to ensure that they fully understood the coding guidelines and the behavior taxonomy. Their training involved a brief introduction to the task and group discussion of the codes given to a random selection of incidents after the individual judges had rated them independently.

(5) The incidents were presented to the judges in random order in order to protect against any influence of previous encodings on subsequent ones (Ericsson and Simon, 1984). The only contextual information provided to judges was the function (line manager, I.R. manager, union rep) of the respondent. This was provided in order to clarify the role of the respondent and, therefore, the role of the antecedent of any pronouns where this was not identified in an individual incident.

(6) The judges, with the exception of the second and third judges for the behavior classification, were permitted to assign one, two, or three category codes to each incident. The final category in each classification scheme was "none of the above." The second and third judges for the behavior classification were permitted to assign as many of the nineteen category codes as they believed to be appropriate for each incident. Because the encoding was based on complete incidents and judges were permitted to assign multiple category codes to each incident, the investigator could not determine exactly what information in a given incident was used to make a particular category coding.

4.7 DATA ANALYSIS - INTER-RATER AGREEMENT OF JUDGES' RATINGS FOR THE BEHAVIOR CLASSIFICATION

Inter-rater agreement is the same as inter-rater reliability for ratings of nominal level data (Tinsley and Weiss, 1975) because, for nominal level data, raters either agree or disagree. There is no partial agreement to be measured.

Inter-rater agreement was measured to make sure that the types of behavior reported by one rater to be represented in an incident were really there. We did not want to analyze behavior types that did not exist.

Two techniques were used to ensure that the behavior types analyzed were really represented in the incidents. First, an initial simple check was made to ensure that every single code analyzed was found in that incident by at least two of the three raters used. Codes found by only one of the three raters were not used in subsequent analyses. Thus, the proportion of raters who reported every code analyzed in this study was either .67, if two of three raters reported it, or 1.0 if all three raters reported it. Therefore, the possible range for mean proportions of judges agreeing on codes when averaged over categories, incidents or the classification scheme as a whole was .67 to 1.0. Furthermore, one of the three raters was a naive rater in that he received no training in the coding process beyond that contained in a brief coding manual with category definitions. This rater also had a limit of three codes that could be assigned to each incident. Thus, one rater operated under tighter coding rules than the other two raters, making agreement between two of three raters harder to achieve.

The second means used to ensure that the codes were really represented in the incidents was to establish criteria for an acceptable level of agreement between the two raters who received the more extensive training and could assign as many codes as they believed were represented in

an incident. Thus measures of the percent of agreement or proportion of overlap in codes for raters 4 and 5 will also be reported.

For a particular code, the proportion of agreement or overlap between two raters is either 1.0 (agreement) or 0.0 (disagreement). A minimally acceptable level of agreement for an individual category of the scheme was determined to be .65. This level was found to be a minimally acceptable standard in a review of the literature by Guttman, Spector, Sigal, Rakoff, and Epstein (1971). It seemed appropriate for this study because it was used in combination with the standard of two of three judges agreeing on each code. Although .65 was determined to be minimally acceptable for a category, a target level of .67 was set for each category. Following Tinsley and Weiss (1975), achieving this target level would mean that these two raters would be in agreement on a category's codes at least two thirds of the time.

For the classification scheme as a whole, a minimally acceptable level was determined to be .70 and a targeted range was determined to be from .70 to .80. Although much higher levels of inter-rater agreement have been reported in numerous studies involving encoding of decision-making and problem-solving protocols (Ericsson and Simon, 1984),

Yukl and van Fleet's published level of .64 for the behavior scheme as a whole suggested that more modest levels of inter-rater agreement should be expected in this encoding process. This expectation was reinforced because Yukl and van Fleet (1982) did not publish mean proportions of agreement for the 19 individual categories of the scheme. Furthermore, Nunnally's cost-benefit rationale (1978) for a standard of inter-item reliability for measures of personality traits of .70 to .80 for basic research seemed applicable to this exploratory study as well.

These standards, in aggregate, were far more stringent than the reliability standard called "reasonably high" by Campbell, Dunnette, Lawler, and Weick (1970, p.83). In the study reported, raters worked in pairs (not independently), rated only 300 of 1847 incidents (16%), and only the overall mean proportion was reported (not the category means). Therefore, although the mean proportion overall was 80% in the study reported, the problems identified above in the process by which the codes were obtained and the results reported raise serious questions about the reliability of the codes.

The more technical details of the measurement of inter-rater agreement are set out in "Appendix N. Inter-Rater Agreement" on page 288. In the following para-

graphs the main findings regarding inter-rater agreement will be presented.

As can be seen from the results presented in Table 6 on page 111, the measures of inter-rater agreement for the data base of 6462 codes provided by all three raters fell far short of the standards set. For raters 4 and 5, the mean proportion of overlap was only .56 for the scheme as a whole and ranged from .09 to .54 for the individual categories. Five of the 19 categories had mean proportions of under .20. With respect to the standard of proportion of judges agreeing on a code, fully 54.3% of the codes (3512 codes) had been assigned by only one of the three judges.

Inter-rater agreement on this task was low for a number of reasons. For example, there were 19 categories for the raters to choose from and the task involved placing incidents specific to an I.R. manager's task in categories developed to apply to managers generally. The categories were not developed inductively from incidents describing I.R. managers' behaviors. Although this procedure set a rigorous objective standard for the classification task, the task was somewhat like trying to place well over a thousand round pegs of different sized diameters in a series of 19 different sized square holes.

BEHAVIOR CATEGORY	CODE FREQ (100%)	NUMBER OF JUDGES AGREEING ON A CODE, AS PERCENT OF CATEGORY TOTAL			MEAN PROPORTION OVERLAP, RATERS 4 AND 5	
		1/3	2/3	3/3	FREQ	MEAN
A PERFORMANCE EMPHASIS	92	63%	26%	11%	66	.32
B CONSIDERATION	330	54	29	17	304	.37
C INSPIRATION	59	95	3	2	7	.14
D PRAISE-RECOGNITION	17	47	29	24	13	.54
E STRUCTURING REWARDS	56	73	21	5	33	.18
F DECISION PARTICIPAT.	446	53	32	15	401	.42
G AUTONOMY	163	66	21	13	120	.28
H ROLE CLARIFICATION	387	61	28	11	327	.30
I GOAL SETTING	80	78	20	3	64	.09
J TRAINING	103	74	18	8	53	.36
K INFORMATION DISSEM.	816	43	27	30	611	.51
L PROBLEM SOLVING	594	48	35	16	527	.39
M PLANNING	435	52	27	21	379	.32
N COORDINATION	148	87	12	1	104	.10
O WORK FACILITATION	499	71	25	4	440	.23
P REPRESENTATION	399	84	14	2	244	.11
Q INTERACTION FACIL.	925	39	35	26	867	.52
R CONFLICT MANAGEMENT	800	43	35	23	753	.47
S CRITICISM-DISCIPLINE	113	58	29	13	92	.40
TOTAL:	6462*				5315	
AVERAGE:						.56**

- * Number of incidents = 1327; mean of 4.9 codes per incident, minimum of 3 per incident, maximum of 15 per incident, and mode of 8 codes per incident.
- ** Compare mean proportions of overlap for raters 4 and 6 of .49 and for raters 5 and 6 of .44.

Table 6. Inter-Rater Agreement Measures, All Codes from All 3 Judges: Number of Judges Agreeing on a Code (1, 2, or 3 out of 3) as a Percentage of the Total Category Code Frequencies, and Corresponding Frequencies and Mean Proportion Overlap in Codes, Raters 4 and 5 only

BEHAVIOR CATEGORY	CODE FREQ	MEAN PROPORTION	
		JUDGES AGREEING ON CODES	OVERLAP, RATERS 4 & 5
Q INTERACTION FACILITATION	563*	.81	.80
K INFORMATION DISSEMINATION	464*	.85	.68
R CONFLICT MANAGEMENT	457*	.80	.78
L PROBLEM SOLVING	307*	.77	.67
F DECISION PARTICIPATION	209*	.77	.80
B CONSIDERATION	152	.79	.73
O WORK FACILITATION	145	.72	.71
M PLANNING (Y)	208*	.81	.58
H RÖLE CLARIFICATION (Y)	150	.76	.65
J TRAINING (Y)	27	.77	.70
S CRITICISM-DISCIPLINE (Z)	48	.77	.77
D PRAISE-RECOGNITION (Z)	9	.82	.78
P REPRESENTATION**	65	.72	.43
G AUTONOMY**	56	.79	.59
A PERFORMANCE EMPHASIS**	34	.77	.62
N COORDINATION**	20	.70	.50
I GOAL SETTING**	18	.71	.33
E STRUCTURING REWARDS**	15	.74	.40
C INSPIRATION**	3	.78	.33
TOTAL:	2950		
AVERAGE:		.81	.79

* $p < .05$, one tailed one sample Z test of proportions (Loether and McTavish, 1980); threshold frequency is 175).

Y Combined in new category, "Planning & Implementing".

Z Combined in new category, "Praising & Criticizing".

** To be deleted from further analysis due to low frequencies (under 75) AND low inter-rater agreement (under .65 Mean Proportion Overlap).

Table 7. Mean Proportions of (a) Judges Agreeing and (b) Overlap in Codes: Mean Proportion of Judges Agreeing (2/3 = .67; 3/3 = 1.0) and Mean Proportion of Overlap in Codes for Raters 4 and 5 (Agree = 1; Disagree = 0) for Only those Codes on Which at least 2/3 Judges Agreed

BEHAVIOR CATEGORY	CODE FREQ	MEAN PROPORTION OVERLAP
-----	----	-----
Q INTERACTION FACILITATION	563	.80
K INFORMATION DISSEMINATION	464	.68
R CONFLICT MANAGEMENT	457	.78
L PROBLEM SOLVING	307	.67
F DECISION PARTICIPATION	209	.80
B CONSIDERATION	152	.73
O WORK FACILITATION	145	.71
Y PLANNING AND IMPLEMEN- TATION (FORMER M, H & J)	364	.65
Z PRAISING AND CRITICIZING (FORMER S & D)	57	.77
	-----	----
	TOTAL: 2718*	
	-----	----
	AVERAGE:	.80

* Number of incidents = 1302; mean of 2.1 codes per incident, minimum of 1 code per incident, maximum of 6 codes per incident, mode of 2 codes per incident.

Table 8. Mean Proportion of Overlap in Codes, Raters 4 and 5: Mean Proportion of Overlap in Codes for Raters 4 and 5, for the Final 9 Categories after Combinations and Deletions of Selected Original Categories

As can be seen from Table 7 on page 112, the 2950 codes, or 45.7% of the original codes assigned, on which at least two of the three raters agreed had an overall mean proportion of overlap of .79. Furthermore, 11 of the 19 individual categories had mean proportions of overlap of .65 or higher. All but one of the 8 categories with mean

proportions of overlap under .65 also had category frequencies under 75 and were deleted from further analysis. The Planning category had a relatively high and statistically significant category frequency of 208 ($p < .05$, one sample, one tailed Z test of proportions) but a relatively low mean proportion of overlap of .58. It was combined with two other categories, Role Clarification and Training, on the basis of similar content involving the planning and implementation of change.

The other two categories with frequencies under 75 but relatively high mean proportions of overlap in codes, Criticism/Discipline and Praise/Recognition, were also combined on the basis of similar content, namely positive and negative reinforcement.

After these deletions and combinations, the standards set out for inter-rater agreement of the codes were fully met. As can be seen in Table 8 on page 113, there were nine categories in the final classification scheme with an overall mean proportion of overlap of .80, that is, at the top of the target range. One category met only the minimally acceptable standard of .65 for a category and two others were just over the target category standard of .67. The other six categories had mean proportions of overlap in codes which exceeded .70. Therefore, these nine categories

and 2718 codes from 1302 incidents were accepted as the basis for further analysis.

In review, the steps in the process of achieving these reliable behavior codes and categories were as follows.

(1) Standards for the mean proportions of agreement between two raters were set following a review of the literature (.65 minimally acceptable level for each category; .67 target level for each category; .70 to .80 target range for the behavior scheme as a whole).

(2) One rater, a doctoral student in business administration with a major in I.R., coded all of the incidents. He received virtually no training and had a maximum of three codes which could be assigned for each incident. The mean proportion of agreement between this rater and the investigator on approximately 25% of the incidents was unacceptably low.

(3) A standard for the proportion of judges agreeing on a code was developed for use in this study (at least two out of three judges agreeing on each code used in subsequent analyses).

(4) Two other raters, masters students in business administration and sociology, coded all of the incidents. They received ten hours of training each and could assign as many codes per incident as they saw represented there. The mean proportions of agreement between the three pairs of raters who coded all the incidents were still unacceptably low, although the mean proportion of agreement between the two new raters was considerably higher than the mean proportion of agreement between the investigator and the first rater had been. A total of 6462 codes were generated by the three raters for 1327 incidents.

(5) A code was retained for further analysis only if it met the standard set for proportion of judges agreeing on it, namely, if at least two out of the three judges agreed on it. Codes unique to one rater were not retained for further analysis.

(6) After the deletion of 3512 codes unique to one rater, 2950 codes remained. The mean proportions of agreement between the two additional raters who received the extra training and operated under the same coding guidelines met the standards set for (a) the classification scheme as a whole, and (b) for eleven of the 19 individual categories. The mean proportions of agreement for eight of the 19 categories were still unacceptably low. However, all of these

codes in the 19 categories met the standard of two out of three or three out of three judges agreeing on each code.

(7) Two low frequency categories, each of which met the standards set for inter-rater agreement, were combined into one category on the basis of similar content (Praise-Criticism).

(8) Three categories, two with acceptable levels of inter-rater agreement and one high frequency category with an unacceptably low level of inter-rater agreement, were combined into one category on the basis of similar content. This new category, Planning-Implementation, had a mean proportion of agreement between the two additional raters which met the minimally acceptable standard.

(9) Seven categories with unacceptably low levels of inter-rater agreement and low frequencies were not retained in subsequent analyses.

(10) The final nine categories with the 2718 codes from 1302 incidents which were retained in subsequent analyses of I.R. managers' behaviors met the standards set for both mean proportions of judges agreeing and mean proportions of agreement.

(11) All nineteen categories with 2950 codes which were retained in subsequent analyses comparing I.R. managers' behaviors with military leaders' behaviors met the standard for mean proportions of judges agreeing on a code. However, eight of the nineteen categories used did not meet the standards for mean proportions of agreement.

4.8 DATA ANALYSIS - INTER-RATER AGREEMENT OF JUDGES' RATINGS FOR CLASSIFICATIONS OTHER THAN BEHAVIORS

None of the five classification schemes other than behavior generated data that was analyzed beyond the stage of inter-rater agreement. As mentioned in a previous section, the individual classification scheme was prepared for the analysis of incidents which did not contain behaviors, but there were too few examples to warrant coding them.

All of the incidents were coded by two raters for the categories of the environmental and organizational schemes. The raters agreed that 616 incidents, or less than 50%, contained codable organizational factors and that only 95 incidents contained codable environmental factors.

The overall organization classification scheme measure of the mean proportion of agreement was .41, while the measures of individual categories' mean proportions of agreement ranged from a high of .47 to a low of .09. The

overall classification scheme measure of the mean proportion of agreement for the 95 incidents in the environmental classification was .76, and the individual categories had measures which ranged from a high of .75, the only category above .65, to a low of .17. The measures for the organizational and environmental scheme did not meet the minimally acceptable criteria for inter-rater agreement, although the overall measure for the environmental scheme was acceptable. The codes from these two schemes were not analyzed further.

All the incidents were analyzed by at least one rater for the the categories of the content and target classification schemes. However, only 104 incidents were analyzed by both raters together. The initial measures of the mean proportion of agreement over all the codes in the original schemes were as follows: .69 for the content scheme, and .38 for the target scheme. Because neither measure reached the minimally acceptable standard for a scheme as a whole, and because both schemes contained a number of distinct subcategories, categories with similar content were combined and acceptable measures for the schemes overall were reached. However, both classification schemes still had individual categories with measures of mean proportion of agreement that did not reach standard. The 11 final categories of the content classification scheme had meas-

ures of mean proportion of agreement that ranged from highs of .85 and .71, the only two categories above .65, to a low of 0.0. The three final categories of the target classification scheme had mean proportions of agreement of .66, .54, and .17. None of the codes for either of these schemes were analyzed further.

4.9 DATA ANALYSIS - FREQUENCIES OF BASIC TYPES OF BEHAVIORS

Once reliable behavior codes were obtained, category frequencies were analyzed in order to (a) identify the situations in which the patterns of behavior for I.R. managers are significantly different; (b) describe the different patterns of behaviors found in the different situations; (c) compare these findings for I.R. managers with the findings of Yukl and van Fleet (1982) for military leaders; and (d) identify those behavior types which occurred with significant frequency for I.R. managers overall to be included in an I.R. managers' behavioral requirements profile. All tests were conducted using the SAS (1982) statistical analysis package unless otherwise stated.

To identify those situations in which the patterns of I.R. managers' behaviors were significantly different, Pearson chi-square tests of independence were conducted on the cross-classifications of the behavior categories with

the classification variables. Measures of association such as Phi were also computed when the null hypothesis of no association was rejected. These tests were conducted using the final, reliably encoded data base of 1302 incidents with 2718 behavior codes and the nine category behavior classification scheme. The effects of including various classification variables as control variables were also examined using sets of conditional tables and calculating and evaluating pooled chi-square measures over a set of tables.

To describe significant differences in patterns of behavior types, cell contributions to the overall chi-square were visually inspected to identify those behavior types whose contributions to overall chi-square were above average. For those cells with above average cell chi-squares, the sign of the deviation of observed from expected frequencies was also examined.

The findings for I.R. managers were also compared with the findings of Yukl and van Fleet (1982) for military leaders. There were four initial barriers to making these comparisons.

(1) In the military leader study, all 19 categories of the original classification scheme were used, while a shorter 9 category scheme was used in the I.R. analysis.

(2) Inter-rater agreement in the military leader study was low. The mean proportion of overlap in raters' codes was only .64, and the mean proportions by category were not published. In the I.R. study, 8 of the 19 original categories had mean proportions of overlap in codes from two raters of less than .65.

(3) The two military leader task situations were combat and noncombat, while the two I.R. manager task situations were contract administration and negotiation.

(4) The military leader study analyzed effective behaviors only while the I.R. study analyzed both effective and ineffective behaviors.

For purposes of comparison, data for the 19 category classification were used from both studies. Although there were problems with the mean proportions of overlap in codes for some of the original 19 categories in this study, all the codes reported for I.R. managers were found by at least two of the three raters. In addition, with the exception of one critical incident method effect, Consideration, identified by Yukl and van Fleet, all behaviors significant in the critical incident studies of military leaders were also significant in one or both of the two questionnaire-correlational studies of military leaders.

Therefore, while the results must remain tentative, there are factors in addition to the measures of mean proportion of overlap which support the basic reliability of the 19 category data in both studies and the results of a comparative analysis of both studies.

For purposes of comparing the results obtained for military leaders and I.R. managers by task situation, it seemed probable that noncombat situations would be more similar to contract administration situations (living under the agreement or truce) and that combat situations would be more similar to negotiation situations (making the agreement or truce under which to live). The data to be presented in the next section tended to support this initial pairing of the task situations. While this pairing of situations across the two types of managers was the best pairing possible, it was not ideal. For example, negotiations are not necessarily combative, and contract administration is not necessarily noncombative. However, I.R. administration behaviors were compared with noncombat behaviors by military leaders. In addition, I.R. negotiating behaviors were compared with combat behaviors by military leaders.

Because the military study analyzed only effective behaviors, an analysis of the I.R. data was conducted to see if the pattern of behavior types for effective incidents

differed significantly from the pattern of behavior types for ineffective incidents. As will be shown in the next chapter, the results of this analysis indicated that the pattern for effective negotiating behaviors did not differ significantly from the pattern for ineffective negotiating behaviors. However, the patterns of behavior types for effective and ineffective administration incidents were significantly different. Therefore, effective I.R. administration behaviors were compared with effective military noncombat behaviors. In addition, all I.R. negotiating behaviors were compared with effective military combat behaviors.

The chi-square test of independence could not be used with the full 19 category scheme because many of the cells had expected frequencies of less than five due to the many low frequency categories in both studies. In analyzing the military leader critical incident data, Yukl and van Fleet (1982) used the one and two sample Z tests of proportions. A one sample, one tailed Z test of proportions (Loether and McTavish, 1980) was also conducted on the I.R. data.

This test was conducted for the 2950 code frequencies from 1327 incidents over the original nineteen category classification scheme, before the deletion and combination of categories. This test identified a threshold frequency

and corresponding threshold proportion for category frequencies above which category frequencies and, therefore, associated behavior types, were significant at the determined level of significance. The standard for the significance level was .05 in this instance. This test differentiated between those types of managerial behaviors which I.R. managers were seen to be engaging in relatively frequently and those types of behaviors which I.R. managers were perceived to use relatively infrequently in critical incidents.

In addition, a two sample, two tailed Z test of proportions (Loether and McTavish, 1980) was used to determine if the difference between the proportions which were significant in the one sample test for either I.R. managers or military leaders was also significant.

Finally, there were a number of assumptions which had to be met before the chi-square test of independence and the Z tests of proportions were used. The assumptions to be met before using the chi-square test included (1) independent observations, (2) a simple, random sample of the population, (3) at least nominal level measures, and (4) no expected frequencies below 5, given the underlying continuous nature of the chi-square statistic. Categories of the classification scheme must be mutually exclusive and ex-

haustive. The assumptions underlying the use of the 1 sample Z test of proportions are the same as those listed above for the chi-square test except for number 4. For the one sample Z test of proportions, NP and NQ (where $Q=1-P$) must both be equal to or greater than 5 (Loether and McTavish, 1980).

While the assumption of the level of measurement posed no problems for this research, each of the other three assumptions requires some discussion. Two key assumptions underlie the claim that the data for this study are independent observations obtained in a simple random sample of the population. The first assumption is that, in providing specific critical incidents, respondents randomly sampled from an infinite number of examples of effective and ineffective behaviors by I.R. managers, examples which they had observed over time and hold in memory. It is, for example, not uncommon for small groups of informants to be able to generate several hundred examples of critical incidents in two or three sessions (Dunnette, 1976, p. 492).

The second assumption is that coders applied multiple codes to individual incidents by first implicitly segmenting incidents into subunits of text appropriate for purposes of assigning a single code. Then a code was assigned to each subunit independently. In the investigator's expe-

rience coding the incidents and in discussions with the other coders, it was clear that individual codes were implicitly based on specific words, phrases, clauses, or sentences within an incident. However, while independence of codes between incidents was guaranteed by the random presentation of incidents to the coders, independence within incidents could not be controlled.

While the random sampling of incidents by respondents is assumed, and is the basis of meeting the assumptions for the statistical tests used, sampling at other levels for this study by the investigator was not random. For example, respondents selected for the study were a combination of a convenience sample (use of the I.R. manager for each company as the contact person) and a stratified sample (by function and level) within each company. This stratified sample was also a convenience sample. It was done by the I.R. managers for their own companies according to guidelines accompanying the questionnaires. Furthermore, the companies which were asked to participate represented a census of the population of private sector companies in Canada with bargaining situations of 500 or more employees, as defined above.

Because the behavior classification scheme had nine categories, no correction was necessary due to the continuous distribution of the chi-square statistic.

Because the number of codes used was very large, both NP and NQ were well above 5 in the one sample Z test of proportions, even though P was relatively small, given a 19 category classification scheme.

The assumption of no expected frequency under five acted as a key constraint on the number of classification variables whose effects on the nine category dependent variable could be examined simultaneously. Because of these practical limits, the effects of the classification variables were examined independently of each other, and, again, controlling for the effects of, at most, one or two other classification variables at a time.

The assumption of exhaustive categories of the classification scheme is not a problem given a final category of "other" or "none of the above." However, some of the categories in the nineteen category scheme used for this study may not be mutually exclusive, as Yukl has mentioned (Yukl, 1986), at least as they pertain to entire incidents. However, as noted above, a key assumption of this study was that the coders first segmented the incidents into sub-

units. It was further assumed that, at the level of these subunits, these categories were mutually exclusive. Although this assumption is thought to be a reasonable one, there is no way to check it because coders did not explicitly identify the subunits or tie particular codes to them.

Finally, results obtained from analyzing the 19 category I.R. data with one and two sample Z tests of proportions were compared with the results obtained from analyzing the 9 category I.R. data with chi-square tests of independence to see if there were any significant differences in results between these two taxonomies and two statistical tests.

5.0 RESULTS

The data for this study were gathered from self-administered questionnaires and the subsequent encoding of the critical incident data from the questionnaires. Some additional data on the characteristics of the bargaining situations were gathered from Labour Canada's files. In this chapter, the results of the data analysis will be presented, including the characteristics of the respondents in the sample and the response rate, an empirical description of perceived I.R. effectiveness in the bargaining units in the sample, a behavioral profile for I.R. managers, the situational contingencies of effective behavior by I.R. managers, and a comparison of I.R. managers and military leaders.

5.1 SAMPLE AND RESPONSE RATES

Usable data were obtained from 101 of the 329 bargaining situations to which a package of questionnaires had been sent. The response rate for bargaining situations was, therefore, 30.7%.

REASON GIVEN FOR COMPANIES NOT PARTICIPATING	NO. OF COMPANIES
1. Lack of staff, manpower, or time	20
2. Workload too heavy	12
3. Now involved in negotiating major agreements	11
4. Vacations, summer plant closings -- time of year	10
5. Company reorganization underway	6
6. Questions are inappropriate, impractical, or inapplicable in our situation now	6
7. English only questionnaire, no French version	5
8. Other commitments, priorities, immediate needs - unspecified	5
9. Downsizing the company	4
10. Changes in management personnel	4
11. Top I.R. manager is new on the job	3
12. Business in receivership or other serious difficulties	3
13. Sensitivity of this particular survey for this company culture, for the top I.R. manager's relationship with other managers, or for the existing general line-staff relations re I.R. issues	3
14. Information requested is not readily available and hard to get	2
15. Already do too many surveys	2
16. Tight time frame, nature and depth of this survey	2
17. Downturn in the economy, low cost imports	2
18. Changes in union personnel	2
19. Anomaly of a local union	1
20. Already participating in another IR study with another university	1
21. No reasons given, but contact made to say they would not be participating	8

Total:	112

Figure 8. Reasons 70 Companies Gave for not Participating in the Survey

Seventy of the 329 companies contacted the investigator to say that they could not participate in the study. Sixty-two of the 70 gave reasons, often more than one, for not participating. In Figure 8, the list of the reasons

provided is set out. Thus, the investigator heard from 171 of the 329 companies or 52%.

The 101 bargaining situations from which usable data were obtained can be characterized as follows:

(1) 32 international, national, and local union organizations were represented ("Appendix O. Distribution of Bargaining Situations by the Union Representing the Employees" on page 293). Fourteen of the 32 were represented in only one of the 101 bargaining situations. The most frequently represented unions were the Steelworkers (15% of the bargaining situations), the Autoworkers (10%), and the Paperworkers (8%).

(2) 93 companies were represented, several in more than one bargaining situation in the study. The list of 93 is set out following the acknowledgments at the beginning of this document.

(3) A wide variety of industries were represented (Table 9 on page 133), including (a) manufacturing (56% of the 101 bargaining situations), (b) transportation, communications and other utilities (19%), and (c) mines, quarries and oil wells (14%). The most frequently represented manufacturing industries were (a) food and beverage (10% of the 101 bar-

INDUSTRY	PERCENTAGE OF BARGAINING SITUATIONS
FORESTRY	2%
MINES, QUARRIES, OIL WELLS	14
MANUFACTURING	56
Food and Beverage	10%
Rubber and Plastics Products	4
Wood	3
Paper and Allied	9
Primary Metal	4
Metal Fabricating	5
Transportation Equipment	10
Electrical Products	6
Other	6
TRANSPORTATION, COMMUNICATIONS, AND OTHER UTILITIES	19
Transportation	7
Storage	1
Communication	5
Electrical, Power, Gas, and Water Utilities	6
TRADE	5
SERVICES	4
Accommodation and Food	4

Table 9. Distribution of Bargaining Situations by Industry: Number of Bargaining Situations = 101.

gaining situations), (b) transportation equipment (10%), and (c) paper and allied products (9%).

(4) Every province except Prince Edward Island was represented (Table 10 on page 134). The most frequently repres-

PROVINCE	PERCENTAGE OF BARGAINING SITUATIONS
*****	*****
BRITISH COLUMBIA	14%
ALBERTA	2
SASKATCHEWAN	5
MANITOBA	5
ONTARIO	48
QUEBEC	19
NEW BRUNSWICK	1
NOVA SCOTIA	5
PRINCE EDWARD ISLAND	0
NEWFOUNDLAND	2

Table 10. Distribution of Bargaining Situations by Province: Number of Bargaining Situations = 101.

 ented provinces were Ontario (48% of the 101 bargaining situations), Quebec (19%), and British Columbia (14%).

(5) The number of unionized employees in each bargaining situation ranged from a minimum of 500 employees to a maximum in excess of 10,000 employees (Table 11 on page 135). About half of the 101 bargaining situations were in the 500 to 1,000 employees range (52%), and about half were in the 1,000 and above range. Fully 39% were in the 500 to 750 range. Because these numbers were obtained from Labour Canada's files after the questionnaires had been returned, the numbers for some bargaining situations in companies with multiple situations with over 500 employees could only be approximate.

NUMBER OF UNIONIZED EMPLOYEES IN THE BARGAINING SITUATION	PERCENTAGE OF BARGAINING SITUATIONS
500 - 749	39%
750 - 999	13
1000 - 1499	19
1500 - 1999	4
2000 - 4999	13
5000 +	12

Table 11. Distribution of Bargaining Situations by their Size: Number of Bargaining Situations = 101.

The quality of the sample is discussed in the next chapter.

Of the 909 questionnaires distributed in the 101 bargaining situations which participated in the study, usable data was obtained from 365 respondents, a response rate of 40.2%. This individual response rate varied by function and level as follows: line managers, 53%; I.R. managers, 41%; union reps, 12%; high level managers, 50%; low level managers, 61%. Of the 365 respondents who returned questionnaires with usable data, 289, or 79.2%, included examples of critical incidents as well as responding to the quantitative items. The distribution of these respondents by function and level is set out in Table 12.

		PERCENT	
		RESPON- DENTS*	INCI- DENTS
		=====	=====
RESPONDENTS:			
FUNCTION	- UNION	7%	8%
	- I.R.	45	48
	- LINE	44	40
	- UNKNOWN	4	3
TOTAL FREQUENCY:		365	1327
		=====	=====
LEVEL	- HIGH	62%	67%
	- LOW	38	33
TOTAL FREQUENCY:		326	1174
		=====	=====
LEVEL BY FUNCTION:			
	HIGH LINE	28%	26%
	HIGH I.R.	34	39
	LOW LINE	23	18
	LOW I.R.	15	15
TOTAL FREQUENCY:		326	1174
		=====	=====

* Number of bargaining situations = 101; number of incidents = 1327; means: 3.6 respondents per bargaining situation, and 3.6 incidents per respondent.

Table 12. Sample Description for the 365 Respondents to the Questionnaire: Percentages and Frequency Totals for Respondents by Function and Level

The implications of the very low response rate for union reps are set out in the section on the quality of the sample in the next chapter.

After reducing the data base of critical incidents and codes in order to get reliable data, the number of usable

PERCENT			
	RESPON- DENTS*	INCI- DENTS	CODES
	-----	-----	-----
RESPONDENTS:			
FUNCTION - UNION	78	88	98
- I.R.	45	48	49
- LINE	43	41	39
- UNKNOWN	4	3	3
	-----	-----	-----
TOTAL FREQUENCY:	289	1302	2718
	-----	-----	-----
LEVEL - HIGH	598	658	668
- LOW	36	32	31
	-----	-----	-----
TOTAL FREQUENCY:	268	1193	2479
	-----	-----	-----
LEVEL BY FUNCTION:			
HIGH LINE	278	288	278
HIGH I.R.	35	39	40
LOW LINE	22	18	17
LOW I.R.	16	15	15
	-----	-----	-----
TOTAL FREQUENCY:	256	1154	2401
	-----	-----	-----

* Number of bargaining situations = 97; means: 3.0 respondents per bargaining situation, 4.5 incidents per respondent, and 2.1 codes per incident.

Table 13. Sample Description, Respondents, for the 2718 Reliable Behavior Codes: Percentages and Frequency Totals for Respondents by Function and Level

critical incidents was reduced to 1302 and the number of codes to 2718. The distribution of the 289 respondents from 97 bargaining situations who provided the reliably encoded critical incidents is set out in Table 13, by function and level. In Table 14 on page 138, the distributions of the 1302 reliably encoded incidents and of

	PERCENT	
	-----	-----
	INCI-	CODES
	DENTS	
	*****	*****
INCIDENTS:		
TASK - ADMINISTRATION	57%	58%
- NEGOTIATION	43	42
	-----	-----
TOTAL FREQUENCY:	1302	2718
	*****	*****
EFFECTIVENESS - EFFECTIVE	57%	58%
- INEFFECTIVE	43%	42
	-----	-----
TOTAL FREQUENCY:	1302	2718
	*****	*****
EFFECTIVENESS BY TASK:		
- EFFECTIVE ADMINISTRATION	32%	34%
- INEFFECTIVE ADMINISTRATION	24	25
- EFFECTIVE NEGOTIATION	25	24
- INEFFECTIVE NEGOTIATION	19	18
	-----	-----
TOTAL FREQUENCY:	1302	2718
	*****	*****

* Number of bargaining situations = 97; means: 3.0 respondents per bargaining situation, 4.5 incidents per respondent, and 2.1 codes per incident.

Table 14. Sample Description, Incidents, for the 2718 Reliable Behavior Codes: Percentages and Frequency Totals for Incidents by Task and Effectiveness

the 2718 reliable codes obtained from those incidents are set out by task situation (administration, negotiation) and perceived effectiveness of the behavior. For selected examples of these critical incidents by task situation and perceived effectiveness of behavior, see the four appendices beginning with "Appendix P. Examples of Critical Incidents of Effective Contract Administration" on page 295.

5.2 AN EMPIRICAL DESCRIPTION OF PERCEIVED I.R. EFFECTIVENESS IN THE BARGAINING UNITS IN THE SAMPLE

Overall, the I.R. climate in the 101 bargaining units in the sample was rated as "good." Furthermore, the variation over the 101 bargaining situations in how the I.R. climate was rated was concentrated in two of the upper-middle categories with very little representation at the extremes. For example, not one of the measures of I.R. climate was rated as "very poor" or "never cooperative" by respondents as a group in any of the 101 bargaining units, and less than 5% of the bargaining units were rated as "poor" on a measure. At the other extreme, less than 7% of the bargaining situations were rated as "very good" or "always cooperative."

On average, respondents in 63 out of 101 bargaining units, or 62%, rated the performance of their I.R. people as a group as "good" and a total of 97 of the 101 bargaining units (96%) rated their I.R. people as either "good" or "as good as can be expected" (Table 15 on page 140). No bargaining units were rated as "very poor" and only one bargaining unit was rated as "poor" on this measure. At the other extreme, only 3 of 101 bargaining units rated the performance of their I.R. people as "very good."

	VERY POOR	POOR	AS GOOD AS CAN BE EXPECTED	GOOD	VERY GOOD
	=====	=====	=====	=====	=====
I. R. GROUP'S PERFORMANCE	0	1	34	63*	3
EMPLOYEES' PRODUCTIVITY, QUALITY, ATTITUDES	0	5	46	49*	1
EMPLOYEES' PRODUCTIVITY & PRODUCT QUALITY	0	4	40	55*	3

* Modal category.

Table 15. Frequency Distributions of 101 Bargaining Unit Scores on 3 Summed Scales: 365 Respondents' Scores, Averaged by Bargaining Unit, on the 5 Item I.R. Group Performance Scale and both the 2 Item and 3 Item Employee Outcomes Scales

Similarly, 95 of 101 bargaining units (94%) rated their unionized employees' productivity, product quality, and attitudes as either "good" (49 of 101) or "as good as can be expected" (46 of 101) (Table 15 on page 140). The ratings were slightly higher when only productivity and product quality were assessed, with 58 instead of 50 bargaining units being rated as either "good" or "very good."

A similar pattern of results was found with the ratings of the union-management relationship (Table 16 on page 141). Fully 77 of 101 bargaining units rated the re-

	DEGREE OF COOPERATION			
	NEVER	SOME-TIMES	OFTEN	ALWAYS
UNION-MANAGEMENT RELATIONSHIP	0	17	77*	7

* Modal category.

Table 16. Frequency Distribution of 101 Bargaining Unit Scores on 1 Summed Scale: 365 Respondents' Scores, Averaged by Bargaining Unit, on the 9 Item Union-Management Relationship Scale

relationship as "often cooperative" and another 7 rated the relationship as "always cooperative." Only 17 of the bargaining units rated the relationship as only "sometimes" cooperative, and there were no bargaining situations rated as "never" cooperative.

Although the I.R. climate was rated positively in these bargaining units as a group, some aspects of the climate were rated more highly than others. For example, while the performance of the I.R. people as a group was rated "good" on managing grievances, arbitrations, work stoppages, and the union-management relationship (item means of 3.7 to 3.9 on a scale from 1 to 5), it was rated as only "as good as can be expected" on improving the attitudes (morale, motivation) of the unionized employees (item mean of 3.1) (Table 1 on page 84). The difference between the mean of improving employee attitudes, 3.1, and the mean

of maintaining and promoting harmonious union-management relations, 3.7; was significant ($T=13.79$, $p < .0001$; SAS paired comparisons test). The difference between the mean of promoting harmonious union-management relations, 3.7, and negotiating collective agreements, 3.8, was also significant ($T=2.16$, $p < .05$; SAS paired comparisons test).

Thus, the I.R. people as a group performed significantly better on handling grievances, arbitrations, work stoppages, and negotiations than they did on maintaining harmonious union relations or improving employee morale and motivation. Of all the items, the I.R. people as a group performed most poorly on improving employee morale and motivation.

There was also a significant difference in assessments of the employee outcomes of productivity, product quality, and attitudes (morale, motivation) (Table 2 on page 85). Employee product quality (item mean = 3.6) was rated better than employee productivity (item mean = 3.4), and both were rated better than employee motivation and morale (item mean = 3.2). The difference between the mean ratings for employee motivation and morale and for employee productivity was significant ($T = 4.80$, $p < .0001$; SAS paired comparisons test). Therefore, I.R. managers as a group were

rated most poorly on the aspect of employee outcomes that was rated most poorly.

5.3 DIFFERENCES IN THE ASSESSMENT OF I.R. CLIMATE BY RESPONDENTS' FUNCTION AND LEVEL

The MANOVA analysis of differences in the assessment of I.R. climate by respondents' function (union rep, line manager, I.R. manager), managerial function only, and level in the managerial hierarchy found that there was a significant difference by both function (F approximation = 7.9, $p < .0001$) and managerial function (F approximation = 4.3, $p < .01$), but not by level or function-level interaction (Figure 17 on page 144).

The respondents' means were standardized by bargaining unit to a mean of 0 and a standard deviation of 1 prior to the MANOVA analysis to remove the effects of differences in bargaining units. Standardized means were examined to identify the nature of the differences by function (Table 18 on page 146). On all three measures of I.R. climate, I.R. managers' mean assessments were higher than line managers' assessments. However, the rank order of union reps' measures relative to the line and I.R. managers' measures was different for each of the three scales. The different rank orders of the union reps' measures were as follows. Union reps' measures

Independent Variables =====	Wilks' Criterion L =====
(1) Function Only (Line, IR, Union)	
- F (APPROX.):	7.9*
- DEGREES OF FREEDOM:	6,690
(2) Function (Line, IR) & Level (High, Low)	
(a) Overall Function Effect	
- F (APPROX.):	4.3**
- DEGREES OF FREEDOM:	3,320
(b) Overall Level Effect	
- F (APPROX.):	0.6
- DEGREES OF FREEDOM:	3,320
(c) Overall Function- Level Interaction	
- F (APPROX.):	0.4
- DEGREES OF FREEDOM:	3,320

*p < .0001
**p < .01

Table 17. MANOVA Results for Differences in I.R. Climate by Function and Level: on the 5 Item I.R. Group Performance Scale, the 3 Item Employee Outcomes Scale, and the 9 Item Union-Management Relations Scale

- (a) ranked highest for employee productivity, product quality, and morale/motivation;
- (b) ranked in the middle position for degree of union-management cooperation; and

(c) ranked lowest for the perceived effectiveness of the I.R. people as a group.

5.4 A BEHAVIORAL PROFILE FOR I.R. MANAGERS

In the following sections of this chapter, (a) significant situational differences in behavior patterns for I.R. managers will be identified by means of chi-square tests of independence among behavior distributions over a nine category behavior classification scheme; and (b) significant situational differences will be identified between the behavior patterns for I.R. managers and the behavior patterns Yukl and van Fleet (1982) found for military leaders, by means of Z tests of proportions over a 19 category classification scheme.

The chi-square test of independence and the Z tests of proportions provide answers to different research questions, and are, in many ways, complementary analyses. For example, the chi-square analysis of task and effectiveness, which will be presented later in Table 25 on page 161, does not identify Information Dissemination as significant even though it is a high frequency category, because the proportions are similar in both situations.

FUNCTION	N	I. R. GROUP PERFORMANCE (5 ITEMS)	EMPLOYEE OUTCOMES (3 ITEMS)	UNION- MANAGEMENT RELATIONS
=====	===	=====	=====	=====
LINE MANAGER	165			
- MEAN*		(.10)	(.09)	(.12)
- S.D.		.81	.84	.86
- RANK ORDER		2nd	3rd	3rd
I. R. MANAGER	161			
- MEAN*		.18	.07	.14
- S.D.		.82	.80	.76
- RANK ORDER		1st	2nd	1st
UNION REP	24			
- MEAN*		(.63)	.31	(0.0)
- S.D.		.88	1.01	.99
- RANK ORDER		3rd	1st	2nd

* Means standardized by bargaining unit to a mean of 0, standard deviation of 1.

Table 18. Standardized Means for I.R. Climate, by Function: On the 5 Item I.R. Group Performance Scale, the 3 Item Employee Outcomes Scale, and the 9 Item Union-Management Relations Scale

Likewise, the one and two sample Z tests of proportions, which will be presented later in Table 28 on page 171, did not identify Praise or Criticism as significant categories for I.R. managers even though the combined categories made an above average contribution to distinguishing between the situations, because the frequencies were not high enough to reach significance.

In spite of the differences in the number of categories in the classification schemes used and in the type of statistical analyses done, the behavioral profile of the

I.R. manager which resulted from both types of analyses was very similar. In summary, eight behavior types which were found to be significant for I.R. managers' behavior effectiveness and eight behavior types which were found to be insignificant were identified. This common behavior profile for I.R. managers is set out in Figure 9.

5.5 SITUATIONAL DIFFERENCES IN BEHAVIOR PATTERNS FOR I.R. MANAGERS

The analysis of the situational contingencies for behavior by I.R. managers used the final nine category behavior classification scheme and confirmed the following:

(a) the patterns of behavior by I.R. managers were significantly different in different situations; that is, patterns of behavior differed significantly by respondents' function and level, task situation and perceived effectiveness of behavior, and some aspects of the task environment (degree of union-management trust and the productivity/product quality of employees);

- A. Significant Behavior Types
1. Interaction Facilitation
 2. Information Dissemination
 3. Conflict Management (esp. negotiation)
 4. Decision Participation
 5. Problem Solving (esp. administration)
 6. Consideration (esp. administration)
 7. Planning/Implementation (esp. negotiation)*
 8. Praise/Criticism (esp. administration)**
- B. Insignificant Behavior Types
1. Inspiration
 2. Structuring Reward Contingencies
 3. Goal Setting
 4. Coordination
 5. Performance Emphasis
 6. Autonomy-Delegation
 7. Representation
 8. Work Facilitation***

* A combined category including Planning, Role Clarification, and Training. The frequencies for Training were not high enough to reach significance in the Z tests of proportions.

** A combined category including Praise/Recognition and Criticism/Discipline. Each of the categories separately and the combined category had relatively low frequencies but high reliability. Because of the low frequencies, the categories were not significant in the Z tests of proportions but the combined category was useful in distinguishing different situations in the chi-square analyses.

*** Moderately high frequencies and reliable. However, this category was neither useful in distinguishing situations in the chi-square analyses nor did it reach significant frequency levels in the Z tests of proportions.

Figure 9. Behavior Profile for I.R. Managers: Summary of Results from the Chi-Square analyses of the Nine-Category Classification Scheme and the Z Tests of Proportions Analyses of the Nineteen Category Classification Scheme

(b) the degree of association between situational variables and behavior category patterns was weak; and

(c) the different patterns of behavior types found could be described and understood in terms of the differences in the situations in which the behavior-patterns occurred.

5.5.1 Respondents' Function and Level

Critical incidents of I.R. managers' behavior were collected from managers and union representatives. The managers were either line managers or I.R. managers and either relatively high or relatively low in the management hierarchy of their company. The patterns of perceived I.R. managers' behavior varied significantly depending on whether those providing the incidents were line managers, I.R. managers, or union reps (chi-square = 26.676, $p < .05$; function (3) in Table 19 on page 150).

When the responses of the managers were analyzed separately from the responses of the union reps, the patterns of I.R. managers' behavior varied significantly depending on whether the managers responding were high level I.R. managers, high level line managers, low level line managers or low level I.R. managers. That is, the effect of the managerial function was significant when the effect of managerial level was controlled for (chi-square = 27.106, $p < .05$; Table 20 on page 152). Likewise, the effect of level

CLASSIFICATION VARIABLES	CATEGORIES	NO. CODES	CHI- SQUARE	df	p	PHI
*****	*****	*****	*****	*****	*****	*****
1. FUNCTION (3)	-LINE -IR -UNION	2640	26.676	16	.05*	.10
2. FUNCTION (2)	-LINE -IR	2401	12.972	8	.11	.07
3. LEVEL	-HI -LO	2401	13.105	8	.11	.07
4. TASK	-ADMIN -NEGOT'N	2718	125.739	8	.0001*	.22
5. EFFECTIVE- NESS	-GOOD -POOR	2718	21.321	8	.006*	.09
6. I. R. GROUP PERFORMANCE	-HI -LO	2718	3.756	8	.88	.04
7. (A) EMPLOYEE OUTCOMES (3)	-HI -LO	2718	11.656	8	.17	.07
(B) PRODUCT'Y & QUALITY	-HI -LO	2718	19.790	8	.01*	.09
(C) EMPLOYEE ATTITUDES	-HI -LO	2718	6.902	8	.55	.05
8. UNION-MANAGE- MENT TRUST	-HI -LO	2718	16.416	8	.04*	.08

* p < .05.

Table 19. Results of Chi-Square Tests of Main Classification Variables: Results of Chi-Square Tests of Independence for each of the Main Classification Variables with the Basic Types of I. R. Managers' Behaviors

.....

was significant when the effect of managerial function was controlled for (chi-square = 28.571, p < .05; Table 20 on page 152), although most of the contribution to the significant pooled chi-square came from controlling for the line

function (chi-square = 20.797, $p < .008$; Table 20 on page 152).

However, when grouped together, high level managers did not vary significantly from low level managers, nor did line managers differ significantly from I.R. managers ($p = .11$ for both function (2) and level; Table 19 on page 150).

Although the effect of the three functions and the effects of managerial function controlling for level and managerial level controlling for function were significant, the degree of association between function or level and pattern of behaviors was weak ($\Phi < .15$). Other measures of degree of association such as asymmetric lambda were examined. These measures of proportionate reduction in error in predicting showed an even weaker degree of association.

Examining individual cell contributions to an overall significant chi-square provided an indication of the sources of the overall difference. As can be seen in Figure 21 on page 153, there were four main sources of the overall difference among union respondents, line managers, and I.R. managers, namely,

CLASSIFICATION VARIABLES	CATEGORIES	NO. CODES	CHI- SQUARE	df	p	PHI
=====	=====	=====	=====	==	=====	===
1. FUNCTION (2)	-LINE -I.R.					
Controlling for Level:						
(A) LEVEL=HI		1627	14.247	8	.08	.09
(B) LEVEL=LO		774	12.859	8	.12	.13
TOTAL:			27.106	16	p<.05*	
			=====	==	=====	
2. LEVEL	-HI -LO					
Controlling for Function:						
(A) FUNCTION=LINE		1070	20.797	8	.008*	.14
(B) FUNCTION=I.R.		1331	7.774	8	.46	.08
TOTAL:			28.571	16	p<.05*	
			=====	==	=====	
3. EFFECTIVENESS	-GOOD -POOR					
Controlling for Task:						
(A) TASK=ADMINISTRATION		1590	45.929	8	.0001*	.17
(B) TASK=NEGOTIATION		1128	7.367	8	.50	.08
TOTAL:			53.296	16	p<.001*	
			=====	==	=====	

* p < .05

Table 20. Results of Chi-Square Tests Controlling for Selected Variables: Results of Chi-Square Tests of Independence for Some of the Main Classification Variables with the Basic Types of I.R. Managers' Behaviors, Controlling for Other Selected Classification Variables

(a) managers, both line and I.R., were more concerned as a group than union reps with Conflict Management behaviors by I.R. managers;

RESPONDENTS'
3 FUNCTIONS

BEHAVIOR TYPE	UNION LINE I.R.		
*****	*****	*****	*****
K. INFORMATION DISSEMINATION			
Q. INTERACTION FACILITATION			
L. PROBLEM SOLVING	-		
R. CONFLICT MANAGEMENT		+	+
B. CONSIDER- ATION	+		
F. DECISION PARTICIPATION			
Y. PLANNING, IMPLEMENTATION			
Z. PRAISING, CRITICIZING	+	+	-
O. WORK FACILITATION			

- + Above average cell contribution to a significant overall cross classification chi-square, based on the number of observed frequencies ABOVE expected frequencies.
- Above average cell contribution to a significant overall cross classification chi-square, based on the number of observed frequencies BELOW expected frequencies.

Table 21. Behavior Types by Function and Level: Differences in I.R. Managers' Basic Behavior Types, By Respondents' Function and Level in the Management Hierarchy

(b) the respondents in functions other than I.R., both line managers and union reps, were more concerned than I.R. managers with Praising/Criticizing behaviors by I.R. managers;

(c) union reps were more concerned than managers with Consideration behaviors; and

(d) union reps were less concerned than managers with Problem Solving behaviors by I.R. managers.

In Table 22 on page 155, the pattern in the sources of the overall difference among high line managers, high I.R. managers, low line managers, and low I.R. managers is more difficult to see because each of these groups of managers appears in two different columns. This information has been summarized in Table 23 on page 156 in a more condensed form. Note that four quite distinctive patterns of behavior are represented. For example, while high line managers report incidents with relatively more Decision Participation and Information Dissemination behaviors and relatively less Praise/Criticism and Conflict Management behaviors, the pattern for low line managers is the reverse. Similarly, while high I.R. managers report incidents with relatively more Conflict Management behaviors and relatively less Decision Participation behaviors, the pattern for high line managers is the reverse.

BEHAVIOR TYPE	2 FUNCTIONS, HOLDING LEVEL CONSTANT				2 LEVELS, HOLDING FUNCTION CONSTANT			
	HI*		LO*		LINE**		I.R.*	
*****	LINE	I.R.	LINE	I.R.	HI	LO	HI	LO
*****	****	****	****	****	****	****	****	****
K. INFORMATION DISSEMINATION					+	-		
Q. INTERACTION FACILITATION								
L. PROBLEM SOLVING								+
R. CONFLICT MANAGEMENT	-	+			-	+		
B. CONSIDERATION								
F. DECISION PARTICIPATION	+	-	-	+	+	-	-	+
Y. PLANNING, IMPLEMENTATION								
Z. PRAISING, CRITICIZING			+	-	-	+		
O. WORK FACILITATION								

- + Above average cell contribution to a significant overall cross classification chi-square, based on number of observed frequencies ABOVE expected frequencies.
- Above average cell contribution to a significant overall cross classification chi-square, based on number of observed frequencies BELOW expected frequencies.
- * A conditional table for which the chi-square test was not significant, i.e., $p > .05$; the relevant pooled chi-square was significant.
- ** A conditional table with a significant chi-square, $p < .05$.

Table 22. Differences in Behavior Types by Function and Level

FUNCTION =====	PLUS/ MINUS*	LEVEL	
		HIGH	LOW
LINE:	PLUS	DECISION PARTICIPATION	PRAISE/ CRITICISM
		INFORMATION DISSEMINATION	CONFLICT MANAGEMENT
	MINUS	PRAISE/ CRITICISM	DECISION PARTICIPATION
		CONFLICT MANAGEMENT	INFORMATION DISSEMINATION
I.R.:	PLUS	CONFLICT MANAGEMENT	DECISION PARTICIPATION
			PROBLEM SOLVING
	MINUS	DECISION PARTICIPATION	PRAISE/ CRITICISM

- * + Above average cell contribution to a significant overall cross classification chi-square, based on the number of observed frequencies ABOVE expected frequencies.
- Above average cell contribution to a significant overall cross classification chi-square, based on the number of observed frequencies BELOW expected frequencies.

Table 23. Significant Behaviors by Managers' Function and Level: Summary of Results from Table 22 on page 155.

Low level I.R. managers report incidents with relatively more Decision Participation and Problem Solving behaviors and relatively less Praise/Criticism behaviors. However, (a) high I.R. managers reported relatively less Decision Participation behaviors, and (b) low line managers reported both relatively less Decision Participation behav-

iors and relatively more Praise/Criticism behaviors. Furthermore, while low I.R. managers reported more Problem Solving behaviors, low line managers reported more Conflict Management behaviors.

In fact, the only examples in Table 23 on page 156 of the same behavior types being reported in the same way by any of the four groups are on the table's diagonals. For example, both high line managers and low I.R. managers report relatively more Decision Participation behaviors and relatively less Praise/Criticism behaviors. In addition, both low line managers and high-I.R. managers report relatively more Conflict Management behaviors and relatively less Decision Participation behaviors. Both of the pairs of management groups on the diagonals have pattern elements that are not shared by both groups in the pair. For example, low line managers report relatively more Praise/Recognition behaviors but high I.R. managers do not. However, neither pair has an example of one group reporting more of a behavior type while the other reports less of the same type.

In conclusion, the distinctive behavior categories for each group of respondents by function and level have been summarized in Table 24 on page 158.

FUNCTION, LEVEL	FREQUENCIES SIGNIFICANTLY HIGHER THAN EXPECTED*	FREQUENCIES SIGNIFICANTLY LOWER THAN EXPECTED**
UNION REP	CONSIDERATION PRAISE/CRITICISM	PROBLEM SOLVING
HIGH LINE MANAGER	DECISION PARTICIPATION INFORMATION DISSEMINATION	PRAISE/CRITICISM CONFLICT MANAGEMENT
HIGH I.R. MANAGER	CONFLICT MANAGEMENT	DECISION PARTICIPATION
LOW LINE MANAGER	PRAISE/CRITICISM CONFLICT MANAGEMENT	DECISION PARTICIPATION INFORMATION DISSEM.
LOW I.R. MANAGER	DECISION PARTICIPATION PROBLEM SOLVING	PRAISE/CRITICISM

* Above average cell contribution to a significant overall cross classification chi-square, based on the number of observed frequencies ABOVE expected frequencies.

** Above average cell contribution to a significant overall cross classification chi-square, based on the number of observed frequencies BELOW expected frequencies.

Table 24. Significant Behaviors by Respondents' Function and Level: Summary of Results from Table 21 on page 153, Table 22 on page 155, and from Table 23 on page 156.

5.5.2 Task Situation and Perceived Effectiveness of Behavior on the Task

Critical incidents were collected of I.R. managers' behavior in both contract administration situations and negotiating situations. The incidents were of either perceived effective performance or perceived ineffective performance in one of these two types of situations. The patterns of I.R. managers' behavior varied significantly depending on

whether the task situation was contract administration or negotiating (chi-square = 125.739, $p < .0001$; Table 19 on page 150). The patterns of behavior also varied significantly depending on whether the behavior on the task was perceived to be effective or ineffective (chi-square = 21.321, $p < .01$; Table 19 on page 150).

When the incidents were analyzed separately to determine the effect of effectiveness controlling for task, the pooled chi-square of 53.296 was again significant ($p < .001$; Table 20 on page 152). The conditional table for the administration task only also had a significant chi-square of 45.929 ($p < .0001$). That is, the pattern of behaviors by I.R. managers in effective administration situations differed significantly from the pattern of behaviors in ineffective administration situations. However, the pattern of behaviors by I.R. managers in effective negotiating incidents was not significantly different from the pattern in ineffective negotiating incidents (chi-square = 7.367, $p = .50$; Table 20 on page 152).

Task had the strongest degree of association with the behavior categories of any of the classification variables ($\Phi = .22$; Table 19 on page 150), but even this level of association was weak. The degree of association of effec-

tiveness with the behavior categories was weaker than that of task ($\Phi = .09$; Table 19 on page 150).

As can be seen in the first two columns of Table 25 on page 161, administration incidents were characterized by more Problem Solving, Consideration, and Praising/Criticism behaviors, while negotiating incidents were characterized by more Conflict Management and Planning/Implementation behaviors.

In the last two columns of the same table, the sources of the overall difference between effective administration and ineffective administration incidents are set out. Effective administration behaviors are characterized by relatively more Interaction Facilitation and Decision Participation behaviors, while ineffective administration behaviors are characterized by more Conflict Management and Planning/Implementation behaviors by I.R. managers.

5.5.3 Task Environment and I.R. Climate

In addition to providing critical incidents, respondents were also asked to rate the performance of the I.R. people in their company as a group, the degree of union-management trust and cooperation in the largest bargaining unit during the term of the last completed collective agreement, and

BEHAVIOR TYPE *****	2 TASKS OF I.R. MANAGERS		EFFECTIVENESS OF I.R. MANAGERS, ADMIN TASK**	
	ADMIN	NEG'N	GOOD	POOR
*****	*****	*****	*****	*****
K. INFORMATION DISSEMINATION				
Q. INTERACTION FACILITATION			+	-
L. PROBLEM SOLVING	+	-		
R. CONFLICT MANAGEMENT	-	+	-	+
E. CONSIDER- ATION	+	-		
F. DECISION PARTICIPATION			+	-
Y. PLANNING, IMPLEMENTATION	-	+	-	+
Z. PRAISING, CRITICIZING	+	-		
O. WORK FACILITATION				

+ Above average cell contribution to a significant overall cross classification chi-square, based on the number of observed frequencies ABOVE expected frequencies.

- Above average cell contribution to a significant overall cross classification chi-square, based on the number of observed frequencies BELOW expected frequencies.

** A conditional table with a significant chi-square, $p < .05$.

Table 25. Behavior Types by Task and Effectiveness on Administration Task: Differences in I.R. Managers' Basic Behavior Types, By I.R. Managers' Task and Perceived Effectiveness of I.R. Managers on Administration Tasks

the productivity, product quality, and attitudes (motivation, morale) of the unionized employees in the largest bargaining unit.

The pattern of I.R. managers' behavior did not vary significantly depending on whether the respondents were from companies where the I.R. people as a group were rated relatively highly or from companies where the I.R. people were rated relatively poorly (chi-square = 3.756, $p = .88$; Table 19 on page 150).

The patterns of I.R. managers' behavior did vary significantly depending on whether the respondents were from companies where the degree of union-management trust was relatively high or from companies where union-management trust was relatively low (chi-square = 16.416, $p < .05$; Table 19 on page 150). However, the degree of association between behavior pattern and level of union-management trust was once again weak ($\Phi = .08$; Table 19 on page 150).

As can be seen in the first two columns of Table 26 on page 164), incidents from situations with relatively higher levels of union-management trust and cooperation were characterized by relatively more Interaction Facilitation, Decision Participation, and Planning/Implementation

behaviors than incidents from situations of relatively low levels of union-management trust.

The pattern of behavior also varied significantly depending on whether the respondents came from companies where the productivity and product quality of employees was rated relatively high or relatively low (chi-square = 19.790, $p < .01$; Table 19 on page 150). The degree of association was, again, weak ($\Phi = .09$).

In the same chart, it can be seen that the pattern of behaviors did not vary significantly depending on either the perceived attitudes of unionized employees (chi-square of 6.902, $p = .55$), or the score on the summed scale which included employees' attitudes, productivity and product quality (chi-square of 11.656, $p = .17$).

From the last two columns of Table 26 on page 164, it can be seen that the pattern of behavior by I.R. managers in incidents from situations with relatively high levels of employee productivity and product quality were characterized by relatively more Information Dissemination behaviors and relatively less Consideration and Praising/Criticizing behaviors. The reverse pattern was found in situations of relatively low levels of employee productivity and product quality.

BEHAVIOR TYPE	U-M TRUST		PRODUCT'Y, QUALITY	
	HI	LO	HI	LO
K. INFORMATION DISSEMINATION			+	-
Q. INTERACTION FACILITATION	+	-		
L. PROBLEM SOLVING				
R. CONFLICT MANAGEMENT				
B. CONSIDERATION			-	+
F. DECISION PARTICIPATION	+	-		
Y. PLANNING, IMPLEMENTATION	+	-		
Z. PRAISING, CRITICIZING			-	+
O. WORK FACILITATION				

+ Above average cell contribution to a significant overall cross classification chi-square, based on the number of observed frequencies ABOVE expected frequencies.

- Above average cell contribution to a significant overall cross classification chi-square, based on the number of observed frequencies BELOW expected frequencies.

Table 26. Behavior Types by Trust, and Productivity and Product Quality: Differences in I.R. Managers' Basic Behavior Types, by Degree of Union-Management Trust and Cooperation, and by Employees' Productivity and Product Quality



5.5.4 Summary of Significant Behaviors for I.R. Managers -

The following five points summarize the results with respect to the significant behaviors for I.R. managers.

(1) Eight of the nine categories retained in this analysis were useful in differentiating among the situations analyzed above by contributing to an overall significant chi-square with an above average cell chi-square.

(2) Work Facilitation had sufficiently high frequency and reliability to be retained in the analysis but it was not helpful in differentiating among the situations analyzed above.

(3) Praise/Criticism had relatively low frequency but it was reliable and was retained in the analysis. It was helpful in differentiating among several of the situations analyzed above (employee productivity/product quality, task, function, and level).

(4) Because (a) Praise and Criticism, and (b) Planning, Role Clarification, and Training, were retained for the analysis in combined categories, their independent effects were not analyzed.

(5) Eight categories were deleted prior to the analysis because of low frequency and low reliability, namely, Inspiration, Structuring Rewards, Goal Setting, Coordination, Performance Emphasis, Autonomy-Delegation, and Representation. Thus, these categories were identified as insignificant for I.R. managers, due to overall low frequencies, at an early stage in this analysis.

5.6 COMPARISON OF I.R. MANAGERS AND MILITARY LEADERS

The results to be presented in this section show that there were distinctive behavior patterns which distinguished I.R. managers from another type of leader/manager, namely, military leaders, and, thus, characterized I.R. managers as a group.

As discussed in the chapter on methodology, the data from the 19 category classification scheme will be used for purposes of comparing I.R. managers and military leaders. In the first section below, the results of a comparison of I.R. managers data only from the nine category and 19 category behavior classification schemes will be presented. The nine category data were analyzed using the chi-square test while the 19 category data were analyzed using the 2 tests of proportions.

In the second section below, the results of the analysis of 19 category data for military leaders will be summarized and compared with the overall results of the 19 category data for I.R. managers. In the third section below, a task by task comparison of results for the two types of managers will be set out. Finally, a behavioral profile for I.R. managers will be developed on the basis of the 19 category analysis.

5.6.1 Comparison of 9 Category and 19 Category Analysis for I.R. Managers

In the preceding section it was shown for the 9 category I.R. data that:

(a) there was a significant difference overall between negotiating and administration types of behavior (Table 19 on page 150);

(b) there was a significant difference between effective and ineffective contract administration behaviors (Table 25 on page 161); and

(c) there was no significant difference between effective negotiating behavior types and ineffective negotiating behavior types. (Table 20 on page 152).

BEHAVIOR CATEGORY	OVER ALL CODES	BY TASK			BY TASK & EFFECT.
		ALL	ADMIN	EFFECT ADMIN	INEF- FECT. ADMIN
A PERFORMANCE EMPHASIS	1	1	1	2	1
B CONSIDERATION	9	3 (A)	7* (A)	8*	6
C INSPIRATION	0	0	0	0	0
D PRAISE-RECOGNITION	0	0	1	1	0
E STRUCTURING REWARDS	1	1	1	1	1
F DECISION PARTICIPAT.	7*	8*	7*	8* (B)	4 (B)
G AUTONOMY	2	2	2	1	2
H ROLE CLARIFICATION	5	3 (A)	6* (A)	4 (B)	10* (B)
I GOAL SETTING	1	1	0	0	0
J TRAINING	1	0	1	2	1
K INFORMATION DISSEM.	16*	17*	15*	16*	13*
L PROBLEM SOLVING	10*	6 (A)	14* (A)	14*	13*
M PLANNING	7*	12* (A)	3 (A)	3	3
N COORDINATION	1	1	1	0	1
O WORK FACILITATION	5	6	4	4	4
P REPRESENTATION	2	3	2	2	2
Q INTERACTION FACIL.	19*	18*	20*	22* (B)	16* (B)
R CONFLICT MANAGEMENT	16*	18* (A)	14* (A)	11* (B)	17* (B)
S CRITICISM-DISCIP.	2	0	3	2	4
TOTAL PERCENT:	101%	100%	102%	101%	98%
TOTAL CODES:	2950	1241	1709	987	722
INCIDENT BASE:	1327	1327	1327	1327	1327
THRESHOLD %*:	5.9%	6.3%	6.2%	6.4%	6.6%
THRESHOLD FREQ.*:	175.2	105.1	78.2	63.5	47.8

* p < .05, one sample, one tailed Z test of proportions (Loether and McTavish, 1980).
 (A)-(A) p < .01, two sample, two tailed Z test of proportions (Loether and McTavish, 1980); |Z| > 2.58.
 (B)-(B) p < .01, two sample, two tailed Z test of proportions (Loether and McTavish, 1980); |Z| > 2.58.

Table 27. Behavior Category Percentages, 19 Categories, I.R. Managers Only: Behavior Category Percentages over all 19 Categories for I.R. Managers Only -- All Codes, By Two Tasks, and By Administrative Task and Effectiveness.



The same results were obtained when the 19 category I.R. data were analyzed. As can be seen in Table 27 on page 168,

(a) contract administration and negotiating behaviors differed significantly from each other ($|Z| > 2.50$, $p < .01$; two tailed, two sample Z test of proportions, for 5 of 19 categories); and

(b) there was a significant difference between effective administration behavior types and ineffective administration behavior types ($|Z| > 2.58$, $p < .01$; two tailed, two sample Z test of proportions for 4 of 19 categories).

In the 19 category analysis as well, the difference between effective negotiation behavior types and ineffective negotiation behavior types was not significant. Work Facilitation was not significant for negotiating incidents overall or for effective negotiating incidents only. Although Work Facilitation did reach significance in ineffective negotiating incidents ($p < .05$, one sample, one tailed Z test of proportions), the difference between the proportions for Work Facilitation in ineffective and effective negotiating incidents did not reach significance ($p > .05$, two sample, two tailed Z test of proportions).

Therefore, for comparison purposes, the original 19 categories were retained to compare (a) effective administration behaviors for I.R. managers with effective noncombat behaviors for military leaders, and (b) all negotiating behaviors for I.R. managers with effective combat behaviors for military leaders.

5.6.2 Comparison of 19 Category Results for I.R. Managers and Military Leaders

In the last two columns of Table 28 on page 171, Yukl and van Fleet's results for military leaders in noncombat and combat situations are set out. Note that Inspiration, Role Clarification, and Performance Emphasis were significant in both situations. While Consideration was also significant in both situations, it occurred significantly more frequently in noncombat situations. In combat situations, Planning and Problem Solving were significantly more frequent.

For comparative purposes, the results for I.R. managers in effective administration and all negotiation situations are also set out in the first two columns of Table 28 on page 171. Note that Interaction Facilitation, Information Dissemination, Conflict Management and Decision Participation were significant in both situations. However, Interaction Facilitation occurred significantly more

BEHAVIOR CATEGORY	I. R. MANAGERS		MILITARY LEADERS, EFFECTIVE	
	ADMIN	ALL NEG'N	NON-COMBAT	COMBAT
A PERFORMANCE EMPHASIS	2	1	10*	9*
B CONSIDERATION	8* (A)	3 (A)	26* (B)	8* (B)
C INSPIRATION	0	0	13*	12*
D PRAISE-RECOGNITION	1	0	5	2
E STRUCTURING REWARDS	1	1	1	2
F DECISION PARTICIPATION	8*	8*	1	3
G AUTONOMY	1	2	1	4
H ROLE CLARIFICATION	4	3	19*	9*
I GOAL SETTING	0	1	1	0
J TRAINING	2	0	5	6
K INFORMATION DISSEMINATION	16*	17*	1	3
L PROBLEM SOLVING	14* (A)	6 (A)	2 (B)	15* (B)
M PLANNING	3 (A)	12* (A)	1 (B)	10* (B)
N COORDINATION	0	1	1	6
O WORK FACILITATION	4	6	1	3
P REPRESENTATION	2	3	2	5
Q INTERACTION FACILITATION	22* (A)	18* (A)	1	2
R CONFLICT MANAGEMENT	11* (A)	18* (A)	2	1
S CRITICISM-DISCIPLINE	2	0	11*	5
TOTAL PERCENT:	101%	100%	104%	105%
TOTAL CODES:	987	1241	1536	226
TOTAL INCIDENT BASE:	1327	1327	1229	114
THRESHOLD PERCENT*:	6.4%	6.3%		
THRESHOLD FREQUENCY*:	63.5	105.1		

* $p < .05$, one sample, one tailed Z test of proportions (Loether and McTavish, 1980).

(A)-(A) $p < .05$, two sample, two tailed Z test of proportions (Loether and McTavish, 1980); $|Z| > 1.96$.

(B)-(B) $p < .05$, two sample, two tailed Z test of proportions (Loether and McTavish, 1980); $|Z| > 1.96$.

Table 28. Behavior Category Percentages, Military Leaders & I.R. Managers: Behavior Category Percentages over all 19 Categories for Military Leaders and I.R. Managers -- By Two Tasks, Administration/Negotiation and Noncombat/Combat.

frequently in administration situations while Conflict Management was significantly more frequent in negotiating situations. Consideration was also significant in administration situations while Planning was significant in negotiating situations.

The following eight behavior types were not significant for either I.R. managers or military leaders: Praise-Recognition, Structuring Reward Contingencies, Autonomy-Delegation, Goal Setting, Training-Coaching, Coordination, Work Facilitation, and Representation.

5.6.3 Military Leaders Compared with I.R. Managers, Task by Task

Military leaders and I.R. managers are compared, task by task, in four tables. In the first table, Table 29 on page 173, the overall results of the comparison of the two different types of leaders are set out. Comparing perceived effective contract administration situations for I.R. managers with perceived effective noncombat situations for military leaders, the following results were obtained.

For I.R. managers, the following behaviors were seen as more important than other behaviors: interaction facilitation, information dissemination, problem solving, conflict management, decision participation and consideration.

BEHAVIOR CATEGORY	I.R. MGRS, EFFECT ADMIN	MILTY LDRS, EFFECT. NONCBT	I.R. MGRS, ALL NEG'N	MILITARY LEADERS, EFFECT. COMBAT
A PERFORMANCE EMPHASIS	2 (A)	10* (A)	1 (B)	9* (B)
B CONSIDERATION	8* (A)	26* (A)	3 (B)	8* (B)
C INSPIRATION	0 (A)	13* (A)	0 (B)	12* (B)
D PRAISE-RECOGNITION	1	5	0	2
E STRUCTURING REWARDS	1	1	1	2
F DECISION PARTICIPA.	8* (A)	1 (A)	8* (B)	3 (B)
G AUTONOMY	1	1	2	4
H ROLE CLARIFICATION	4 (A)	19* (A)	3 (B)	9* (B)
I GOAL SETTING	0	1	1	0
J TRAINING	2	5	0	6
K INFORMATION DISSEM.	16* (A)	1 (A)	17* (B)	3 (B)
L PROBLEM SOLVING	14* (A)	2 (A)	6 (B)	15* (B)
M PLANNING	3	1	12*	10*
N COORDINATION	0	1	1	6
O WORK FACILITATION	4	1	6	3
P REPRESENTATION	2	2	3	5
Q INTERACTION FACIL.	22* (A)	1 (A)	18* (B)	2 (B)
R CONFLICT MANAGEMENT	11* (A)	2 (A)	18* (B)	1 (B)
S CRITICISM-DISCIPLINE	2 (A)	11* (A)	0	5
TOTAL PERCENT:	101%	104%	100%	105%
TOTAL CODES:	987	1536	1241	226
TOTAL INCIDENT BASE:	1327	1229	1327	114
THRESHOLD PERCENT*:	6.4%	-	6.3%	-
THRESHOLD FREQ.*:	:63.5	-	105.1	-

* $p < .05$, one sample, one tailed Z test of proportions (Loether and McTavish, 1980).

(A)-(A) $p < .0001$, two sample, two tailed Z test of proportions (Loether and McTavish, 1980); $|Z| > 3.90$.

(B)-(B) $p < .05$, two sample, two tailed Z test of proportions (Loether and McTavish, 1980); $|Z| > 1.96$.

Table 29. Behavior Category Percentages, Military Leaders & I.R. Managers: Behavior Category Percentages over all 19 Categories for Military Leaders and I.R. Managers -- By Two Tasks, Administration/Negotiation and Noncombat/Combat.

BEHAVIOR CATEGORY	COMPARISON OF EFFECT. ADMIN. & NONCOMBAT TASKS		COMPARISON OF NEGOTIATION & COMBAT TASKS	
	Z*	p <	Z*	p <
A PERFORMANCE EMPH.	(8.341)	.0001	(8.070)	.0001
B CONSIDERATION	(11.460)	.0001	(4.005)	.0001
C INSPIRATION	(11.814)	.0001	(11.707)	.0001
F DECISION PARTICIPA.	9.264	.0001	2.510	.05
H ROLE CLARIFICATION	(11.022)	.0001	(3.928)	.0001
K INFORMATION DISSEM.	14.698	.0001	5.321	.0001
L PROBLEM SOLVING	11.528	.0001	(4.683)	.0001
M PLANNING	--	--	0.884	N.S.
Q INTERACTION FACIL.	17.925	.0001	6.113	.0001
R CONFLICT MANAGEMENT	9.815	.0001	6.536	.0001
S CRITICISM-DISCIP.	(8.589)	.0001	--	--

* Two sample, two tailed Z test of proportions (Loether and McTavish, 1980).

Table 30. Z Scores and Probabilities, Paired I.R. and Military Tasks: Z Scores and Associated Probabilities for Comparisons of Paired I.R. Managers' Tasks and Military Leaders' Tasks (Effective Administration and Noncombat Tasks; Negotiation and Combat Tasks)

All of these behaviors except consideration were also more important for I.R. managers than they were for military leaders.

For military leaders, the following behaviors were seen as more important than other behaviors: consideration, role clarification, inspiration, criticism-discipline, and performance emphasis. All of these behaviors were also more important for military leaders than they were for I.R. managers.

Comparing all negotiating situations for I.R. managers with perceived effective combat situations for military leaders, the following results were obtained.

For I.R. managers, the following behaviors were seen as more important than other behaviors: interaction facilitation, conflict management, information dissemination, planning, and decision participation. All of these behaviors except planning were also more important for I.R. managers than they were for military leaders.

For military leaders, the following behaviors were seen as more important than other behaviors: problem solving, inspiration, planning, performance emphasis, role clarification, and consideration. All of these behaviors except planning were also more important for military leaders than they were for I.R. managers.

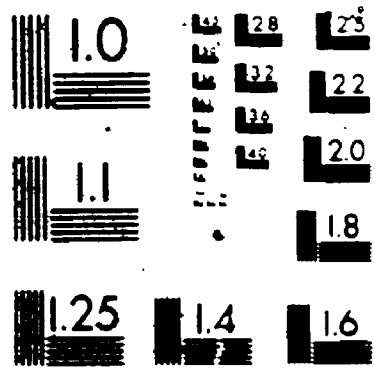
Thus, as can be seen in Table 29 on page 173 and Figure 30 on page 174, the second table in the series of four, different behavior types reached significance for I.R. managers than for military leaders with two exceptions. In all of these cases, the difference between the proportions for each type of leader was also significant. As can be seen in Table 29 on page 173, only two categories, Planning and Consideration, in the cross-situational compar-

isons reached significance for both types of leaders. For Planning, the difference between proportions in negotiating and combat situations was not significant ($Z = .884$, $p > .05$; Table 30 on page 174). In the other instance, the difference between the proportions for Consideration in effective administration and noncombat situations was significant ($p < .0001$, 2 sample, 2 tailed Z test of proportions).

In the third figure of the series, Figure 10, the behavior types which were significant for I.R. managers in the previous two tables are set out, with cross references to behaviors which were also significant for military leaders. In the last figure of the series, Figure 11, the behavior types significant for military leaders in the first two tables are set out, with cross references to the behavior types also significant for I.R. managers.

The cumulative evidence from all four tables shows that the pattern of significant behaviors for I.R. managers is very different from the pattern for military leaders. For example, as can be seen in Figures 10 and 11, only three of the seven significant behavior types identified for each type of leader are common to both (Consideration, Problem Solving, Planning). Furthermore, none of the four types of behavior significant in both test situations for I.R. managers (Decision Participation, Information Dissem-

3



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS
STANDARD REFERENCE MATERIAL 1010a
(ANSI and ISO TEST CHART No. 2)

ination, Interaction Facilitation, Conflict Management) is also significant for military leaders. There are four types of behavior significant in both task situations for military leaders, namely, Performance Emphasis, Inspiration, Consideration, Role Clarification. Of these, only Consideration is also significant for I.R. managers, and there only in effective Administration situations.

EFFECTIVE ADMINISTRATION	BOTH EFFECTIVE ADMIN & ALL NEG'N	ALL NEGOTIATION
-----	-----	-----
B CONSIDERATION*	F DECISION PARTICIPATION	M PLANNING*
L PROBLEM SOLVING*	K INFORMATION DISSEMINATION	
Q INTERACTION FACILITATION(+)	Q INTERACTION FACILITATION(+)	
	R CONFLICT MANAGEMENT(+)	R CONFLICT MANAGEMENT(+)

* See also the list for military leaders in accompanying chart.

+ Significant in both task situations (one sample Z test), and the difference in proportions (two sample Z test) is also significant with the higher proportion in the task situation indicated by the direction of the arrow.

Figure 10. Significant Behaviors in I.R. Managers' Task Situations: Behaviors Significant in Each of the Two Task Situations of I.R. Managers (Effective Administration and All Negotiation)

Two other points of interest in these comparisons are the following:

(1) Conflict Management behaviors were mentioned frequently in negotiation situations but not in military incidents including combat situations. Conflict Management did reach significance in combat situations in the questionnaire-correlational study but not in the critical incident studies.

EFFECTIVE NONCOMBAT	BOTH EFFECTIVE NON COMBAT & COMBAT	EFFECTIVE COMBAT
S CRITICISM- DISCIPLINE	A PERFORMANCE EMPHASIS	L PROBLEM SOLVING*
	C INSPIRATION	M PLANNING*
B CONSIDERATION* (+) <-	B CONSIDERATION* (+)	
	H ROLE CLARIFICATION	

-
- * See also the list for I.R. managers in accompanying chart.
 - + Significant in both task situations (one sample Z test), and the difference in proportions (two sample Z test) is also significant with the higher proportion in the task situation indicated by the direction of the arrow.

Figure 11. Significant Behaviors in Military Leaders' Task Situations: Behaviors Significant in Each of the Two Task Situations of Military Leaders (Noncombat and Combat)

(2) Consideration behaviors were required in effective administration and noncombat situations, as well as in combat situations.

5.6.4 Results of the 19 Category Comparison with Military Leaders for an I.R. Manager's Behavioral Profile

In summary, from this comparison of I.R. managers and military leaders, a distinctive behavioral profile for I.R. managers can be constructed. Using the full 19 category scheme and aggregating over all respondents, the following four behavior types, in order of frequency, were significant in both negotiation and administration situations: Interaction Facilitation, Information Dissemination, Conflict Management, and Decision Participation.

The following four behavior types were significant in one of the two situations analyzed: Problem Solving, Planning, Consideration, and Role Clarification.

Conspicuous by the very low frequencies accumulated overall were the following categories in ascending order of frequency: Inspiration (0%), Praise-Recognition (0%), Performance Emphasis (1%), Structuring Rewards (1%), Goal Setting (1%), Training and Coaching (1%), Coordination (1%), Autonomy-Delegation (2%), Representation (2%), and Criticism-Discipline (2%) (the first column in Table 27 on page 168).

6.0 DISCUSSION

The findings presented in the previous chapter have a number of implications for the research hypotheses and objectives of this study.

(1) The behavior classification results fully supported five of the 9 behavior hypotheses. One was only partially supported (H7, perceived productivity, product quality and attitudes of employees), another two were supported with qualification (H2 and H3, managerial function and level), and one was not supported (H6, perceived effectiveness of the company's I.R. people as a group).

(2) The conceptual replication of Yukl and van Fleet's (1982) new critical incident method and managerial taxonomy was successful. However, this replication introduced some significant changes in research procedures and statistical techniques. The extensions to the research design involving more classification variables were also largely successful (see #1 above).

(3) The five research questions for the non-behavioral classifications (individual, organizational, environmental, content, and target) were not addressed. The codes for these classifications were not analyzed. There were not enough non-behavioral incidents to have them coded in the individual classification scheme. The codes for the other schemes were not analyzed because of reliability problems with them.

(4) The two hypotheses concerning the relationship of respondents' function (H9) and managerial function (H10) to scores on the three quantitative scales (I.R. group performance, employee outcomes, and union-management relationship) were supported. The corresponding hypothesis concerning the relationship of respondents' level to the I.R. climate measures (H11) was not supported.

(5) A behavioral profile was developed for I.R. managers, including identification of some significant situational contingencies for effective behavior.

(6) A descriptive survey of management and union perceptions of the effectiveness of I.R. management was conducted in a significant proportion of Canada's large bargaining units. The results were consistent with an earlier Conference Board survey of American I.R. executives. The results

indicated that the I.R. climate in the bargaining units in the sample was generally perceived to be good, or, at least, as good as can be expected. However, the morale and motivation of unionized workers was perceived to be significantly lower than their productivity and product quality. I.R. managers as a group were perceived to be performing significantly more poorly in this area and in the maintenance of harmonious union relations than on the more concrete tasks of contract administration and negotiations.

In this chapter, the quality of the sample and the empirical description of the bargaining units in the sample will be discussed. The findings for the hypotheses about the relationship of the scores on the three measures of I.R. climate with respondents' function and level will be critically reviewed and evaluated. The results for the behavior classification and the other classification schemes will be reviewed. An interpretative overview of the study results based on Walton and McKersie's (1965) model of labor negotiations will be presented, and the strengths and weaknesses of the study will be reviewed.

6.1 THE QUALITY OF THE SAMPLE

The results of this study are based on a large national sample of individual managers and union reps (n=365) from a

large number of bargaining situations (n=101) with 500 or more employees in private sector companies in a wide variety of industries and geographical settings. Furthermore, multiple informants were used from different functions and different levels in the same bargaining situations.

However, the sample was not a random sample of either bargaining situations or of individuals within those bargaining situations. Furthermore, the response rates, while not unusually low for national mail surveys, were modest at best.

The response rate for union representatives, 12%, was especially low. A low response rate from union reps was not unexpected given (a) the one-sided emphasis of the study on I.R. managers' behaviors; (b) the mailing of the questionnaires to the I.R. manager rather than the union hall; (c) the explicit note to the contact person that distribution of the questionnaires to union reps may not be possible in all situations; and (d) the sensitive nature of the issues raised in the questionnaire. Because the primary focus of this research was on the perceptions of managers, this low response from union reps was disappointing but neither unexpected nor critical for the success of the study. While results for this group can only be sugges-

tive, they have been retained but must be interpreted and used with a great deal of caution.

Therefore, generalizing the results from this sample to the population of private sector companies with relatively large groups of unionized employees, or to a company as a whole, is not warranted given the sampling plan and the response rate. In fact, the study results are probably biased towards companies with positive union-management relations and an I.R. manager and I.R. group that is widely perceived to be relatively effective. Both the scores on the I.R. climate scales and the informal discussions the investigator had with contact people and with potential contacts in companies which did not participate in the study supported this suggestion.

Furthermore, the study is probably biased towards companies and individual managers inclined to support research projects such as this. The time and effort required to fill out this questionnaire was considerably greater than for many other surveys. In addition, there were aspects of the questionnaire which could make it seem like a performance appraisal of the top I.R. manager and his department. This would be a very sensitive issue in most companies, and an issue that is often not formally addressed (Freedman, 1979).

Although the sample of 101 bargaining situations was not a random sample, the distribution by province, industry, size, and unions represented does seem to broadly reflect much of the variety included in the population of large Canadian private sector bargaining situations, as intended. In review, those areas of the population which were either not included by design or underrepresented due to nonresponse are as follows:

- (1) the construction industry;
- (2) public administration and defence (government employees at all levels of government);
- (3) health and welfare services (nurses and other hospital employees);
- (4) education services (teachers and other employees at all levels of the education system);
- (5) small and medium sized bargaining situations (under 500 unionized employees);
- (6) industries with a very low proportion of the work force which is covered by collective agreements (agriculture; fishing and trapping; finance, insurance, real estate; some service industries such as religious organizations, amusement and recreation services, services to

- business management, and personal services);
- (7) Quebec (especially unilingual francophones) which seems to be underrepresented (while Ontario seems to be slightly overrepresented);
- (8) some manufacturing industries which were either underrepresented (one bargaining situation only) or not represented, including tobacco products, leather, textiles, knitting mills, clothing, printing and publishing, machinery (except electrical machinery), non-metallic mineral products, and petroleum and coal products.

The concentration of the sample drawn in Ontario (48%), Quebec (19%), and British Columbia (14%) reflects the concentration of Canada's population and industrial activity generally (Peach and Kuechle, 1985). When the distribution of large bargaining situations drawn in the sample is compared with the distribution of total union membership by province (Peach and Kuechle, 1985, p.5), Ontario is slightly better represented in this sample (48% vs. 35.5%) and Quebec is slightly underrepresented (19% vs. 27.9%). While some of this difference may reflect differences in the distribution of large bargaining situations

vs. total union membership, part of the difference no doubt reflects the greater familiarity of Ontario businessmen with Western's School of Business Administration. Part of the difference is no doubt also due to the fact that bilingual or French only versions of the questionnaire were not available for use in Quebec situations.

When the list of 32 unions represented in the study is compared with the list of 33 unions with 25,000 or more members in Canada in 1984 (Peach and Kuechle, 1985, p.8), the following types of large Canadian unions were not represented in the study: government employees' unions; construction unions; unions of teachers, musicians, nurses, and other hospital employees; service employees' unions; and clothing and textile unions.

6.2. EMPIRICAL DESCRIPTION OF THE I.R. CLIMATE IN THE SAMPLE BARGAINING UNITS

There were four main results in the empirical description of the I.R. climate in the bargaining units sampled.

(1) Overall, the I.R. climates were perceived to be good.

(2) Companies at the extremes on the rating scale with either very good, or poor and very poor I.R. climates were not well-represented in the sample.

(3) The I.R. managers' performance as groups was perceived to be poorest with respect to improving employees' motivation and morale and promoting and maintaining harmonious relations with the union.

(4) Employees' morale and motivation were rated lower than their productivity and product quality.

All four of these findings are consistent with a Conference Board survey (Freedman, 1979; Kochan, 1980 A) of 778 senior American I.R. executives in early 1978. They suggest, as Kochan and Freedman have noted, that I.R. managers are perceived to perform most poorly on the aspects of their job that require the most improvement, namely, building relationships with union reps and improving the attitudes of individual workers.

Nonunionized companies have pioneered in the development of policies and programs to address the issues of employee motivation and morale (Foulkes, 1980). A similar effort in unionized settings appears to be a greater need now than efforts to further improve the I.R. manager's effectiveness on the more traditional tasks of handling grievances, arbitrations, contract negotiations, and work stoppages.

The absence of bargaining situations with measures of I.R. climate that were very poor and the very few situations rated "poor" suggest a nonresponse bias in both the American survey and the present study from such companies, or from individuals, including union reps, in the companies surveyed who hold these views. If this is so, the critical incidents of effective and ineffective behaviors by I.R. managers which were collected from the same respondents will reflect the opinions of individuals who, by and large, hold positive views of both I.R. management and the I.R. climate generally in large bargaining situations.

Perceptions may vary more widely in the companies which participated than their respondents' answers suggest. It is important to stress that the views of only one half of the union-management relationship were obtained. The Conference Board survey sampled only senior I.R. executives, omitting both line managers and union reps. This survey sampled line managers and I.R. managers at all levels of the hierarchy, but the response rate for union reps was extremely low (12%). The results for this study show that the variance in responses both within and between companies would be much greater if both sides of the union-management relationship were equally represented.

Alternatively, the companies with poor I.R. climates may not have participated in the surveys. Random sampling with a high response rate and effective control for nonresponse bias would be required to ensure that nonresponse is not a factor. As mentioned previously, this was not considered practical from the start for this study.

8.3 DIFFERENCES IN THE ASSESSMENT OF I.R. CLIMATE BY RESPONDENTS' FUNCTION AND LEVEL

In the preceding section, the overall results for measures of the I.R. climate were discussed. In this section, the differences in measures of I.R. climate from respondents in different functions and at different levels in the management hierarchy will be discussed.

H9 and H10, concerning the relationship of function (union, I.R., line) and managerial function (I.R., line) to assessments of I.R. climate measures, were supported. H11, concerning the relationship of level in the hierarchy to assessments of I.R. climate, was not supported. A summary of these three hypotheses with the level of support indicated is set out in Figure 12.

These results extended the findings of Yukl and van Fleet. Yukl and van Fleet did not collect measures corresponding to either the function and level measures or the I.R. climate measures. If perceptions of behavior types reflect subjective criteria of effectiveness that differ from group to group, perceptions of other aspects of the work situation can be expected to vary as well.

- A. Other things being equal, perceptions of the state of the I.R. climate (the effectiveness of the I.R. people as a group; the unionized employees' productivity, product quality and attitudes (morale, motivation); the state of the union-management relationship (positive, negative)) will vary depending on:
- H9. The observer's function
(line manager, I.R. manager, union rep);
SUPPORTED.
 - H10. The management observer's function
(line manager, I.R. manager);
SUPPORTED.
 - H11. The management observer's level in the hierarchy
(high, low);
NOT SUPPORTED.

Figure 12. Summary of Support for the Relationship of Respondents' Function & Level to I.R. Climate Measures: Summary of Support for the 3 Hypotheses Relating Observers' Function and Level to Scores on the 3 Summed Scales Measuring I.R. Climate

The findings in this section which involved the union respondents are both suggestive and expected. However, the union results were based on such a small number of respondents and the union respondents made up such a small proportion of the total sample that these results must remain very tentative.

The fact that I.R. managers' measures were higher than line managers' measures on all three I.R. climate scales is intuitively what one would expect. Also, the fact that managers in general think that I.R. managers perform better than union reps think they do, and the fact that union reps think unionized employees produce more product of a higher quality and have better motivation and morale than managers think they do are intuitively to be expected. It is also not surprising that the two groups most actively involved in a professional capacity in the union-management relationship rated it more successful than line managers did.

The results of differences by function are consistent with earlier studies of differences in perception and stereotyping among members of different organizational groups, including executives and union leaders (French and Henning, 1966; Henning and Mosely, 1970; Myers and Turnbull, 1956; Haire, 1955).

On these particular scales, the only scale on which the perceptions of the integrators (I.R. managers) were rated in between the perceptions of the two groups they were integrating was the employee outcomes scale (Lawrence and Lorsch, 1967). On other measures of interpersonal orientation, I.R. managers' measures may have been more frequently midway between the measures of the two other

groups. However, as previously noted, results involving the union reps' scores are very tentative due to the low response rate for them.

There were no significant differences by level of respondent. This finding may be an artifact of a measure for level that failed to tap fully comparable differences in level across bargaining situations in companies with different organization structures. Alternatively, the finding may suggest that perceptions of I.R. climate are more powerfully shaped by associations with others within the same function than with others at the same relative organizational level. However, the findings may also be an artifact of the possible nonresponse bias. Perhaps if the variance on the I.R. climate scales had been higher across bargaining situations, the relationship of level with I.R. climate would have been significant.

These findings are a reminder of the barriers across bargaining tables and inside management committee meetings that do exist and must be addressed for effective communication on I.R. matters to occur.

6.4 THE BEHAVIOR CLASSIFICATION SCHEME

As noted above, the behavior classification scheme was the

only scheme which produced reliable codes which could be analyzed further. Of the nine behavior hypotheses, five were fully supported, one was partially supported, two were supported with qualification, and one was not supported. See Figure 13 for a summary of the hypotheses related to the behavior classification and their level of support.

6.4.1 Respondents' Function and Level

H1 was supported. The distribution of behavior types did vary significantly with the respondents' function (line manager, I.R. manager, and union rep). Furthermore, the distribution of behavior types varied significantly with managerial function (line and I.R.) when level was controlled for (H2), and with level when managerial function was controlled for (H3). Thus H2 and H3 were supported with qualifications. There was an interaction effect between managerial function and level in the managerial hierarchy, but there were no significant main effects for managerial function or level.

- A. Other things being equal, the types of behavior perceived to be critical for the effectiveness of an I.R. manager will vary depending on:
- H1. The observer's function
(line manager, I.R. manager, union rep);
SUPPORTED.
 - H2. The management observer's function
(line manager, I.R. manager);
SUPPORTED WITH QUALIFICATION: Controlling
for level.
 - H3. The management observer's level in the hierarchy
(high, low);
SUPPORTED WITH QUALIFICATION: Controlling
for function.
 - H4. The perceived effectiveness of the I.R.
manager's behavior (effective, ineffective);
SUPPORTED. Effectiveness with administration
also supported.
 - H5. The type of task situation within which the I.R.
manager's behavior is taking place
(contract administration, negotiation);
SUPPORTED.
 - H6. The perceived overall performance effectiveness of
the company's I.R. people as a group
(effective, ineffective);
NOT SUPPORTED.
 - H7. The perceived productivity, product quality and
attitudes (morale, motivation) of the unionized
employees (high, low);
PARTIALLY SUPPORTED. Productivity and
product quality only.
 - H8. The perceived overall union-management
relationship (positive, negative).
SUPPORTED.
- B. Other things being equal, the types of behavior perceived to be critical for the effectiveness of a manager will vary depending on:
- H12. The manager's function
(I.R. manager, military leader);
SUPPORTED.

Figure 13. Summary of Support for the Behavior Hypotheses: Summary of Support for the Nine Hypotheses related to the Behavior Classification Scheme

The reason for these significant effects involving function and level could be (1) because I.R. managers be-

have differently and appropriately at different organizational levels and are observed doing so by people at different levels, (2) different respondents observe the same behaviors and evaluate them differently using subjectively defined criteria of effectiveness, or (3) a combination of the above. Because of the research design and conceptual framework used for this study, a definitive answer to this question is not possible from these results.

In the military leader study, Yukl and van Fleet (1982) found that Consideration was a critical incident method effect. Consideration reached significance in both the critical incident studies but it did not reach significance in either of the questionnaire-correlational studies. They noted that many of the incidents were written from the perspective of subordinates, but they had not controlled for this through the research design. By asking for respondents' function and level and by taking a stratified sample with each managerial population represented about equally, this research design did control for this variable.

The results indicated the following (see Table 24 on page 158).

(1) Union reps emphasized Consideration.

(2) High level line managers (bosses or peers of high level I.R. managers) and low level I.R. specialists (subordinates of I.R. managers) both emphasized more Decision Participation. High level line managers also emphasized more Information Dissemination, while low level I.R. specialists emphasized more Problem Solving.

(3) Low level, front line, managers emphasized Conflict Management and Praise/Criticism behaviors rather than Decision Participation or Information Dissemination. Union reps also emphasized Praise/Criticism behaviors.

These findings are consistent with subjective criteria differences which might be intuitively expected from the different function and level subgroups represented, if those subjective criteria reflected the self-interests of each of the subgroups.

For managers such as I.R. managers in boundary spanning positions who come into frequent contact with many different subgroups, different subjective criteria of performance effectiveness such as those described above can create role conflict. I.R. managers receive conflicting signals from representatives of the different subgroups about what is expected of them. It is especially important for I.R. managers themselves and for their superiors to

recognize that they may have different subjectively held criteria of effectiveness that are being used in the formal or informal performance appraisal of I.R. managers, and to seek ways to address this problem.

From the findings reviewed above, it is clear that subjective criteria of effectiveness are a critical incident method effect only if they are not controlled for or measured in the research design.

6.4.2 Task Situation and Perceived Effectiveness of Behavior on the Task

H4 and H5 concerning perceived effectiveness of the behavior and type of task situation (administration, negotiation) were both supported. In addition to these two main effects, an interaction between effectiveness and task occurred. Effective administration incidents and ineffective administration incidents had significantly different behavior distributions but effective and ineffective negotiation incidents did not.

Although Yukl and Van Fleet (1982) collected ineffective incidents, they did not analyze them because they contained few behaviors. This study of I.R. managers extended the military leader study by analyzing ineffective behaviors as well as effective behaviors. The difference was

found to be significant for administrative behaviors and overall.

Task had the highest chi-square and the largest Phi of any of the classification variables used in the study. Therefore, the most confidence can be placed in the facts (a) that an association exists between the types of behavior and task (administration and negotiation), and, (b) that the level of that association is the strongest of any measured in the study. Thus, at least two of the three major phases of the collective bargaining cycle (organization, negotiation, contract administration; Phillips, 1981) have significantly different behavioral emphases perceived to be critical for effective performance.

The findings suggest that conflicts of interest, which are settled primarily during negotiations and negotiation impasse resolution procedures, are associated more with Conflict Management behaviors. Living under the terms of an agreement, including settlement of any rights disputes, is associated more with Problem Solving, Consideration, and Praise/Criticism behaviors.

Negotiations are often complex, require input from many parties, and stretch over a long period of time. In addition, important decisions often have to be made

quickly. Hence, the emphasis on Planning/Implementation behaviors in negotiations.

Ineffective administration incidents emphasized Conflict Management and Planning/Implementation behaviors, the same behaviors which were emphasized in negotiation incidents. Effective administration incidents emphasized Decision Participation and Interaction Facilitation, behaviors which are consistent with Problem Solving and Consideration behaviors which characterized administration incidents overall. These findings suggest that I.R. managers who behave effectively in administration situations recognize the different behavioral requirements of the negotiation and administration task situations and behave appropriately for administration situations. I.R. managers who behave ineffectively in administration situations either fail to recognize the difference between the two tasks, or recognize the difference and still fail to behave appropriately.

6.4.3 Perceived Effectiveness of the I.R. People as a Group

H6 concerning the relationship of behaviors to perceptions of the effectiveness of the company's I.R. people as a group was not supported. In fact, with a probability equal to .88, this relationship had the lowest chi-square and the lowest Phi in the study.

This finding may be an artifact of nonresponse bias in the study. The modal response on both the single item and summed scale measures of how effective the I.R. people as a group were was "good." There were no group responses that rated the group as "very poor," a very few that rated the group as "poor" and a few that rated the group "as good as can be expected." This nonresponse bias could have entered the study at a number of places.

(1) Perhaps the companies where the performance of the I.R. people as a group was perceived as poor or very poor did not participate in the study. Perhaps the I.R. manager who was the contact person for the study knew this and decided not to have this issue raised in the company at all.

(2) Perhaps the contact person in such companies had his company participate in the study but directed questionnaires only to those whom he knew to hold favorable views on the function and his leadership. These I.R. managers disregarded guidelines in the cover letter to select a balance of those known to be critical of the function and those known not to be critical.

(3) Perhaps those who were critical of the function were sent questionnaires by the contact person but decided not to participate.

If the nonresponse bias is not a significant factor in the sample, the finding indicates at least that the phenomenon of specific behaviors by individual I.R. managers is independent of the assessment of the group's overall effectiveness. The instructions to respondents on the questionnaire stated as follows: "Regardless of your assessment above of the overall performance of the industrial relations people as a group, you will be asked to provide examples of both very poor and very good things said or done."

The focus of this research was not on inter-group differences (effective and ineffective I.R. departments) or on inter-individual differences (effective and ineffective I.R. managers). The focus was on patterns of intra-individual variation (effective and ineffective behaviors, regardless of the overall effectiveness of the individual), particularly fluctuations in an individual's performance over time (Schoenfeldt, 1982). The intent was to identify patterns in effective and ineffective behaviors that managers engage in from time to time, and not the behaviors associated with either particular individuals or particular departments which have been globally assessed to be either effective or ineffective. Every manager makes mistakes from time to time and every manager can improve, no matter how effective she or he is assessed overall.

If nonresponse bias is not a significant factor in these findings, then perhaps perceived effectiveness of the I.R. people as a group is not a good indicator of I.R. climate, at least not as good as measures of the union-management relationship or the productivity and product quality of unionized employees.

6.4.4 Employee Productivity, Product Quality and Attitudes (Morale, Motivation)

H7 about the relationship of behaviors to the productivity, product quality, and attitudes (morale, motivation) of unionized employees was only partially supported. The relationship of behaviors to the three item summed scale and to the single item measure of employee attitudes was not significant. However, the relationship of behaviors to a two item summed scale of employee productivity and product quality was significant.

Employees' attitudes, their morale and motivation, were rated generally lower than their productivity and product quality. I.R. managers' performance in improving employees' attitudes was also rated generally lower than their performance in other areas.

High employee productivity and quality is associated with above average Information Dissemination. Low employee pro-

ductivity and quality is associated with above average Consideration and Praising/Criticizing.

Both here and with respect to union-management trust which will be discussed in the next section, the possibility of either reverse causation or other causative factors being responsible for the results of this study is clearest. Here, for example, I.R. managers might well emphasize Consideration and Praise/Criticism behaviors because employee productivity is low, in an attempt to improve it. Furthermore, I.R. managers might emphasize Information Dissemination behaviors because employee productivity is high. Alternatively, employee productivity may be high because of higher investments in technology, which could lead to a higher level of skilled employees, which could lead management to trust them more and share more information with them. The possibilities for this type of explanation are endless. It is sufficient here to note that there is a possibility of reverse causation and causation by variables not included in this study given the research design.

6.4.5 Union-Management Relationship

H8 hypothesized that the types of behavior will vary depending on the perceived overall union-management relationship. This hypothesis was supported.

More positive union-management relationships were associated with an emphasis on Interaction Facilitation, Decision Participation, and Planning/Implementation behaviors. More negative relationships were associated with less of these same types of behaviors.

Reverse causality is a possible explanation of these findings as was discussed in the previous section. In situations with positive relationships, managers may engage in relatively more of these types of behaviors, including a more participative, proactive style of managing I.R. matters.

6.4.6 Comparison of I.R. Managers and Military Leaders, and the I.R. Behavior Profile

H12, concerning the differences in behaviors depending on whether the person observed was an I.R. manager or a military leader, was supported.

When military leaders were compared with I.R. managers, it was clear that effective military leaders would not necessarily make effective I.R. managers, and vice-versa. There is only modest overlap in the types of behavior most frequently required for perceived effective performance between these two kinds of leaders/managers. The taxonomy and critical incident method used in both studies success-

fully distinguished between these two quite different types of leaders/managers. It is clear, then, that the behavior requirements for perceived effective performance are significantly different for I.R. managers and for military leaders.

While military leaders more frequently used behaviors such as Performance Emphasis, Inspiration, and Criticism-Discipline to motivate work performance, I.R. managers more frequently used behaviors such as Interaction Facilitation, Information Dissemination and Decision Participation in their roles as information conduits and facilitators of interpersonal and intergroup interaction. In military situations, behaviors to motivate work performance directly may be more appropriate because specific performance objectives and subobjectives for leaders and subordinates may be easier to formulate. In I.R. situations, it may be easier to specify and to recognize what processes or types of activities are most appropriate in a given situation than it is to identify precise goals or objectives for managers and subordinates. Many factors outside of the control of individual managers impact on final I.R. outcomes such as contract settlements, strikes or arbitration awards.

With respect to the differences in conflict management behaviors, perhaps intragroup interpersonal conflict is less frequent in military combat situations which can involve life threatening decisions than it is in negotiating situations.

There were a large number of behavior types which were not significant for either I.R. managers or military leaders. Several of these relate to motivating the work performance of individual subordinates. Examples of this type of behavior include Structuring Reward Contingencies, Goal Setting, and Autonomy-Delegation. Neither I.R. managers nor military leaders could be called typical company managers. Perhaps these behavior types would occur significantly more frequently in critical incidents of more traditional office or plant management activities.

6.5 THE OTHER CLASSIFICATION SCHEMES

None of the research questions, Q1 to Q5, were answered. The individual classification scheme was not used because too few nonbehavioral incidents were provided. None of the other four classification schemes produced reliable codes and so no further analysis was done on them. A summary of the five research questions and the level of support for each is set out in Figure 14.

1. With whom is the I.R. manager interacting most frequently in incidents perceived to be critical for performance effectiveness?
NOT SUPPORTED. No analysis done.
2. What specific issues are I.R. managers perceived to be handling effectively and what issues are they perceived to be handling ineffectively?
NOT SUPPORTED. No analysis done.
3. Other things being equal, what individual level factors other than behaviors are perceived to be determinants of an I.R. manager's performance effectiveness?
NOT SUPPORTED. No analysis done.
4. Other things being equal, what organizational level factors are perceived to be determinants of an I.R. manager's performance effectiveness?
NOT SUPPORTED. No analysis done.
5. Other things being equal, what environmental level factors are perceived to be determinants of an I.R. manager's performance effectiveness?
NOT SUPPORTED. No analysis done.

Figure 14. Summary of the Support for the Five Research Questions: Summary of the Support for the Five Research Questions Relating to the Five Nonbehavioral Classification Schemes (Individual, Organizational, Environmental, Content, Target)

All of the incidents were coded by two raters for the organizational and environmental schemes. Less than half of the incidents had codable organizational factors and less than 100 incidents had codable environmental factors. The vast majority of the incidents provided were, therefore, focussed at the level of individual behaviors and little of the detail or background information provided was at a more macro organizational or environmental level. To collect critical incidents of behaviors with a focus on or-

ganizational or environmental correlates of differences, it would be necessary to design the study, including the sampling plan, quite differently. For example, instead of collecting incidents on two task situations such as administration and negotiation, incidents could be collected before and after a major organizational or environmental change. The impact of organizational and environmental forces, like that of culture, appears to be subtle to the point of invisible until sudden change occurs.

The low inter-rater agreement measures for the environmental, target, and content classification schemes may be an artifact of having too few relevant incidents to code. However, the behavioral and organizational classifications were clear examples of the difficulty that exists in obtaining reliable codes, even with a large data base of relevant codes. The behavior scheme is an example of the time and effort that has to be expended to achieve reliable codes. This level of effort was not made for these other schemes because they were not the major focus of the study.

6.6 INTERPRETATIVE OVERVIEW OF THE RESULTS

Our analysis has, of necessity, considered the effects of several factors on the pattern of an I.R. manager's behavior in sequence and, for the most part, independent of one

another. If an I.R. manager could compartmentalize the many different parts of the total job in this way, managing effectively would be considerably easier than it actually is. Many of the results from this study can be integrated, in a way similar to the way that an I.R. manager finds that the various parts of the I.R. job are interrelated, using the bargaining framework of Walton and McKersie (1965).

Their framework included four subprocesses, namely, distributive bargaining (power bargaining over zero-sum conflicts of interest), integrative bargaining (problem solving for common problems), attitudinal structuring (maintaining and promoting harmonious relations), and intraorganizational bargaining (bargaining within one's own group). Intra-organizational bargaining and inter-organizational bargaining (between groups) can be seen as two dimensions of the labor negotiations framework, with each of the other three subprocesses occurring in both dimensions, and interactions continually occurring between the dimensions and among the subprocesses.

Walton and McKersie's model is a model of labor negotiations, not of the total collective bargaining cycle. They did, however, recognize, especially in their discussion of attitudinal structuring, that contract administration and negotiations are activities which are

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intimately related, especially through the mechanism of the attitudes which the parties develop towards one another (pp.201-202; 366-368).

Their model is especially helpful in integrating the findings of this study if the model's scope is broadened to include the whole collective bargaining cycle by redefining two of the terms. This broadening of the scope can be accomplished if (a) distributive bargaining is understood to take place primarily in negotiations (the parties' interests are in conflict until their rights have been decided by means of contract terms), and (b) integrative bargaining is understood to take place primarily in contract administration (their rights having been decided, for the most part). The word "primarily" should be emphasized, because as the Walton and McKersie model makes explicit, common problems do come up in negotiations. Rights arbitrations demonstrate the frequency with which conflicts of interest come up during the life of an agreement. The processes of negotiating and contract administration are intimately connected phases in the collective bargaining cycle. This redefinition is an extension of the model but is not inconsistent with the basic thrust of the model or the meanings of the terms.

The study found that behaviors differed significantly by task situation (negotiation, administration) and effectiveness (effective and ineffective administration). The primarily inter-organizational distributive bargaining (negotiating) behavior identified was Conflict Management. The primarily intraorganizational distributive bargaining behavior identified was Planning-Implementation (Planning, Role Clarification, Training).

Integrative bargaining (administration) behaviors identified were Problem Solving, Interaction Facilitation, and Decision Participation. All of these behaviors could be either inter-organizational or intraorganizational. Consideration could be classified both under integrative bargaining (administration) and attitudinal structuring. Walton and McKersie identified good information flow (cf. Interaction Facilitation) and trust, openness and risk taking (cf. Decision Participation) as factors which enhance integrative bargaining.

Many of the study findings relate to inter-organizational and intraorganizational attitudinal structuring. As noted above, Consideration is an example that could be classified as inter-organizational attitudinal structuring. Several other findings relate to differences in attitudes between union reps and managers

and, consequently, the need for inter-organizational attitudinal structuring, namely, (1) the significant differences between union and management perceptions of both the I.R. climate and significant behavior types; (2) the differences in behavior patterns for situations of relatively cooperative and relatively conflictful union-management relations; and (3) the related findings (a) that I.R. managers are perceived as performing relatively poorly in the areas of maintaining and promoting harmonious relations with the union and improving employee morale and motivation, and (b) that employees' attitudes (morale, motivation) were rated lower than their productivity and product quality. These differences in attitudes and perceptions are among the reasons why parties sometimes find it difficult to identify the difference between common problems and conflicts of interest.

Findings related to the need for intraorganizational attitudinal structuring within the management group include (1) the significant differences between I.R. managers and line managers on both (a) perceptions of I.R. climate, and (b) significant behavior types; and (2) the differences in significant behavior types among high line managers, high I.R. managers, low level line managers, and low level I.R. managers. Walton and McKersie identified role conflict and

factional conflict as two reasons for the need for bargaining within a party.

The study identified four behavior types which were significant across most situations. These behaviors could be considered the core behaviors for the I.R. manager and important in all of the categories identified above, although some were found to be even more important in some situations than in others. These core behaviors included information dissemination, interaction facilitation, decision participation, and conflict management.

When the results of the study are seen in this framework, it is interesting to see how many of the findings relate to the need for attitudinal structuring behaviors by I.R. managers. This framework also suggests an explanation for some of the findings in this study.

Walton and McKersie noted that the subprocesses are related but often have conflicting goals. For example, an I.R. manager may behave in a certain way in order to achieve a goal in one subprocess, distributive bargaining, only to find that this behavior has made the achievement of goals in the attitudinal structuring or integrative bargaining subprocesses more difficult. Or an I.R. manager may make a comment at the bargaining table to achieve a

goal in intraorganizational bargaining with one of his own team, only to have the union reps across the table take exception. These conflicting goals in inter-related processes make constant trade-offs necessary and constantly create what Walton and McKersie called "dilemmas" and "complicating factors" for the I.R. manager.

There are two sets of study findings which can be explained using this framework. This study found that ineffective behaviors in contract administration, namely, conflict management and planning-implementation, were effective behaviors in negotiating. The study also found that I.R. managers were perceived to be performing relatively poorly in maintaining and promoting harmonious relations with the union and in improving unionized employees' attitudes, even though employees' attitudes were perceived to be in need of improvement relatively more than their productivity and product quality.

The framework, as revised above, suggests the following explanation for these findings. Because the primary criteria used to evaluate I.R. managers are economic ones related to the cost of the negotiated settlement (Freedman, 1979), negotiations take precedence for I.R. managers over contract administration, and distributive bargaining over wages and other cost items takes precedence over any

integrative bargaining during negotiations. Conflict management behaviors used in negotiating cost items, and used appropriately here, have adverse consequences for achieving integrative bargaining goals in negotiations and, especially, in administration situations because of the adverse effects they have had on the attitudinal structuring goal of building harmonious relations. Given acrimonious relations, distributive bargaining behaviors become the norm in ineffective administrative situations even on common problems.

Given (a) conflicting goals, (b) inter-related processes, and (c) a priority on the distributive process and related behaviors, it is easy to see why I.R. managers are perceived to use distributive behaviors ineffectively in integrative situations, and why they are perceived to be performing less effectively on attitudinal structuring issues with both union reps and unionized employees.

6.7 REVIEW OF STEPS IN THE PROCESS OF DEVELOPING FRAMEWORKS, COLLECTING DATA, AND TESTING HYPOTHESES

A number of steps were taken in the process of moving from the conceptual framework of the determinants of the I.R. manager's effectiveness developed in the literature review chapter to the final summaries of support or nonsupport for the research hypotheses and research questions. The pur-

pose of this section is to review these steps and to indicate (a) what additional components (e.g., constructs, variables, classification schemes) were specified at each step; (b) what components were deleted from further analysis at each step; and, finally, (c) what components were found to be both reliable and significant at the conclusion of the study. Following this review, the implications of the cumulative impact of these changes on the significance of the research findings will be discussed. In the following section, which is the final section of the chapter, the strengths and weaknesses of the study will be discussed.

1. Development of a multivariate conceptual framework of the determinants and outcomes of the I.R. manager's performance effectiveness (Figure 2): The following four major components were specified in this step:

- (a) individual determinants and outcomes of behavior (see #5 below);
- (b) individual behaviors (see #6 and #8 below);
- (c) organizational determinants of behavior (see #6 below);
- (d) environmental determinants of behavior (see #6 below).

2. Development of a multivariate conceptual framework of the determinants and outcomes of the I.R. manager's perceived performance effectiveness (Figure 3): The following four additional components were specified in this step:

- (a) the effect of the observer (see #3 (a) to (c) below);
- (b) other actors or characters in the incident (see #6 below);
- (c) functional or departmental outcomes of behavior (not studied);
- (d) organizational outcomes of behavior (not studied).

With the addition of the observer to the framework, all of the other components in the framework listed in #1 above became perceived components.

3. Development of a multivariate research framework of the determinants and outcomes of the I.R. manager's perceived behaviors (Figure 3): The following eight additional components were specified in this step:

- (a) observer's function (see #8 below);
- (b) observer's level (see #7 and #8 below);
- (c) observer's perception of the effectiveness of the behavior observed (see #8 below);
- (d) I.R. task situation (see #8 below);
- (e) specific issues or problems mentioned in the incident (see #6 below);
- (f) I.R. group performance effectiveness (see #7 below);
- (g) employees' attitudes, productivity and product quality (see #7 and #8 below);
- (h) union-management cooperation (see #8 below).

4. Development of 12 specific research hypotheses (9 related to behavior and 3 relating observer's function and level to perceptions of I.R. climate) and 5 specific research questions (Figures 5 to 7): There was one additional component specified among the nine hypotheses related to the behavior classification:

- (a) observed manager's function (I.R. manager, military leader; see #8 below).

5. Data Collection: One component was not analyzed due to an insufficient number of relevant incidents:

- (a) individual determinants and outcomes of behavior (see #1 above).

Note that there was very low response from unilingual francophone managers (only one questionnaire was received with incidents written in French), from union reps (response rate of 12%), and from some manufacturing industries such as tobacco products, leather, textiles, knitting mills, clothing, printing and publishing, machinery (except electrical machinery), non-metallic mineral products, and petroleum and coal products (represented in the sample by at most one bargaining situation).

6. Reliability check: Four components were not analyzed further due to an unreliable classification scheme:

- (a) organizational determinants of behavior (see #1 above);

- (b) environmental determinants of behavior (see #1 above);
- (c) specific issues or problems mentioned in the incident (see #3 above);
- (d) other actors or characters in the incident (see #2 above).

Note that some of the original categories in one classification scheme, behaviors, were deleted or collapsed because they were unreliable or had accumulated very low code frequencies (7 of 19 categories were deleted and 5 of 19 categories were collapsed into two categories, so that only 9 categories were analyzed further instead of the original 19; see #1 above and #8 below).

7. Test of statistical significance: Three components were analyzed and their effects were found to be statistically insignificant:

- (a) observer's level, on perceptions of I.R. climate (see #3 above and #8 below);
- (b) I.R. group performance effectiveness, on behavior (see #3 above);
- (c) employees' attitudes, on behavior (see #3 above and #8 below).

8. Test of statistical significance: Nine components were analyzed and their effects were found to be statistically significant:

- (a) observer's function, and management observer's function controlling for level, on behavior (see #3 above);
- (b) observer's function, and management observer's function, on perceptions of I.R. climate (see #3 above);
- (c) observer's level, controlling for function, on behavior (see #3 and #7 above);
- (d) observer's perception of the effectiveness of the behavior observed (see #3 above);
- (e) I.R. task situation (see #3 above);
- (f) employees' productivity and product quality (see #3 and #7 above);
- (g) union-management cooperation (see #3 above);
- (h) observed manager's function (I.R. manager, military leader; see #4 above);
- (i) individual behaviors (see #1 and #6 above).

Note that for items (a) and (b) above, support for the effect of the component was qualified. For item (f), support for the component was partial. For item (i), support for some categories of the classification scheme was problematic (see #6 above).

In summary, the scope of the study was reduced in stages from the development of the initial conceptual framework of the determinants and outcomes of the I.R. manager's performance effectiveness with the following major implications.

(1) Perceptions of behavior and of the determinants of behavior were studied. More objective measures were not studied.

(2) A series of bivariate hypotheses, with the effects of other variables assumed to be equal, were tested. Multivariate analyses were not done.

(3) Some variables were not studied because relevant data was not collected. There were too few incidents with individual level factors other than behaviors to warrant use of the individual classification scheme.

(4) Response from some sectors of the populations sampled was very low; e.g., union reps, unilingual francophone managers, and some manufacturing industries.

(5) Some of the data gathered was not reliable and could not be analyzed further; e.g., the organizational and environmental determinants of behavior, as well as the lists of other characters in the incidents, and specific problems being addressed by I.R. managers in the incidents. In addition, over half of the behavior codes collected were not used in subsequent analyses because only one of the three raters used found them in an incident.

(6) The effects of some of the reliable data were statistically insignificant; e.g., the effects of perceived performance of the I.R. people as a group on behavior.

(7) Support for some of the hypothesized relationships was only partial or qualified; e.g., the effect of managerial function and level on behavior, the effect of perceived effectiveness of the behavior, controlling for task, and the effect of employee attitudes, productivity, and product quality on behavior.

(8) However, there was full support for a number of bivariate relationships hypothesized in the perceived effectiveness framework; e.g., observer's function, on perceptions of I.R. climate and on behavior; perceptions of effectiveness of the observed behavior; I.R. task situation; union-management cooperation; observed manager's function; and the nine category behavior classification scheme (dependent variable).

Four conclusions can be drawn from this review of the steps followed in the study.

(1) The scope of Yukl and van Fleet's critical incident studies was considerably expanded in this study of critical incidents of the I.R. manager's behavior.

(2) A series of bivariate relationships were tested in the framework of the I.R. manager's perceived performance effectiveness, and the relationships hypothesized between six of the twelve classification variables and the dependent behavior variable were found to be statistically significant. These hypotheses were partially supported, supported with qualifications, or fully supported. For the other six classification variables, four were unreliable, one was not tested due to lack of relevant data being collected, and one relationship tested was statistically insignificant.

(3) The multivariate relationships of the conceptual framework of the determinants and outcomes of the I.R. manager's performance effectiveness were not studied. However, this framework was useful in both summarizing the relevant literature and developing the framework of perceived effectiveness.

(4) Methodologically, a research process such as this which suffered such a hemorrhaging of data from start to finish was at best inefficient and at worst raises serious questions about the cumulative impact of such data loss on the meaning of research findings which were based on such a diminished data base. Ericsson and Simon (1984) had no objection in principle to such statistical treatment of reli-

ability issues after the fact if the original data base was large enough in the first place. However, something in the interaction of the human limitations of the raters, a general managerial coding scheme with 19 categories, and a large number of detailed incidents of I.R. managers' behaviors must have produced an extremely difficult coding task.

However, in spite of the reservations raised above, the significant findings for the perceived effectiveness framework have provided a measure of limited support for some of the relationships hypothesized in the effectiveness framework; for example, the relationships of structure (function and level of observer), role clarity and consensus (function and level of observer), I.R. climate, I.R. task, and effectiveness of behaviors, all to behaviors (perceived behaviors).

This measure of limited support suggests that further testing of the effective performance framework is warranted. In the meantime, practicing managers who find the effective performance framework to be a useful tool in the analysis of I.R. management problems can be assured that the framework does have at least limited empirical support.

6.8 STRENGTHS AND WEAKNESSES OF THE RESEARCH

Most of the points to be presented in this section have already been mentioned in at least one other place in this document. The purpose of this section is to review them together. The strengths and weaknesses of the study will be reviewed under the following headings: overall contribution of the research, the research design, the sampling plan and response rate, the critical incident method, managerial taxonomy, data analysis, operationalization and measurement issues.

Overall Contribution

A major strength of the study is that it met the three objectives initially set. The conceptual validation of the military leader study was a success. The basic types and situational contingencies of perceived effective and ineffective behavior by I.R. managers were identified successfully. These findings had relevance for the practice of management. The topic of managerial relevance will be reviewed in the final chapter. However, the study did not answer the five research questions which were asked on issues of secondary concern. There were either insufficient numbers of incidents to warrant coding them (individual

classification) or problems of unreliable codes prevented further analysis (the other four nonbehavioral classification schemes).

Research Design

One of the strengths of the study's research design is that it allowed going beyond mere description to the analysis of significant relationships between key variables in the model and thus exploring contingencies in behavior patterns. Some key variables were not included in the model, however. In addition, multivariate analyses could not be conducted. Otherwise, more of the total variance would have been explained.

There were two key limitations of this research design. First, it was not an experimental or quasi-experimental design, and therefore did not allow causal inferences to be made. For example, in examining the relationship between behavior pattern and both employee productivity/product quality and the degree of union-management cooperation, it was not possible to say whether (a) the behaviors caused the situation, (b) the situation caused the behaviors, or (c) some other variable(s) caused both the situation and the behaviors.

The effectiveness model tested is an open social system model of fit among components and multi-directional, multi-variate causality. This design permitted a test of significance for the relationship between two variables, holding the effect of, at most, one other variable constant at any given time.

The second major limitation of the study design is that it is not multi-method. Any critical incident method effect in this study could not be identified. However, the critical incident method effect identified in the military leader study was controlled for in other ways (function and level classification variables).

Sampling Plan and Response

In terms of the sampling plan, the study was a national census of large, private sector bargaining situations, exclusive of the construction industry, which included a stratified sample of multiple respondents from different functions (union, line manager, I.R. manager) from each bargaining situation. In terms of response, more than 1300 critical incidents were collected from 365 individuals in 101 different companies or bargaining situations in Canada.

A major limitation of the sampling plan was that it was not a random sample. This precluded any generalizations from the sample to the population from which the sample was drawn. A random sample was not considered practical from the beginning of this research.

Although the sample and response were relatively large in absolute terms, the response rate was only modest for both bargaining situations and individual respondents within bargaining situations. The response rate for union reps was especially low. This made nonresponse bias a real possibility for this study. This probably had the effect of reducing the variance on the items in the three summed scales used to measure the dimensions of I.R. climate. However, even with this reduced variance, significant results were obtained.

The response was also modest in terms of the frequencies required given the number of cells in the data analyses. The modest response did not permit withholding part of the data for a predictive validity check.

Critical Incident Method

A major strength of the critical incident method used in this study was the richness of the data collected for analysis as contrasted with the colorless, unidimensional quality of entirely numerical responses. The incidents were, in effect, mini-cases of real world managerial situations. Furthermore, the experimenter demand phenomenon was limited by the use of this method, as was the halo effect and a number of other error inducing factors associated with questionnaire responses of quantitative items. However, the instructions for generating critical incidents and the choice of items for the preliminary quantitative questions probably had some impact on the respondents' choice of incidents.

Nevertheless, the critical incidents did not have the richness of either full scale research case studies or in-depth personal interviews, nor did they permit multivariate statistical analyses like interval or ratio data would have permitted. Furthermore, partially controlling for a method effect through function and level variables could not replace the value of having more objective criteria of effectiveness as controls.

Standard Managerial Behavior Taxonomy

The use of a 19 category standard behavior taxonomy permitted the gathering of detailed information which could be compared across other studies. However, use of 19 categories in the coding process probably reduced inter-rater agreement considerably. Using a standard taxonomy did not permit the design of customized categories for I.R. managers and no doubt also decreased reliability.

Data Analysis, Operationalization, and Measurement

Statistically significant results were obtained for many of the relationships tested. Analysis of cell chi-squares was used to explore the nature of the relationship between two variables, given that a significant relationship existed. The measures of degree of association with the chi-square test permitted an analysis of the degree of association where statistical significance was obtained. The degree of association was, however, very weak.

Although the reliability of the 19 data analyzed with the Z tests of proportions was not as high as the reliability of the 9 category data analyzed with the chi-square

test, these two complementary methods of data analysis produced similar results.

The operationalization of most of the variables in the study worked well. However, there were difficulties with both level in the managerial hierarchy and also the employee outcomes scale. There were also difficulties with some of the definitions in the behavior classification taxonomy such as distinguishing problem solving from conflict management.

Using multi-item summed scales was an improvement over categorical level variables and resulted in classification variables with moderate to high internal consistency. However, much of the information in these variables had to be sacrificed when they were dichotomized to reduce the number of cells in the analysis, given the multi-category, categorical dependent variable.

7.0 SUMMARY OF CONCLUSIONS, IMPLICATIONS, AND SUGGESTIONS FOR FURTHER RESEARCH

7.1 SUMMARY OF CONCLUSIONS

The following is a summary of the 12 conclusions (C1 to C12) reached in this study.

A. (C1) IN INCIDENTS PERCEIVED TO BE CRITICAL TO AN I.R. MANAGER'S EFFECTIVENESS, SOME TYPES OF MANAGERIAL BEHAVIOR WERE SEEN, OVERALL, AS MORE IMPORTANT THAN OTHER TYPES OF MANAGERIAL BEHAVIOR.

The more important behaviors included interaction facilitation, information dissemination, conflict management, decision participation, problem solving, consideration, planning-implementation, and praise-criticism.

The less important behaviors included inspiration, structuring reward contingencies, goal setting, coordination, performance emphasis, autonomy-delegation, representation, and work facilitation.

B. IN INCIDENTS PERCEIVED TO BE CRITICAL TO AN I.R. MANAGER'S EFFECTIVENESS, THERE WERE SIGNIFICANT DIFFERENCES IN THE TYPES OF MANAGERIAL BEHAVIOR THE FOLLOWING GROUPS PERCEIVED AS RELATIVELY MORE IMPORTANT:

(C2) UNION REPS, LINE MANAGERS, AND I.R. MANAGERS:

Consideration was more important to union reps than to managers.

Problem Solving was less important to union reps than to I.R. managers.

Praise-criticism was more important to union reps and line managers than to I.R. managers.

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Conflict management was more important to managers (both line and I.R.) than to union reps.

(C3) HIGHER LEVEL LINE MANAGERS, HIGHER LEVEL I.R. MANAGERS, LOWER LEVEL LINE MANAGERS, AND LOWER LEVEL I.R. MANAGERS:

To higher level line managers, decision participation and information dissemination were more important, while conflict management and praise-criticism were less important.

To lower level line managers, conflict management and praise-criticism were more important, while decision participation and information dissemination were less important.

To higher level I.R. managers, conflict management was more important, while decision participation was less important.

To lower level I.R. managers, decision participation and problem solving were more important, while praise-criticism was less important.

C. IN INCIDENTS PERCEIVED TO BE CRITICAL TO AN I.R. MANAGER'S EFFECTIVENESS, THERE WERE SIGNIFICANT DIFFERENCES IN THE TYPES OF MANAGERIAL BEHAVIOR WHICH WERE SEEN AS RELATIVELY MORE IMPORTANT IN THE FOLLOWING SITUATIONS:

(C4) CONTRACT ADMINISTRATION AND NEGOTIATION:

In contract administration situations, problem solving, consideration, and praise-criticism were seen as more important, while conflict management and planning-implementation were seen as less important.

In negotiating situations, conflict management and planning-implementation were seen as more important, while problem solving, consideration, and praise-criticism were seen as less important.

(C5) CONTRACT ADMINISTRATION SITUATIONS WHERE THE I.R. MANAGER WAS PERCEIVED TO BE BEHAVING EFFECTIVELY AND CONTRACT ADMINISTRATION SITUATIONS WHERE THE I.R. MANAGER WAS PERCEIVED TO BE BEHAVING INEFFECTIVELY:

In perceived effective contract administration situations, interaction facilitation and decision participation were seen as more important, while conflict management and planning-implementation were seen as less important.

In perceived ineffective contract administration situations, conflict management and planning-implementation were seen as more important, while interaction facilitation and decision participation were seen as less important.

(C6) SITUATIONS WHERE THE PRODUCTIVITY AND PRODUCT QUALITY OF UNIONIZED EMPLOYEES WERE PERCEIVED TO BE RELATIVELY HIGH, AND SITUATIONS WHERE THEIR PRODUCTIVITY AND PRODUCT QUALITY WERE PERCEIVED TO BE RELATIVELY LOW:

In perceived high productivity and product quality situations, information dissemination was seen as more important, while consideration and praise-criticism were seen as less important.

In perceived low productivity and product quality situations, consideration and praise-criticism were seen as more important, while information dissemination was seen as less important.

(C7) SITUATIONS WHERE THE UNION-MANAGEMENT RELATIONSHIP WAS PERCEIVED TO BE RELATIVELY COOPERATIVE, AND SITUATIONS WHERE THE RELATIONSHIP WAS PERCEIVED TO BE RELATIVELY CONFLICTFUL:

In perceived more cooperative union-management relationships, interaction facilitation, decision participation, and planning-implementation were seen as more important.

In perceived more conflictful union-management relationships, interaction facilitation, decision participation, and planning-implementation were seen as less important.

D. IN INCIDENTS PERCEIVED TO BE CRITICAL TO A MANAGER'S EFFECTIVENESS, THE TYPES OF MANAGERIAL BEHAVIOR WHICH WERE SEEN AS RELATIVELY MORE IMPORTANT FOR I.R. MANAGERS WERE SIGNIFICANTLY DIFFERENT FROM THE TYPES OF MANAGERIAL BEHAVIOR WHICH WERE SEEN AS RELATIVELY MORE IMPORTANT FOR MILITARY LEADERS:

(C8) COMPARING PERCEIVED EFFECTIVE CONTRACT ADMINISTRATION SITUATIONS FOR I.R. MANAGERS WITH PERCEIVED EFFECTIVE NON-COMBAT SITUATIONS FOR MILITARY LEADERS:

For I.R. managers, the following behaviors were seen as more important than other behaviors: interaction facilitation, information dissemination, problem solving, con-

conflict management, decision participation and consideration. All of these behaviors except consideration were also more important for I.R. managers than they were for military leaders.

For military leaders, the following behaviors were seen as more important than other behaviors: consideration, role clarification, inspiration, criticism-discipline, and performance emphasis. All of these behaviors were also more important for military leaders than they were for I.R. managers.

(C9) COMPARING ALL NEGOTIATING SITUATIONS FOR I.R. MANAGERS WITH PERCEIVED EFFECTIVE COMBAT SITUATIONS FOR MILITARY LEADERS:

For I.R. managers, the following behaviors were seen as more important than other behaviors: interaction facilitation, conflict management, information dissemination, planning, and decision participation. All of these behaviors except planning were also more important for I.R. managers than they were for military leaders.

For military leaders, the following behaviors were seen as more important than other behaviors: problem solving, inspiration, planning, performance emphasis, role clarification, and consideration. All of these behaviors except planning were also more important for military leaders than they were for I.R. managers.

E. (C10) UNION REPS, LINE MANAGERS, AND I.R. MANAGERS HAD SIGNIFICANTLY DIFFERENT PERCEPTIONS OF THE I.R. CLIMATE IN THEIR BARGAINING SITUATIONS:

With respect to perceptions of the performance of the I.R. people as a group, I.R. managers' ratings of the I.R. group were the highest, line managers' ratings of the I.R. group were the second highest, and union reps' ratings of the I.R. group were the lowest.

With respect to perceptions of the productivity, product quality, motivation and morale of the unionized employees, union reps' ratings were the highest, I.R. managers' ratings were the second highest, and line managers' ratings were the lowest.

With respect to the degree of cooperation in the union-management relationship, I.R. managers' ratings were the highest, union reps' ratings were the second highest, and line managers' ratings were the lowest.

F. (C11) THE MOTIVATION AND MORALE OF UNIONIZED EMPLOYEES WAS PERCEIVED TO BE SIGNIFICANTLY LOWER THAN THEIR PRODUCTIVITY AND AND PRODUCT QUALITY.

(C12) I.R. MANAGERS AS A GROUP WERE PERCEIVED TO BE PERFORMING LESS EFFECTIVELY ON THE IMPROVEMENT OF EMPLOYEE MOTIVATION AND MORALE AND ON THE MAINTENANCE AND PROMOTION OF HARMONIOUS RELATIONS WITH THE UNION THAN ON THE HANDLING OF GRIEVANCES, ARBITRATIONS, CONTRACT NEGOTIATIONS, AND WORK STOPPAGES (LEGAL AND ILLEGAL).

7.2 IMPLICATIONS OF THE RESEARCH FOR THEORY AND RESEARCH

There are four main implications of this study for theory and research.

(1) This study is a successful conceptual replication of the new critical incident method and the managerial behavior taxonomy by an investigator other than Yukl. As such, researchers can have increased confidence in the utility of the method and taxonomy.

(2) The study represents an extension of Yukl and van Fleet's original research which demonstrates that the taxonomy and method have a wider range of uses in theory testing. The new critical incident method was also placed in the context of a very similar method used in some types of protocol analysis.

(3) A model of effective behavior by one of the key actors in the I.R. system, the I.R. manager, was developed and

tested. The model and empirical results are a contribution to the field of industrial relations, particularly in the increasingly studied area of the management of I.R.

(4) Finally, this study has contributed by identifying inter-rater agreement as one of the most important factors in any further use of the new critical incident method. Suggestions have been made about what should be reported in further studies (category mean proportions of agreement, as well as overall scheme means), and about standards of inter-rater agreement for individual categories (.65 minimum, and .67 target) and for the scheme as a whole (.70). The study has also demonstrated ways in which low measures of inter-rater agreement can be increased (using an initial screen of agreement by at least two of three judges; collapsing categories and deleting low frequency and unreliable categories; intensive training of raters; removing arbitrary ceilings on the number of codes which can be given to an incident).

However, the study has also shown that getting higher measures of inter-rater agreement takes a great deal of time, effort and money. For example, it took three raters over 100 hours in total to code over 1400 incidents for the behavior classification only. At ten dollars per hour for painstakingly detailed work, this coding cost over one

thousand dollars, plus the cost of the investigator's time to prepare coding manuals, hire the raters, and train them.

Because of the time, effort, cost, and risk involved in using the method, this section will close with some suggested guidelines for prospective users.

Guidelines for Prospective Users

(a) Use this new critical incident method only if there is no easier, cheaper, safer method which is appropriate for the research problem.

(b) Read reports of previously published studies carefully for indications of potential problems with using the method for your research problem. Examples of such indications include a low overall classification scheme measure of inter-rater agreement, no published category by category measures of agreement, and column percentages which add up to more than 100%.

(c) Allocate plenty of resources in time and money to processing and analyzing the data after the incidents have been collected. Computer packages such as SAS are available which can handle the problem of processing large amounts of

textual data along with quantitative data but it is time consuming and expensive to process long free-form responses from the questionnaires to the computer printout, and from the printout of text to the input of raters' codes. Furthermore, the task of finding appropriately qualified raters for a relatively difficult and tedious job is as important for the success of the study and as difficult as the task of finding the original respondents.

(d) Obtain a very large number of incidents and a very large number of codes initially because (i) to handle reliability problems statistically after the fact reduces the data base significantly, and (ii) for purposes of data analysis, even a moderate number of categories in the dependent variable, along with a moderate number of classification variables or variable categories will generate a sizable number of cells in the analysis.

(e) And finally, remember that, even after taking all these precautions, acceptable levels of mean proportions of agreement cannot be guaranteed. Therefore, use the method in its exploratory stages only for problems for which acceptable fail-safe fall-back positions are available. For example, for some problems in the exploratory stage of research, it may be possible to assure yourself in advance that codes which meet a standard of at least two out of

three (or three out of four) raters in agreement will be acceptable for your research even if the classification mean proportion of agreement does not reach .70.

There are two additional suggested guidelines which are unrelated to the new critical method or the managerial behavior taxonomy.

(f) Mail out national surveys to companies in the early fall, winter, or very early spring, to allow at least two months for follow-up and response before the start of the summer plant closings and summer vacation period.

(g) Make provision in terms of time and funding for including a French version of any questionnaires in all national surveys in Canada.

7.3 IMPLICATIONS OF THE RESEARCH FOR MANAGEMENT PRACTICE

This research was exploratory. Nevertheless, the results have a number of implications for improving the practice of management. In this section, two main recommendations will be made followed by four additional suggestions for managers' consideration.

Recommendations

(1) I.R. management education for potential I.R. managers should include (a) a behavior skill building component emphasizing the key I.R. behavior types identified in this study; and (b) a case analysis component with complex cases requiring an I.R. manager to make a decision involving trade-offs among conflicting goals (negotiations/distributive bargaining; administration/integrative bargaining; attitudinal structuring/multiple groups), and to take action including the identification of specific behaviors he would perform. These two components could be made self-reinforcing by including frequent role plays of case decisions. Writing complex cases and putting on skill building workshops are, however, time consuming and expensive.

(2) I.R. management development for I.R. managers currently employed in the function should include training, to the proficiency level of mastery, in I.R. behavior skill building workshops and in the analysis of complex cases such as those described above. Developing and providing training programs like these will also be time consuming and expensive.

Additional Suggestions for Managers' Consideration

(3) The top I.R. executive should evaluate (a) the motivation and morale of the unionized employees, and (b) the union-management relationship in the light of business objectives and requirements. Where improvements are required in either of these areas, the objectives and action plan should be explicitly coordinated with the objectives and activities of both negotiations and contract administration.

(4) All I.R. managers and their superiors should regularly take the time to jointly review their perceptions of how effectively the I.R. manager is performing, with reasons for their assessments. These discussions should continue until they reach agreement by consensus or other means. This suggestion is made because (a) perceptions are likely to vary, (b) objective criteria for individual I.R. managers are difficult to find and more difficult to interpret, and (c) meaningful formal appraisal is rare (Freedman, 1979; Murray and Dimick, 1977).

(5) Individual I.R. managers should take the time to explicitly analyze and assess the attitudes and perceptions of the individuals they deal with in other groups. Where indicated, they should formulate specific attitudinal

structuring plans for these individuals or groups and coordinate the objectives and activities of this plan with the objectives and activities of other negotiating or contract administration activities they have in common. Examples of groups to consider for attitudinal structuring include management or union bargaining teams, the steering committee, lower level I.R. specialists, first level supervision, union stewards, or unionized employees in a specific department.

(6) Individual I.R. managers should take the time to explicitly plan and prepare for transitions such as (a) from negotiations to contract administration, (b) from a meeting with first line supervision to a meeting with the steering committee for negotiations, or (c) from a job in one bargaining unit to a job in another. In the planning and preparation, they should recognize that the expectations of others and, therefore, the behavioral requirements for their perceived effective behavior, in these new situations may be significantly different.

All of these recommendations and suggestions could have been inferred prior to this study on the basis of I.R. theory such as Walton and McKersie (1965), theory and experimental findings in the social sciences on topics such as role conflict, stereotyping, and small group processes,

or a few related research findings in I.R. such as Haire (1955). However, these recommendations and suggestions can now be made with increased confidence on the basis of the empirical findings of this study. Furthermore, these findings go beyond indicating that the situations identified above are likely to involve differences in perceptions of effectiveness. The findings also detail which behaviors were significant in each of the situations studied and, therefore, which specific behaviors can be expected to be involved in similar situations listed above. These specific behavior patterns have been set out, situation by situation, in the list of study conclusions at the start of this chapter and so they will not be repeated here.

In the longer term, this research suggests that behavioral components might make a valuable decision aid in situations of selecting, placing, promoting, or providing further management development to I.R. managers. However, a great deal of further work and development beyond this first exploratory study would be required before this could happen.

7.4 SUGGESTIONS FOR FURTHER RESEARCH

Three of the four suggestions for further research are suggestions for further use of the data base of critical inci-

depts already collected and entered into the computer. The fourth suggestion involves collecting additional critical incidents.

(1) Yukl (1986) has recently revised his managerial behavior taxonomy by reducing the number of categories somewhat and tightening up the definitions of some of the categories. The existing computerized data base of critical incidents could be recoded by new raters using the new taxonomy and definitions. This would provide validation for the existing ratings and findings, an inexpensive way to test out the new instrument, with the possibility to compare the two instruments using the same data base.

(2) The second suggestion also involves the possibility of comparing the existing ratings and findings to a new set of ratings and findings. The existing data base of incidents could be used to develop a set of categories inductively which would be custom-made for I.R. managers' behaviors. The results could then be compared with the results from using the standard managerial taxonomy.

(3) The data base of incidents could also be used as the basis for developing standardized instruments for use in appraising I.R. managers for purposes of selection,

identification of further management development requirements, and possibly performance appraisal.

(4) Finally, this study could be followed up by a similar study of a group of managers closer in responsibilities to I.R. managers than the military leaders were. This would test whether the instrument and method are capable of distinguishing managers who are closer in function in the same way it successfully distinguished I.R. managers and military leaders. A study of critical incidents of sales managers, for example, would be parallel in some ways to this one. Both sales managers and I.R. managers occupy boundary spanning positions and yet have very different responsibilities. Another possibility for this type of extension to the study would be a study of critical incidents of line managers working on I.R. tasks in bargaining situations of under 200 employees in which no full-time I.R. specialists are employed.

In spite of the pessimistic tone of the guidelines for prospective users presented above, the new critical incident method and the managerial taxonomy are ideally suited for many problems in management research. Although using the method and taxonomy entails certain risks at this stage in their development, the prospects for future users should be bright.

APPENDICES

APPENDIX A. SELF-ADMINISTERED QUESTIONNAIRE

CODE # _____

INDUSTRIAL RELATIONS MANAGERS STUDY

This questionnaire is part of a study being conducted by Professor David Whitehead of the School of Business Administration at the University of Western Ontario on industrial relations managers in Canadian unionized companies.

Most of the questions ask for your personal opinions, judgements, and observations. Please respond frankly and openly. Please do not discuss any of the items in this questionnaire with others until you have completed your answers.

YOU MAY BE ASSURED OF COMPLETE CONFIDENTIALITY.

No one in your company will see your answers, nor will any of the results of this study be published or otherwise released in a way in which any individual respondent or any one company can be identified. Please complete and mail the questionnaire in the pre-addressed and postage-paid envelope provided directly to Professor Whitehead at the address given below, as soon as possible, and, if at all possible, by June 30, 1985.

Mail to: Professor J. David Whitehead
School of Business Administration
The University of Western Ontario
London, Ontario
N6A 3K7

Telephone (519) 679-2836, if you require further information or if you have any questions about this study.

Your cooperation and assistance with this study is very much appreciated. Please add any additional comments you wish to make in the margins of any page or at the top of this cover page. They will be appreciated.

I. R. MANAGERS STUDY

2

QUESTIONNAIRE

PART 1. The questions in the following part refer to your personal opinion about union-management relations in your location.

A. In the following section, indicate your opinion of the overall performance of the industrial relations people as a group in each of the activities described. (Circle number)

	VERY GOOD	GOOD	AS GOOD AS CAN BE EXPECTED	POOR	VERY POOR
a) Grievances and arbitrations	1	2	3	4	5
b) Negotiating collective agreements	1	2	3	4	5
c) Managing work stoppages, legal and illegal strikes	1	2	3	4	5
c) Improving morale and motivation of unionized workers	1	2	3	4	5
d) Maintaining and promoting harmonious union-management relations	1	2	3	4	5
e) Industrial relations activities overall	1	2	3	4	5

B. In the following section, indicate your opinion of the productivity, product quality, and attitudes (motivation, morale) of the largest group of unionized employees at your location. (Circle number)

	VERY GOOD	GOOD	AS GOOD AS CAN BE EXPECTED	POOR	VERY POOR
a) Productivity of unionized employees	1	2	3	4	5
b) Attitudes (motivation, morale) of unionized employees	1	2	3	4	5
c) Product quality of unionized employees	1	2	3	4	5

APPENDIX C. COVER LETTER TO EACH RESPONDENT

School of Business Administration
London, Canada
N6A 3K7

June 13, 1985

TO PARTICIPANTS IN THE I.R. MANAGERS STUDY

We are writing to ask for your help in completing a study of industrial relations managers' performance. Six of Canada's largest companies have already strongly supported the study by participating in over 100 lengthy personal interviews. To ensure that the results will be useful for a wider range of companies, your company was selected as part of a sample of bargaining situations of 500 or more employees. The results will assist companies in further developing their own industrial relations managers, and assist us at the Business School in our ongoing attempt to identify and meet the current needs of Canadian business in industrial relations matters.

Very specifically, we are asking you to complete the enclosed questionnaire which should be interesting, straight forward and quick to fill out.

In order for the results to be representative of people in your company, it is very important to have your response included. The results of the study will be more meaningful to you and your colleagues if your response is included.

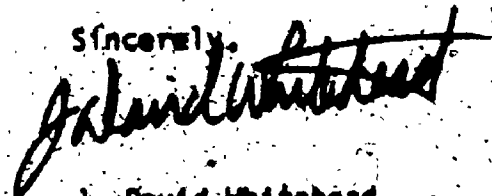
Of course you may be assured of complete confidentiality. The questionnaires are coded only for purposes of mailing lists and follow-ups. No individuals or individual companies will be identifiable by name.

The results will be published in trade journals and magazines but we will send you your own summary if you write "Copy of results requested" on the back of the return envelope and print your name and address below it.

I would be most happy to answer any questions you might have. Please write or call. The telephone number is (519) 679-2836.

Thank you for your assistance.

Sincerely,



J. David Whitehead,
Project Director

JDM:jf

VERY POOR PERFORMANCE

4

DAY TO DAY RELATIONS

- A. Please provide one or two examples of very poor performance in managing day to day relations with union representatives and unionized employees:
- describe specific things an industrial relations manager said or did ("He did or said such and so ..."),
 - include necessary details and background information,
 - include examples of activities such as handling grievances and arbitrations, and improving the productivity, product quality, morale, or motivation of unionized employees.
- (Print or write clearly in the space below)

VERY GOOD PERFORMANCE

5

DAY TO DAY RELATIONS

- B. Please provide one or two examples of very good performance in managing day to day relations with union representatives and unionized employees:
- describe specific things an industrial relations manager said or did ("He did or said such and so ..."),
 - include necessary details and background information,
 - include examples of activities such as handling grievances and arbitrations, and improving the productivity, product quality, morale, or motivation of unionized employees.
- (Print or write clearly in the space below)
- 2

VERY POOR PERFORMANCE

6

NEGOTIATING AGREEMENTS

- C. Please provide one or two examples of very poor performance in negotiating collective agreements:
- describe specific things an industrial relations manager said or did ("He did or said such and so ..."),
 - include necessary details and background information,
 - include examples of actual face to face interactions across the negotiating table, plus related activities such as preparing for negotiations, meetings of the bargaining team, meetings with the steering committee, communicating with principals and other managers, strike preparations, etc.
- (Print or write clearly in the space below)

VERY GOOD PERFORMANCENEGOTIATING AGREEMENTS

- D. Please provide one or two examples of very good performance in negotiating collective agreements:
- describe specific things an industrial relations manager said or did ("He did or said such and so ..."),
 - include necessary details and background information,
 - include examples of actual face to face interactions across the negotiating table, plus related activities such as preparing for negotiations, meetings of the bargaining team, meetings with the steering committee, communicating with principals and other managers, strike preparations, etc.
- (Print or write clearly in the space below)

PART 3. The questions in this section refer to you and are included only for statistical purposes of interpreting the results.

1. My present position is: (Circle number)
 - 1 INDUSTRIAL RELATIONS OR PERSONNEL
 - 2 OTHER STAFF FUNCTION
 - 3 LINE MANAGEMENT OR SUPERVISION
 - 4 UNION REPRESENTATIVE
 - 5 NON-SUPERVISORY EMPLOYEE
 - 6 OTHER: _____
(Please specify)

2. My present location is at: (Circle number).
 - 1 CORPORATE LEVEL
 - 2 DIVISION OR GROUP LEVEL
 - 3 PLANT LEVEL
 - 4 OTHER: _____
(Please specify)

3. Within my organizational unit (plant, division, group, or corporate wide), my position is best described as: (Circle number)
 - 1 AN EMPLOYEE WITH NO SUPERVISORY RESPONSIBILITIES
 - 2 A FOREMAN OR SUPERVISOR OF FOREMEN
 - 3 A MANAGER OF SUPERVISORS
 - 4 THE TOP GENERAL MANAGER OF MY UNIT
 - 5 THE TOP PERSONNEL OR I. R. MANAGER OF MY UNIT
 - 6 ANOTHER MANAGER REPORTING TO THE TOP GENERAL MANAGER
 - 7 ANOTHER MID-LEVEL MANAGER
 - 8 OTHER: _____
(Please specify)

4. My participation in industrial relations activities and my frequency of contact with industrial relations managers during the past three years could best be described as follows: (Circle any appropriate numbers)
 - 1 I AM AN INDUSTRIAL RELATIONS MANAGER MYSELF
 - 2 I REPORT (ED) DIRECTLY TO AN INDUSTRIAL RELATIONS MANAGER
 - 3 AN INDUSTRIAL RELATIONS MANAGER REPORTED DIRECTLY TO ME ON EITHER A SOLID LINE OR DOTTED LINE BASIS
 - 4 I WAS ON A COMMITTEE WITH AN INDUSTRIAL RELATIONS MANAGER
 - 5 I WAS IN RELATIVELY REGULAR AND FREQUENT CONTACT WITH AN INDUSTRIAL RELATIONS MANAGER
 - 6 I ATTENDED ONE OR MORE GRIEVANCE MEETINGS
 - 7 I ATTENDED ONE OR MORE ARBITRATION HEARINGS
 - 8 I WAS A MEMBER OF A BARGAINING TEAM
 - 9 I WAS A MEMBER OF THE "BACKROOM" STEERING COMMITTEE FOR OUR BARGAINING TEAM
 - 10 I WAS A MEMBER OF A JOINT UNION-MANAGEMENT COMMITTEE
 - 11 MY CONTACT WITH INDUSTRIAL RELATIONS MANAGERS HAS BEEN RELATIVELY INFREQUENT AND IRREGULAR
 - 12 OTHER: _____
(Please specify)

THANK YOU AGAIN FOR YOUR COOPERATION AND ASSISTANCE.

APPENDIX B. COVER LETTER TO CONTACT PERSON



The University of Western Ontario

School of Business Administration
London, Canada
N6A 3K7

June 13, 1985

Dear Sir:

We are writing to ask for your help in completing a study of industrial relations managers' performance. Six of Canada's largest companies have already strongly supported the study by participating in over 100 lengthy personal interviews. To ensure that the results will be useful for a wider range of companies, we are mailing questionnaires to a sample of bargaining situations of 500 or more employees. The results will assist companies in further developing their own industrial relations managers, and assist us at the Business School in our ongoing attempt to identify and meet the current needs of Canadian business in industrial relations matters.

Very specifically, we are asking you to do the following:

- 1) Fill out and return one of the enclosed questionnaires yourself.
- 2) Distribute six questionnaires to managers in your bargaining situation, and encourage them to participate.
- 3) Distribute two questionnaires to union reps (although we realize that this may not be possible in all cases).

The questionnaires ask managers to describe four incidents where industrial relations managers said or did something very well or very poorly, and to provide some additional background information. The questionnaires should be interesting, straight forward and quick to fill out.

Since the results have to be representative, we are asking you to distribute the questionnaires to managers as follows --

- one questionnaire to a first-level foreman, supervisor, or general supervisor
- one to a first level industrial relations rep (need not be a manager)
- one to a plant manager or manufacturing manager (or other mid-level line manager)
- one to a plant level industrial relations manager (or other mid-level I.R. manager)
- one to the President or the General Manager of a separate business unit (or other very senior line manager)
- one to the top personnel/I.R. manager (or other top level I.R. manager)

Please select managers who have had at least some experience in both contract administration and the process of negotiating agreements during the past three years, if possible. Also, since we want to get the full range of opinions on the subject, if you select someone who is known to be critical of the industrial relations function overall, please also include someone who is not critical to provide a balance. The results of the study will be more meaningful to you and your colleagues if the respondents are, in fact, representative of managers in your company.

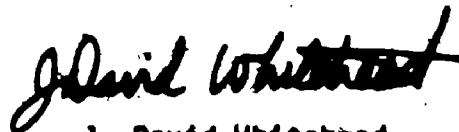
Of course you may be assured of complete confidentiality. The questionnaires are coded only for purposes of mailing lists and follow-ups.

The results will be published in trade journals and magazines but we will send you a summary if you write "Copy of results requested" on the back of the return envelope and print your name and address below it.

I would be most happy to answer any questions you might have. Please write or call collect. The telephone number is (519) 679-2836.

Thank you for your assistance.

Sincerely,



J. David Whitehead
Project Director

JDM:jf

APPENDIX C. COVER LETTER TO EACH RESPONDENT

School of Business Administration
London, Canada
N6A 3K7

June 13, 1985

TO PARTICIPANTS IN THE I.R. MANAGERS STUDY

We are writing to ask for your help in completing a study of industrial relations managers' performance. Six of Canada's largest companies have already strongly supported the study by participating in over 100 lengthy personal interviews. To ensure that the results will be useful for a wider range of companies, your company was selected as part of a sample of bargaining situations of 500 or more employees. The results will assist companies in further developing their own industrial relations managers, and assist us at the Business School in our ongoing attempt to identify and meet the current needs of Canadian business in industrial relations matters.

Very specifically, we are asking you to complete the enclosed questionnaire which should be interesting, straight forward and quick to fill out.

In order for the results to be representative of people in your company, it is very important to have your response included. The results of the study will be more meaningful to you and your colleagues if your response is included.

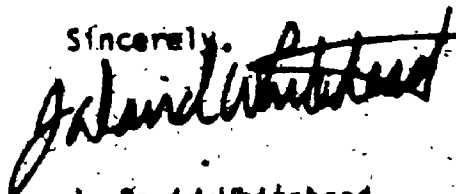
Of course you may be assured of complete confidentiality. The questionnaires are coded only for purposes of mailing lists and follow-ups. No individuals or individual companies will be identifiable by name.

The results will be published in trade journals and magazines but we will send you your own summary if you write "Copy of results requested" on the back of the return envelope and print your name and address below it.

I would be most happy to answer any questions you might have. Please write or call. The telephone number is (519) 679-2836.

Thank you for your assistance.

Sincerely,



J. David Whitehead
Project Director

JDM:jf

APPENDIX D. FIRST FOLLOW-UP POSTCARD TO CONTACT PERSON

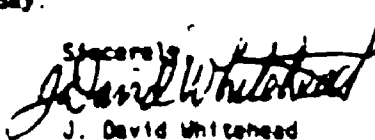
June 20, 1985

Last week a package of questionnaires seeking opinions about the performance of Industrial Relations Managers was sent to you. Your company was drawn in a sample of bargaining situations of 500 or more employees.

If you have already returned your own questionnaire and distributed the others to the managers you selected, please accept our sincere thanks. If not, please do so today. Because it has been sent to only a small, but representative, sample of Canadian companies, it is extremely important that your company be fully represented if the results are to accurately represent the opinions of Canadian managers. We would also greatly appreciate it if you would pass this message along to the others you selected to complete the questionnaires.

If by some chance you did not receive the package of questionnaires, or if it got misplaced, please call me now, collect (519-679-2836) and I will send another package to you today.

Sincerely,



J. David Whitehead
Project Director

APPENDIX E. SECOND FOLLOW-UP LETTER TO CONTACT PERSON

School of Business Administration
London, Canada
N6A 3K7

July 12, 1985

Dear Sir:

About four weeks ago, I sent you a package of questionnaires seeking the views of managers in your company about the performance of industrial relations managers. As of today, we have received some of the completed questionnaires back from your company and we want to convey our sincere thanks for your participation.

However, we are still waiting for your other questionnaires to be returned and, in order to complete the project on schedule, we would like to have all the questionnaires back by August 2, 1985.

Specifically, we are asking you to do the following:

- 1) If you distributed questionnaires to less than nine people, please send us a note indicating how many you did distribute, and why nine was not an appropriate number for your company.
- 2) Please jog the memories of those who may not have found the time to complete and mail the questionnaire you distributed to them. Because only seven managers and two union reps were selected from your company, with each one representing a distinct segment of your management and union groups, it is essential for each person to return their questionnaire if the results are to be representative.

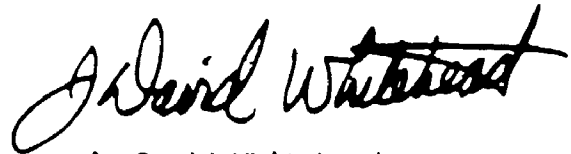
Your further assistance in these two final matters will be very much appreciated. The large number of questionnaires returned to date is very encouraging. However, past experience suggests that those who received questionnaires but have not yet sent them back may hold quite different views than those who have, and we are striving to get as complete a picture as possible of this very practical issue of concern.

- 2 -

In the event that any of the questionnaires have been misplaced, please call me collect (519-679-2836) and I will send you the questionnaires you need today.

Your contributions to the success of this project are greatly appreciated.

Most sincerely,

A handwritten signature in cursive script that reads "J. David Whitehead". The signature is written in black ink and is positioned above the typed name and title.

J. David Whitehead
Project Director

JDW:jf

APPENDIX F. RATERS' GUIDELINES FOR CODING THE CRITICAL
INCIDENTS

Please read the following guidelines and definitions carefully before proceeding to the actual coding task.

Each separate incident will be rated by two or more raters. Individual raters have been asked to rate each of the separate incidents according to one or more of the six classification schemes set out in this manual (Behavior, Target, Content, Individual, Organizational, Environmental). For each of the six classification schemes there is a list of rating categories. If more than one of the rating categories in a given classification scheme applies to a given incident, raters can assign up to three of the rating categories to any one incident. This manual provides (a) lists of the rating categories (code lists) for each of the six classifications schemes, and (b) definitions of each of the rating categories (code definitions). In addition, guidelines follow immediately for actually doing the rating task.

1. Code all incidents for the classification scheme(s) you have been assigned as set out below.
2. For each classification scheme, read each incident carefully and determine how many classification levels are represented in the incident. NOTE: Many category definitions (except the last) start with "the extent to which" a particular behavior or other factor is present in a given incident. Using the behavior scheme as an example, both (a) incidents which contain examples of effective planning ("Planning," BEHAVIOR level #13, to a very considerable extent, for example) and (b) incidents which contain examples of ineffective planning ("Planning," BEHAVIOR level #13, to a virtually non-existent extent), are coded equally correctly as BEHAVIOR level #13. Thus, coding an incident as Behavior, "13", Planning, means simply that planning (either the presence of it or the absence of it) is an important factor in a particular behavior that was judged EITHER effective OR ineffective enough by the respondent to include as an example on this questionnaire. "Planning" (and each of the other 18 Behavior classification levels as well as the factors in the other

classification schemes listed) is, therefore, really a continuous dimension of planning behavior which extends all the way from none or virtually none of it, to a whole lot of it, and, depending where the specific behavior is on that continuum, an incident could be judged all the way from ineffective to highly effective.

3. If the incident contains ONE AND ONLY ONE classification level represented, then enter the corresponding number of the classification in the cell labelled "Primary", leaving the "Secondary" and "Tertiary" cells empty.
4. If the incident contains MORE THAN ONE classification level represented, then
 - a. Determine the number and identity of the different classification levels represented;
 - b. Rank order the classification levels represented in terms of the relative importance of each level in the specific incident being coded (see below on criteria for rank ordering);
 - c. Enter the corresponding number of the most important classification level in the "PRIMARY" cell of the coding box above each incident, and the corresponding numbers for the second and third most important levels in the "SECONDARY" and "TERTIARY" cells, respectively. Only up to a maximum of three classification levels can be coded for each incident under any one classification scheme.
 - d. Criteria for rank ordering more than one level in any incident: If more than one level is represented, as discussed above, use your judgement to place them in a rank order ONLY if there is "head-and-shoulders" difference between them. If the order is open to some discussion, then use the same arbitrary order in which the behavior classification levels are listed on the following CODE LIST for entering the codes on the coding form for the incident.
5. If the incident contains NO classification level represented, then enter the corresponding number for NONE OF THE ABOVE in the "Primary" cell, leaving the "Secondary" and "Tertiary" cells empty.
6. Note for Behavioral classifications only: when all of the incidents have been classified according to the

levels of the BEHAVIOR classification scheme as described above, classify again only those incidents classed as NONE OF THE ABOVE using the levels of the INDIVIDUAL classification scheme (which will be distributed when the first classification according to the BEHAVIOR scheme has been completed). That is, only incidents containing none of the 19 BEHAVIOR levels listed will be classified using the INDIVIDUAL scheme.

7. If you have been assigned the coding task for more than one major classification scheme, then following completion of the coding of each incident into the levels of the first classification scheme assigned, code each of the incidents again using the procedure described above for the other classification schemes assigned.

APPENDIX G. REVISED INSTRUCTIONS TO CODERS FOR THE BEHAVIOR CLASSIFICATION

Please read the following guidelines and definitions carefully before proceeding to the actual coding task,

1. Read each incident carefully and determine how many BEHAVIOR TYPES are represented in the incident. Circle the appropriate letters for each BEHAVIOR type represented. Further identify the three most important BEHAVIOR types by attaching a "1", "2", or "3" to the appropriate circled letter.

NOTE: All definitions (except the last) start with "the extent to which" a particular behavior type is present in a given incident. Both (a) incidents which contain examples of effective planning ("Planning," BEHAVIOR type "M", to a very considerable extent, for example) and (b) incidents which contain examples of ineffective planning ("Planning," BEHAVIOR type "M", to a virtually non-existent extent), are coded equally correctly as BEHAVIOR type "M". Thus, coding an incident as "M", Planning, means simply that planning (either the presence of it or the absence of it) is an important factor in a particular behavior that was judged EITHER effective OR ineffective enough by the respondent to include as an example on this questionnaire. "Planning" (and each of the other 18 classification levels listed) is, therefore, really a continuous dimension of planning behavior which extends all the way from none or virtually none of it, to a whole lot of it, and, depending where the specific behavior is on that continuum, an incident could be judged all the way from ineffective to highly effective.

2. If the incident has ONE AND ONLY ONE BEHAVIOR type represented, then circle the appropriate letter and attach the number "1" to it.
3. If the incident has ONLY TWO OR THREE BEHAVIOR types represented, then circle the appropriate letters and attach the numbers "1", "2", and "3" (if there are three) to them.

4. Criteria for rank ordering more than one type in any incident: If more than one type is represented, as discussed above, use your judgement to place them in a rank order ONLY if there is "head-and-shoulders" difference between them. If the order is open to some discussion, then use the same arbitrary order in which the behavior types are listed on the coding form to assign numbers.

If the incident has NO BEHAVIOR types represented, then circle only the letter "T" corresponding to NONE OF THE ABOVE.

APPENDIX H. BEHAVIOR CLASSIFICATION CATEGORY LIST AND
DEFINITIONS

BEHAVIOR - Things which individual industrial relations managers said or did in their dealings with the individuals who responded to the questionnaire, and which were then provided by respondents as specific examples of very good or very poor performance on the questionnaire.

1. **PERFORMANCE EMPHASIS** - The extent to which an I.R. manager emphasizes the importance of performance, tries to improve productivity and efficiency, and tries to keep others working up to their capacity.
2. **CONSIDERATION** - The extent to which an I.R. manager is friendly, supportive, and sympathetic toward others, looks after their welfare, and tries to treat them fairly.
3. **INSPIRATION** - The extent to which an I.R. manager stimulates enthusiasm among others for the work of the I.R. group and says things to build their confidence in their ability to successfully perform assignments and attain I.R. group objectives.
4. **PRAISE - RECOGNITION** - The extent to which an I.R. manager provides praise and recognition to others who perform effectively and shows appreciation for special efforts and contributions by others.
5. **STRUCTURING REWARD CONTINGENCIES** - The extent to which an I.R. manager rewards effective performance by others with tangible benefits such as pay increases, promotion, more desirable assignments, better work schedules, extra time off, special privileges, etc.
6. **DECISION PARTICIPATION** - The extent to which an I.R. manager consults with others before making

work-related decisions and otherwise allows them to influence his or her decisions.

7. **AUTONOMY - DELEGATION** - The extent to which an I.R. manager delegates responsibility and authority to others and allows them discretion in determining how to do their work.
8. **ROLE CLARIFICATION** - The extent to which an I.R. manager informs others about their duties and responsibilities, specifies the rules and policies that must be observed, and lets others know what is expected of them.
9. **GOAL SETTING** - The extent to which an I.R. manager emphasizes the importance of setting specific, challenging, but realistic performance goals for each important aspect of another's job.
10. **TRAINING - COACHING** - The extent to which an I.R. manager determines training needs for others and then provides any necessary instruction and coaching or arranges for others to provide it.
11. **INFORMATION DISSEMINATION** - The extent to which an I.R. manager keeps others informed about developments that affect their work, including events in other work units and events outside of the organization, the decisions made by higher management, and progress in meetings or negotiations with superiors, outsiders, or any others.
12. **PROBLEM SOLVING** - The extent to which an I.R. manager takes the initiative in proposing solutions to serious work-related problems and acts decisively to deal with such problems when a prompt solution is needed.
13. **PLANNING** - The extent to which an I.R. manager plans how to efficiently organize and schedule the work, plans how to attain I.R. objectives, and makes contingency plans for potential problems.
14. **COORDINATING** - The extent to which an I.R. manager coordinates the work of others, emphasizes the importance of coordination, and encourages others to coordinate their activities.
15. **WORK FACILITATION** - The extent to which an I.R. manager obtains for others any necessary supplies, equipment, support services, and other resources, eliminates any problems in the work environment,

and removes other obstacles that interfere with the work.

16. **REPRESENTATION** - The extent to which an I.R. manager establishes contacts and maintains close relations with other groups and important people in the organization, persuades them to appreciate and support the I.R. group, and uses influence with superiors and outsiders to promote and defend I.R. interests.
17. **INTERACTION FACILITATION** - The extent to which an I.R. manager tries to get others to be friendly with each other, cooperate, share information and ideas, and help each other.
18. **CONFLICT MANAGEMENT** - The extent to which an I.R. manager restrains others from fighting and bickering with each other, encourages them to resolve conflicts in a constructive manner, and helps them settle conflicts and disagreements.
19. **CRITICISM - DISCIPLINE** - The extent to which an I.R. manager criticizes or disciplines others who have consistently poor performance, violate a rule, or disobey an order.
20. **NONE OF THE ABOVE** - Choose this option if the specific incident being rated does not contain any of the behaviors listed above.

APPENDIX I. INDIVIDUAL FACTORS CLASSIFICATION SCHEME
DEFINITIONS

- A. PERSONALITY TRAITS** - Inferred generalized tendencies to behave (usually adjectives or nouns in form rather than verbs) in recurring ways in many different situations (contrast "abilities" -- how well a person can perform and "attitudes" -- directed towards specific classes or categories of people or things). Examples include (a) honest, gregariousness, shyness, personal integrity (social traits); (b) needs or drives such as the need for affiliation, aggression, achievement, hostility (motives); (c) happy-go-lucky, hard-driving, takes-a-day-at-a-time, carries-a-chip-on-his-shoulder (personal conception of social and material world); (d) extremely shy, extremely aggressive, extremely hostile or unhappy, paranoid (maladjustment); (e) all-together person (personality integration).
- B. ATTITUDES** - Inferred predisposition to think, feel, or behave toward a particular, specific class or category of people or things objectively "out there." Attitudes are always towards or about something specific (ethnic group, institutions, religion(s), and rights, or property rights).
- C. VALUES** - Expressions of the "good" and the "bad", the "shoulds" and the "rights" of human behavior. Examples include equality, service to others, personal ambition, freedom, peace, duties to family and society, and happiness (various life goals and ways of life).
- D. KNOWLEDGES** - Areas of knowledge (general, or specific such as labor law or labor history) are learned to varying levels of proficiency which can be measured by achievement tests.
- E. INTELLIGENCE** - Vague and hard to define but measured by intelligence tests and correlated highly with school achievement. Examples would include "smart," "bright," or "intelligent."

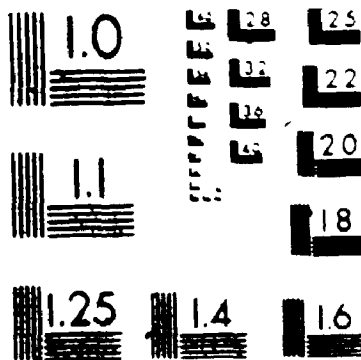
- F. INTERESTS** - Vocational interests are preferences for particular activities related to vocational pursuits (repair a clock vs. write a letter, outdoor work vs. office work).
- G. BIODATA (AGE, EDUCATION, EXPERIENCE)** - Examples older vs. younger, college educated vs. high school grad, M.B.A. (general business) vs. Masters in Industrial Relations (function specific), prior experience as unionized employee or union rep vs. career manager, prior work experience in Engineering department, sales, or manufacturing vs. career I.R. professional. Other demographic data (e.g. sex), hobbies, leisure activities.
- H. SKILLS** - Skills, abilities and aptitudes are all individual difference maximum performance characteristics (when people try against standards of success), vs. (a) personality traits which are typical, recurring tendencies to behave the same in a variety of situations, and vs. (b) attitudes which are predispositions to think, feel, behave toward a particular class or category of people or objects). Relative to abilities, skills are more learned through training to a level of proficiency (rather than more basic and unlearned), less enduring, less permanent, and more task specific. Examples include (a) operating a turret lathe, flying an airplane (motor skills, where muscles manipulate physical environment); (b) problem solving, decision making, action planning, report writing (cognitive skills); (c) speechmaking, interviewing, negotiating, meeting management, conflict resolution, leadership (interpersonal skills).
- I. ABILITIES** - Abilities are maximum performance characteristics like skills and aptitudes, and unlike traits and attitudes. Relative to skills, abilities are characteristically more unlearned, more basic, enduring, permanent, and less task specific. Basic cognitive abilities include memory, perceptual speed, inductive and deductive reasoning and verbal comprehension. Basic motor and physical abilities include strength, flexibility, gross body coordination and equilibrium. Abilities are individual differences which people bring to a training situation and which are inferred from differences in certain response tendencies.

- J. **APTITUDES** - Unlearned, innate, potential or "horse-power" for maximum performance abilities or skills. Examples would include "Good I.R. managers are born, not developed."
- K. **MOTIVATION** - Holding constant the effects of aptitude, skill, understanding of task, and environmental constraints, "motivation" is a label for a set of independent-dependent variable relationships that explain the start of an individual effort, the direction of the effort, the amount or amplitude of effort expended, and the persistence of effort over time. (For basic needs, drives, or motives see "personality traits" above; see "personal ambition" as an example under "values" above). Include examples under "motivation" of direct reference such as "motivation" or "motivated," "effort," or more complex combinations of "valence" (perceived value of outcomes stemming from an action), "expectancy" (belief that a behavior will result in attaining these outcomes), and "instrumentality" (perceived contingency that one outcome has for another).
- L. **ROLE CLARITY & CONSENSUS** - Role clarity is the absence of role ambiguity and role consensus is the absence of role conflict. Roles are sets of behaviors that persons expect of occupants of a position and communicate to that person both normatively and descriptively through channels transcending formal documents (like job descriptions) and structures (like formal reporting channels). When expectations don't match received role demands or actual role behavior, role conflict, including role overload, or role ambiguity result. Role conflict includes (a) mismatches between expectations communicated from two or more other people to a "man-in-the-middle," (b) internally inconsistent expectations from one person; (c) mismatch between expectations and personal characteristics of focal role occupant (e.g. values, personality traits); and (d) inter-role conflicts of one focal person (e.g. work vs. family).
- M. **REWARDS** - Anything an individual receives in exchange for what is given to an organization, including extrinsic rewards (vacations, fringes, salary, bonuses, interesting assignments, approval, acceptance, support), intrinsic rewards (task involvement, goal identification), and other

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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS
STANDARD REFERENCE MATERIAL 1010a
(ANSI and ISO TEST CHART No. 2)

"reward substitutes" or "reward equivalents"
(punishments, orders, rules).

- N. **SATISFACTION** - A pleasurable or positive emotional state resulting from the perception of one's job as fulfilling one's important job values, providing these values are compatible with one's needs.
- O. **RESULTS, ENDS, GOALS, EFFECTIVENESS CRITERIA** - Outcomes of individual behavior, that is, the ends for which behaviors and interactions were engaged in. Examples of results or objective criteria of effectiveness include rates of grievances, arbitrations, turnover, and absences; quantity of organizational output; cost related indexes such as scrapage rates or costs of processing standard work units.
- P. **BEHAVIORS** - Observable action(s), interaction(s), responses -- the means employed, things said or done, to reach certain ends.
- Q. **OTHER "INDIVIDUAL" FACTORS -- SPECIFY** - Choose this option if the specific incident being rated does not contain any of the INDIVIDUAL level factors listed above, but there are INDIVIDUAL level factors in the incident which do not fit any of the above classification level descriptions. Describe the type of INDIVIDUAL level factor in the margin of the printout used for coding the incidents.
- R. **NO "INDIVIDUAL" FACTORS** - Choose this option if the specific incident being rated does not contain any of the INDIVIDUAL level factors listed above.

APPENDIX J. ORGANIZATION FACTORS CLASSIFICATION SCHEME
DEFINITIONS

1. **TASK/JOB CHARACTERISTICS** - Note: Although the meaning of "task" or "job" is intuitively obvious, it is defined below as a "residual" (that is, the effect that remains, holding all other specified organizational effects constant) due to the lack of one widely accepted more concrete conceptual definition. "Task" or "job" is the set of external conditions imposed on an I.R. manager that elicits performance or response, holding constant other organizational factors such as structure, information processes, reward systems, etc., and individual differences among operators. Sets of such external conditions, that is, tasks or jobs, can be distinguished on continua such as temporal relations (time horizon, duration, frequency, sequence), criticality, divisibility, automation, interdependencies with other tasks, diversity, difficulty, variability and task uncertainty (a function of the last three and several others above).

2. **INFORMATION PROCESSES** - These processes vary from organization to organization in terms of the extent to which new information technology (operations research, etc.) is used to rationalize the decision-making process by modeling the problem in mathematical terms and testing alternative solutions on the model prior to real world implementation. More specifically, organizations vary (a) in the extent to which various decision mechanisms are used (computers, man-computer configurations), (b) in the extent to which the information system is formalized (categories and coding schemes exist for the systematic collection of decision information), (c) in the scope of the data base maintained, (d) in the frequency of data collection and decision-making -- the time lag involved in adding information to the data base and in being able to access the data base when required. Note: It is assumed that much of what managers do and much of what goes on in organizations generally involves information

processing and decision-making, and these organizational processes are reflections of, and responses to, the very limited abilities of people to process information.

3. **STRUCTURE** - (a) division of labour (horizontal division of labor is breaking a unified task like building a car down into subtasks like putting on fenders and doors which different people can do; vertical division of labour is separating the managerial planning and control functions from the subtasks of building the car); (b) departmentalization (classification or aggregation of subtasks divided up above into larger groups based on similar input resources used, outputs produced or physical location); (c) configuration (span of control -- numbers of employees reporting to a given manager, and ratio of staff (such as IR staff) or of managers to total company payroll); (d) distribution of power (centralized, decentralized); and (e) job redesign (job enlargement, job enrichment, autonomous work groups, and effective teams; for definitions, see the note under 5 (3) below).

4. **REWARDS** - Those outcomes in exchange for which people join, work and remain in organizations. Rewards can be positive (people work to get them) or negative (people work to avoid them), extrinsic (rewards other than those internally associated with doing the job itself) or intrinsic (a job well done is its own reward).

Extrinsic rewards can be given to (a) all organization members independently of performance (vacations, retirement benefits, sick leaves, COLA, recreational facilities, working conditions -- if differentially distributed, then the criterion is seniority); (b) all members of a department, work team, or other organizational unit (group incentives, group bonus); or (c) an individual, based on differentials in individual performance (salary within a range, where the range is based on qualifications, experience or seniority and placement within the range is dependent on meritorious performance; incentives; bonuses; commissions; supervisor's help, support, interesting assignments and other "considerations;" work group approval, acceptance or support).

Intrinsic rewards include task involvement (for example, skilled craftsmen, scientists,

other professionals with self-esteem, specialized skills, and an appropriate self-concept who identify with others who perform the same task) and goal identification (for example, individuals who have internalized departmental or organizational goals and thus voluntarily choose goal-related behaviors).

Finally, doing what is expected by others or doing what one is told can be its own reward if (a) the expectations, instructions, rules, or orders are perceived or accepted to be legitimate (authority, suspension of judgement, legitimate power), or (b) sanctions (positive or negative) are involved in compliance or lack of compliance.

Note: the rewards set out above are operationalizations of the spectrum of diverse - bases of power and social influence on which organizations, and managers in organizations, rely in their attempts to influence and direct the behavior of others.

5. PEOPLE -

1. There are differences among individuals and among groups of people. In some ways a person is (a) like all other people, (b) like some other people, and (c) like no other people.
2. Organizations vary in the extent to which their systems for achieving and maintaining person-job "fit" are sensitive to differences at these various levels (individual, group, not at all), and tasks vary in the extent to which individual and group differences have a bona fide relationship to task performance.
3. Systems for achieving a person-job "fit" by changing individuals in jobs include orientation, indoctrination, training, development -- changing behaviors, skills, knowledge, attitudes, and values of job incumbents.

Note: Do not include here under the "People" category any references to structural (rather than systems) approaches for achieving a person-job "fit" by changing the jobs while leaving the people in those jobs virtually the same. Examples of such structural approaches include (a) job enlargement (adding more of the same type of activity to the job); (b) job enrichment (increasing self management and control); (c) autonomous work groups (total self-management and

control by work team members as a group); and (d) effective work teams (a level of team self-management and control appropriate for organizational and individual needs and objectives).

6. **STRATEGY** - Choice of organization's area of distinctive competence, that is, its "domain" -- products or services to be offered, customers or clients to be served, technology to be used, and location where work will be performed. Following choice of "domain," strategy consists of choice of which specific goals to pursue.
7. **CONSTRAINTS** - The extent to which there is sufficient slack resources in terms of time, money, staff, plant or equipment, to allow the realization of goals and objectives, given efficient utilization of existing resources, without making other design changes.
8. **OTHER - SPECIFY** - Choose this option if none of the organizational level factors listed above are present in the incident being rated, but there are other organizational level factors present in the incident. Please identify these other factors, if any, in the margin beside the rating.
9. **NONE OF THE ABOVE** - Choose this option if none of the organizational level factors listed above are present in the incident being rated.

APPENDIX K. ENVIRONMENTAL FACTORS CLASSIFICATION SCHEME
DEFINITIONS

- A. UNION(S)** - Organizations vary (a) in the extent of unionization of the work force eligible to unionize; (b) in the number of unions with which they have to deal; (c) in the size, power, and affiliation (local, provincial, international) of the individual unions; (d) in the militancy of their unions and the extent to which that militancy is ideologically based, rather than being based on more practical bread-and-butter concerns. Also, the extent to which union-management conflict, containment/aggression, accommodation, cooperation or collusion is perceived to exist because of, or due primarily to, the union or union reps rather than management.
- B. BARGAINING STRUCTURE** - Bargaining structures vary in the extent to which they are centralized (units which are industry-wide, multi-location, multi-employer, industry-wide, multi-union) or decentralized/fragmented (single plant, single union, single employer unit). Bargaining structure involves the scope or level (single or multiple plant, employer, and/or union) of the bargaining unit (election unit, negotiation unit, or unit of direct impact or spill-over).
- C. COMMUNITY** - The immediate locale (city, town, suburb) within which the organization or plant is located.
- D. GOVERNMENT, LAWS** - Federal, Provincial, or municipal governments, government officials, legislation, or regulations.
- E. COMPETITORS** - The extent and nature of an organization's competition.
- F. CUSTOMERS, SUPPLIERS** - The number, location, and nature of an organization's customers and suppliers.

- G. OTHER ENVIRONMENTAL FACTORS -- SPECIFY** - Choose this option if none of the environmental level factors listed above are present in the incident being rated, but there are other environmental level factors present in the incident. Please identify these other factors, if any, in the margin beside the rating.
- 9. NONE OF THE ABOVE** - Choose this option if none of the environmental level factors listed above are present in the incident being rated.

APPENDIX L. TARGET CLASSIFICATION SCHEME DEFINITIONS

DIRECT REPORTING RELATIONS -- UP & DOWN

- A. **SELF** - I.R. manager alone, e.g., acting alone and independently.
- B. **BOSS** - Line or I.R. executive to whom I.R. manager reports directly.
- C. **SUBORDINATE(S)** - I.R. staff reporting to the I.R. manager either directly or indirectly.

OTHER MANAGERS

- D. **FOREMEN** - First level supervision, foremen, or other managers (like department heads in offices) who have direct supervision of unionized employees.
- E. **BARGAINING TEAM MEMBERS** - Managerial members of the bargaining team.
- F. **OTHER MANAGER(S)** - Managers in the company other than those listed above.
- G. **"CONSULTANTS"** - Management's legal counsel, consultants, or other agents.

UNION AND EMPLOYEES

- H. **CHIEF SPOKESMAN** - Union's chief spokesman.
- I. **BARGAINING TEAM MEMBERS** - Union member(s) of the union bargaining team.
- J. **UNION STEWARD(S)** - Union reps on the shop floor who advise employees on, and handle, grievances, etc.
- K. **EXECUTIVE MEMBER(S)** - Union executive member(s), e.g., business officer, president, international rep, etc.
- L. **OTHER UNION REPS** - Union reps other than those specifically mentioned above.

M. EMPLOYEE(S) - Rank and file unionized employee(s).

OTHERS

N. THIRD PARTY NEUTRAL(S) - Conciliators, mediators, arbitrators, government officials, etc.

O. PUBLIC, COMMUNITY, PRESS - Members of the public, local community, or the press.

P. SUPPLIERS, CUSTOMERS - Suppliers or customers of the business.

Q. OTHERS - Unspecified others with whom the I.R. manager is interacting.

R. NO TARGET OF ANY KIND - Neither the I.R. manager himself acting alone, nor any other person with whom he or she is interacting is mentioned in the incident.

APPENDIX M. CONTENT CLASSIFICATION SCHEME DEFINITIONS

MANAGEMENT'S RIGHT TO ORGANIZE & DIRECT THE WORKPLACE

1. **ASSIGNING WORK OUTSIDE BARGAINING UNIT** - Contracting out, managers doing work of bargaining unit, etc.
2. **DISTRIBUTING WORK INSIDE BARGAINING UNIT** - Vacancies, job posting, etc.
3. **HOURS, SHIFTS, OVERTIME** - Scheduling work without adjusting numbers of employees working.
4. **JOB RECLASSIFICATION** - Issues dealing with the reclassification of a job due to a change in job responsibilities or content, etc., with attending issues of change in the rate of pay.
5. **LAYOFFS & RECALL** - Scheduling work involving changing the numbers of employees working but keeping the operation going at that location.
6. **TECHNOLOGICAL CHANGE** - Issues such as introducing robots and other types of technological change that affect unionized employees.
7. **PLANT CLOSINGS** - Severance pay, relocation help, etc., when closing the operation at that location.

SENIORITY

8. **SENIORITY VS. SKILL AND ABILITY** - Seniority, skill, ability issues in hiring, promoting, retaining employees.

INDIVIDUAL'S HUMAN RIGHTS

9. **SEXUAL HARASSMENT** - Any employee complaints or procedures, in-house or involving the Human Rights Commission.
10. **RETIREMENT** - Forced retirement at age 65, early retirement plans, or any other retirement issues.

11. **ETHNIC ORIGIN** - Any employee complaints of discrimination on the basis of ethnic origin, or procedures taken following up complaints, in-house or involving the Human Rights Commission.

DISCIPLINE & DISCHARGE

12. **DISCIPLINE, DISCHARGE** - Procedures, grounds, penalties in discipline & discharge cases other than those on issues mentioned above.
13. **ALCOHOL OR DRUG ABUSE** - Either on the job or cause for absence from work.
14. **ABSENTEEISM - OTHER REASONS** - Absence from work for any reasons other than alcoholism or drug abuse.

COMPENSATION

15. **EQUAL PAY - EQUAL WORK** - Equal pay for work of equal value or equal pay for work of comparable value, etc.
16. **BASE PAY** - Base rates of pay, e.g., hourly rates, or base salary.
17. **OVERTIME** - Pay for work in addition to the regular work period.
18. **MERIT PAY** - Bonuses or monetary incentive systems such as piece rate - any scheme that makes at least some remuneration contingent on productivity.
19. **WORKMEN'S COMPENSATION** - Pay from the Workmen's Compensation Board for absence caused by work related accident or injury.
20. **PAY WHEN NOT AT WORK** - Pay for holidays, vacations, call-in pay, illness, other absences not related to the Workmen's Compensation Board, etc.
21. **OTHER FRINGES** - Any other fringe benefits not covered above, e.g., dental plans, life insurance, etc.

OCCUPATIONAL HEALTH & SAFETY

22. **HEALTH & SAFETY** - Any issue related to occupational health & safety, including union-management com-

mittees, complaints to a government agency about violations, etc.

UNION RIGHTS & LIABILITIES

23. **SECURITY & RIGHTS** - Union security issues such as the automatic collection by the employer of union dues, and union rights and freedoms such as protection from discrimination on the basis of union membership, the duty of the employer to bargain in good faith, etc.
24. **UNION BUSINESS ON COMPANY TIME** - Issues related to the possibility of union reps conducting union business such as negotiating or processing grievances on company time, with or without pay for the duration of this activity.
25. **LIABILITY - STRIKES, ETC.** - The legal and financial liability of the union and union reps for damages caused during unlawful strikes or wildcat walk-outs, and liability in charges against the union of lack of fair representation by employees in the bargaining unit.

GENERAL APPROACHES

26. **BOTTOM-LINE APPROACH** - An approach to I.R. matters, irrespective of specific items involved, that takes full account of the operating and strategic needs of the business -- improving productivity, product quality, earnings per share, etc.
27. **CONSISTENT APPROACH** - An approach to dealing with unionized employees that is consistent with how other employees are, or have been, dealt with -- often achieved by use of proactive policies and regulations rather than ad hoc post-facto reactive approach to incidents as they come up.
28. **CONSULTATIVE APPROACH** - An approach to dealing with the union that places priority on formal union-management consultation such as union-management committees, or informal consultation such as "open-door" or "always available to you" policies or practices.
29. **EMPLOYEE SATISFACTION AND MORALE APPROACH** - An approach to I.R. matters that takes full account of

the satisfaction and morale needs of unionized employees, individually or as a group.

GENERAL PROCESSES AND STRUCTURES

30. **NEGOTIATING** - Issues involving structures and processes for negotiating collective agreements (but not including mediation/conciliation - see below), rather than specific content issues such as pay or benefits that come up during negotiations. Examples of such issues would include preparations for negotiations, putting together the negotiating team, getting and revising a mandate, keeping principals informed of progress, strategy and tactics for conducting face-to-face table sessions, etc.
31. **GRIEVANCES** - Issues involving the grievance process itself rather than issues on other specific subjects such as pay or discipline that happen to come up in the grievance process. Examples include how many steps to include in the grievance process, how much authority to give to those making decisions at the first and second steps, what weight to give to timeliness of grievances, and what to do with grievances which are general complaints rather than violations of specific articles in the collective agreement.
32. **ARBITRATION** - Issues involving the arbitration process itself rather than issues on other specific subjects such as pay or discipline that happen to come up in the arbitration process. Examples include how many grievances to take to arbitration, pros and cons of expedited arbitration, strategy and tactics in choosing a particular arbitrator, costs and time involved in resolving disputes by arbitration, the perhaps increasing "legalism" in the arbitration system, court review of arbitrators' awards, etc.
33. **STRIKES & LOCKOUTS**, - Issues involving the policies and practice of management of legal and illegal strikes (such as when and if to begin preparation for a strike, whether to negotiate with employees while they are out on an illegal strike -- or wait until they return, whether to employ "scabs"

during strikes), rather than issues which may be the substantive reason for the walkout.

APPENDIX N. INTER-RATER AGREEMENT

(1) The inter-rater agreement (mean proportion of agreement) between the first rater, rater 6, and the investigator on approximately 25% of the data base was .44. Each rater had a maximum of 3 codes to assign to each incident rated. Rater 6 received a brief introduction to the task and a coding manual with categories and category definitions. He did not receive any significant training in order to get a coding completely independent of the investigator's.

(2) Because this level of agreement was unacceptably low, two new raters, rater 4 and rater 5, each coded all the incidents in the data base. They each received about 10 hours of training. They were permitted to use as many codes per incident as they felt were warranted. The arbitrary maximum of 3 codes per incident was removed.

(3) Although there is a measure of inter-rater agreement for 3 or more judges when the judges are different for each incident or subject (Fleiss, 1971), there is no measure of agreement for use when the same group of 3 or more judges is used for each incident as in the case of this research (Tinsley and Weiss, 1975). Studies which used the same three judges to code all incidents have simply reported the three measures of inter-rater agreement, one for each of the three pairs (Guttman, Spector, Sigal, Rakoff and Epstein, 1971). When two of three judges agree on a code, .67 is the proportion of judges agreeing on the code, but only one of the three possible pairs of inter-rater agreements can be coded '1' for 'agree'. The other two pairs are coded '0' for 'disagree'. Thus, depending on how it is calculated, the inter-rater agreement corresponding to a proportion of .67 of the judges agreeing could be 1/3 or .33. For groups of more than two judges with at least some disagreement, inter-rater agreement will always be less than the proportion of judges agreeing on a code.

(4) The percentage of agreement or proportion of overlap in codes for two raters is calculated by taking the ratio of the frequency of codes on which both raters agree to the frequency of total codes assigned by both raters. There is no widely accepted standard for measures of inter-rater agreement. Guttman, Spector, Sigal, Rakoff, and Epstein

(1971) reviewed the literature and concluded that there seemed to be a tacit assumption that "a percentage of agreement below 65% was unacceptable". Therefore they decided on a criterion of 70% for all categories in their study. Tinsley and Weiss (1975) noted that a minimally acceptable standard of 65% "would allow the judges to be in disagreement more than one third of the time. We do not recommend acceptance of such a crude rule of thumb." They conclude that "research designed to establish minimum standards for interrater reliability and agreement" would be of special interest. Campbell, Dunnette, Lawler and Weick's discussion of an appropriate standard for the coding of critical incidents was discussed in the methodology chapter.

Yukl and van Fleet (1982), however, defended their acceptance of a classification scheme mean proportion of overlap of only .64, noting that allowing the raters to choose the number of codes to use, as well as to select the specific codes once the number was determined, caused the mean proportion of overlap to go down. While this is true, allowing variable numbers of multiple codes per incident simply increased the reasons why inter-rater agreement was low. It did not increase inter-rater agreement to know this or to take it into account by computing measures of inter-rater agreement in alternative ways. They did not publish the mean proportion of overlap for any of the 19 categories of the scheme, but it is reasonable to assume that many of the categories had measures well below the mean of .64, given the figures reported in this study.

(5) Yukl and van Fleet also supported the very modest level of proportion of overlap of .64 they attained with their two raters by noting that "with as many as 19 behaviors from which to select, the probability of agreement by chance alone is extremely low on any given incident" (1982, pp. 92-93). While representing the proportion of agreement as an improvement over chance would be ideal (Tinsley and Weiss, 1975), there are a number of factors in the coding process followed in this study and the Yukl and van Fleet study that made this difficult. These factors include (1) allowing raters to differ in the number of codes selected for each incident, and (2) allowing raters not to report the particular subunit of an incident to which a given code was assigned. Thus individual codes assigned by two raters can be matched up in pairs only when both raters assigned only one code to an incident.

The probability of agreement by chance alone for any given category and for the 19 category scheme as a whole would be $1/19$ or .053 only if (a) the raters' distributions of codes were identical, (b) the codes were distributed

evenly across all 19 categories, and (c) every code of rater 4 could be paired with a matching code from rater 5. Several attempts were made to approximate the proportion of agreement between rater 4 and rater 5 expected by chance alone. For example, codes assigned by the raters were paired on the basis of the order in which they were listed and a special code was assigned to fill in the gap left when the raters differed in the number of codes assigned to an incident. These approximations suggested that the proportion of agreement expected by chance alone was in the range of .09 to .11. While higher than .053, 10% is still a relatively trivial component of the overall proportion. Although methodology articles strongly advocate measures which take account of the possibility of agreement by chance alone, no discussion of appropriate standards for such measures was found.

(6) The three measures of inter-rater agreement for the three possible pairs of judges for the full set of incidents in this study were .56 (raters 4 and 5), .49 (raters 4 and 6), and .44 (raters 5 and 6).

(7) Inter-rater agreements involving rater 6 were lower because (a) rater 6 had a ceiling of 3 codes per incident and, therefore, generated less codes per incident, on average, than the other two raters; (b) rater 6 received no training while the other two did; and (c) raters 4 and 5 were both masters students while rater 6 was a doctoral student in I.R.-- his biases may well have been different. Because of these differences in rater 6's ratings, they were excluded from further analysis, although they were used in step #8 below to eliminate ratings which were unique to one of the three raters.

(8) The total data base of all three raters' codes was reduced by retaining only those codes on which two out of three or three out of three raters agreed. Codes provided by only one rater were eliminated.

(9) Inter-rater agreements on this reduced data base were as follows: (a) .79 (raters 4 and 5), (b) .68 (raters 4 and 6), and (c) .61 (raters 5 and 6).

(10) Although overall inter-rater agreement for raters 4 and 5 was quite high, the inter-rater agreements for these same two raters on individual categories of the 19 category classification scheme varied widely from a low of .33 (categories C and I) to a high of .80 (categories F and Q). In general, agreement was relatively high for high frequency categories and relatively low for many of the low frequency categories. In the latter cases, lower inter-rater agree-

ment may well be just an artifact of the low category frequencies.

(11) Yukl's more recent work has focussed on trying to reduce the total number of categories in the taxonomy by factor analysis (unsuccessful) or qualitative comparison of the categories used in other managerial behavior and effectiveness taxonomies with a view to developing an integrating taxonomy. His most recent taxonomy has thirteen behavior categories. A number of categories which were separate in the leader military study have been combined in this taxonomy. For example, praise and structuring rewards has been combined in "recognizing and rewarding" (Yukl, 1986). A separate category for criticizing and disciplining has not been retained.

(12) On the basis of similarity of content and using Yukl's more recent taxonomy as a guide, some of the 19 categories were combined and other deleted in order to increase both the category frequency totals (if below 75) and the category measures of inter-rater agreement (if below .65 mean proportion of overlap).

(13) Categories M (Planning), H (Role Clarification), and J (Training) were combined into a "Planning and Implementation" category (Y) on the basis of similarity of content related to the management of change. Category J had few frequencies (27) while category M had a high frequency count (208) but low inter-rater agreement (.58 mean proportion of overlap).

(14) Because of low category frequencies, categories D (Praise-Recognition) and S (Criticism-Discipline) were combined into a new category Z (Praising and Criticizing) on the basis of similarity of content. Although the frequency total in the combined category was still low (57), no further combinations were made because there were no other obvious similarities of content. The category was retained because of high inter-rater agreement (mean proportion of overlap of .77).

(15) The measures of mean proportion of overlap in codes for the remaining 9 categories, including one at .65, were considered to represent sufficient inter-rater agreement for further analysis. All codes in these categories were retained. The reasons for accepting these codes were as follows: (a) 2/3 or 3/3 of the judges agreed on all the codes used in the analysis, representing a minimum proportion of judges who agreed on each and every code and category of .67; (b) only one category had a mean proportion of overlap below .67 and, at .65, it met the minimally acceptable criterion level according to some investigators (see

above); (c) two additional categories had measures in the .67 to .69 range, and, therefore, met the more stringent standard of two raters being in agreement at least two thirds of the time; (d) the relatively high measure of agreement for the scheme as a whole (.80); and (e) the exploratory nature of this basic research.

APPENDIX O. DISTRIBUTION OF BARGAINING SITUATIONS BY THE
UNION REPRESENTING THE EMPLOYEES

UNION (AFFILIATION)	PERCENTAGE, BARGAINING SITUATIONS
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Steelworkers of America, United (AFL-CIO/CLC)	15%
Automobile, Aerospace and Agricultural Implement Workers of America, International Union, United (CLC)	10
Paperworkers Union, Canadian (CLC)	8
Food and Commercial Workers International Union, United (AFL-CIO/CLC)	6
Oil Workers, Atlantic (CCU)	6
Electrical Workers, International Brotherhood of (AFL-CIO/CLC)	5
Rubber, Cork, Linoleum, & Plastic Workers of America, United (AFL-CIO/CFL)	4
Teamsters, Chauffeurs, Warehousemen and Helpers of America, International Brotherhood of (Independent, International)	4
Woodworkers of America, International (AFL-CIO/CLC)	4
Bakery, Confectionery and Tobacco Workers International Union (AFL-CIO/CLC)	3
Machinists and Aerospace Workers, International Association of (AFL-CIO/CLC)	3
Mine Workers of America, International Union, United (CLC)	3
Communications, Electronic, Electrical, Technical and Salaried Workers of Canada (formerly Communications Workers & I.U.E.) (CLC)	3
Mine, Mill, and Smelter Workers Union (CCU)	2
Public Service Employees Federation (CNTU)	2
Independent Local Organizations	2
Direct Charters (CNTU, 1%; CLC, 1%)	2
Air Line Flight Attendants' Association, Canadian (CLC)	1
Carpenters and Joiners of America, United Brotherhood of (AFL-CIO)	1
Energy and Chemical Workers Union (CLC)	1
Communications Workers, Canadian Union of	

(Independent, National)	1
Grain Services Union (CLC)	1
Hotel & Restaurant Employees' and Bartenders' International Union (AFL-CIO/CLC)	1
'Letter Carriers' Union of Canada (CLC)	1
Postal Workers, Canadian Union of (CLC)	1
Public Employees, Canadian Union of (CLC)	1
Pulp and Forest Workers, Federation of (CNTU)	1
Pulp, Paper and Woodworkers of Canada (CCU)	1
Railway Shopcraft Employees and Allied Workers, Canadian Council of	1
Retail, Wholesale and Department Store Union (AFL-CIO/CLC)	1
Telephone Employees' Association, Canadian (Independent, National)	1

Sources: (1) Labour Canada's computer file of bargaining situations with 500 or more employees, exclusive of construction.
 (2) Minister of Labour Canada, Union Codes, 1984, (Ottawa, Canada: Minister of Supply and Services Canada, 1984).

APPENDIX P. EXAMPLES OF CRITICAL INCIDENTS OF EFFECTIVE
CONTRACT ADMINISTRATION

CONSIDERATION

1. He never misses an opportunity to chat or share ideas with employees whether it be in a crowded bar or a parking lot. In a recent incident, upon discovering that a long haul truck driver was staying in the same hotel, he sent a refreshment up to his room for his enjoyment.
(Also Interaction Facilitation.)

2. During the early 1980's we had 1100 people on layoff. Of these, there were a number of people who required up to 3 weeks of work, for which they would receive insurable earnings for U.I.C. purposes, in order to qualify for extended benefits from U.I.C. (Company Name) was sympathetic to our request to provide make-work jobs for these people and, as a result, we were able to waive seniority rights for a three-week period, with the blessing of our own membership, in order to give them the necessary weeks of work to re-establish U.I.C. benefits. This meant up to 40 weeks of additional U.I.C. payments for these people and constitutes, in my mind, the best performance of an industrial relations manager. (Personal Name) was our manager at that time and it was through him that these results were achieved.
(Also Problem Solving.)

3. Good performance in day-to-day relations results from (a) thorough preparation, and (b) respect for the other side. For example, a Union steward's wife was ill and it was known that he left only twice a week to visit her. A normal Thursday afternoon consultation was changed, at the IR manager's request, to Thursday morning, supposedly because the IR manager had other business in the afternoon. When it became known that he had changed the meeting to accommodate the Union steward, there was a renewed respect for him from the Union side and a noticeable improvement in relations.
(Also Interaction Facilitation.)

DECISION PARTICIPATION

1. The IR department did all necessary "homework" on about 30 employees with a significant attendance problem, approached the union for their cooperation in setting up a program to advise, counsel, and eventually terminate employees who could not "turn things around." Union executive agreed to cooperate on the understanding that they would be kept informed and involved wherever possible. (Also Information Dissemination.)

2. In the consultation process the Union(s) have access to relevant information and are allowed to provide alternative solutions prior to management finalizing a decision which may impact on their membership. A recent high profile project (project is B.M.F. Retrofit) was given to the Union in its entirety. The result of this project would result in transfer of employees and possible redeployment of staff. The Union was given time to research and meet with employees and to provide alternatives. From this perspective, the Union realized how many complexities management had to deal with.

(Also Interaction Facilitation, Information Dissemination.)

3. An employee was to be disciplined for a serious operating error. Since it was decided that he would not be discharged, it was important to take a significant disciplinary step but one which allowed the individual to retain his self-esteem and which did not destroy the morale of co-workers. Prior to any company decision or action, interviews were held to gather the facts. The Union executive conducted interviews in parallel and felt that they had generated a reasonable explanation in the employee's defense. The IR manager worked with the Union Executive for 6-7 hours generating a time chart that laid out the sequence of events which pointed out what went wrong and why. The disciplinary action taken was serious, but the Union Executive and the individuals felt the investigation was fair and the action taken reasonable under the circumstances. The Executive felt they had made an extensive effort on behalf of their member and that their input was considered. The LR manager indicated their involvement was viewed as assistance in arriving at an appropriate decision. No grievance was filed. Although a very hazardous incident occurred with high property damage (hardware) a very positive experience flowed from it (people).

(Also Problem Solving, Interaction Facilitation, Conflict Management, Criticism-Discipline.)

4. Our safety programme needed a shot in the arm and responsibility was assigned to the Manager, Employee Relations. Working with a committee comprised of both Union

and Supervisors, he designed an effective and acceptable programme (acceptable to both parties). One of the cornerstones of the new programme is the continuous nature of its operation. Problems are reacted to promptly and are free of the "us and them" syndrome.

(Also Problem Solving, Interaction Facilitation.)

5. We hire summer students and until recently many of our employees viewed the hiring process as discriminatory. My Industrial Relations manager once again, with full discussion and involvement of the Union, has developed new guidelines which have virtually done away with the rancor and bitterness of the past.

(Also Problem Solving.)

6. An employee with a serious mental problem from drug overdose had run out of Long Term Disability Benefits. The Company was considering termination based on nonculpable discharge. Through discussion with the union and the employee, an arrangement was made to put him in a limited job with careful and continuous supervision. Weekly meetings were held with the employee, supervision and union representatives. The employee was not progressing well and would likely have to be released but he quit of his own accord - the success of the venture was not in the result but in the joint attempt at dealing with the situation.

(Also Consideration, Interaction Facilitation.)

7. Our Company had a 61-year old employee with 29 years of service with a history of poor work performance. In an effort to identify and determine the specific problems the employee was experiencing as well as training needs, the Company met on a weekly basis to review the work completed for the previous week. One of the factors identified during the meeting which contributed to the poor work performance was some health problems the employee was experiencing. Given his age and work environment it was foreseeable there would be no improvement in this area. The employee suggested during the meeting if the company would enhance his pension he would consider early retirement. The Company was able to arrive at a figure acceptable to the employee who subsequently retired. The Vice-President of the local Union had participated in the weekly meetings with the employee. He also realized that, given the physical problems, the employee's performance was unlikely to improve and would ultimately lead to disciplinary action being administered as a result of the poor work performance problem. The Union was appreciative of the action taken by the Company to arrive at a pension settlement which met the needs of the employee.

(Also Consideration, Problem Solving.)

INFORMATION DISSEMINATION

1. A number of employees filed a group grievance: Employees were not promoted interdepartmentally in spite of seniority and should be given a job (for which they were not suited due to subjective standards). The employees were met with and, rather than beat around the bush, the "subjective" areas in which the employees did not meet the standards were listed: (1) appearance; (2) presentation; (3) personality, and these were reviewed and dealt with. A definitive course of action was offered in terms of "self-improvement" to each individual. The (response to the) grievance was accepted by the staff as they appreciated honesty. They asked why no one had been that honest before so they could have started self-improvement. (Also Problem Solving, Interaction Facilitation.)

PROBLEM SOLVING

1. An employee had an excessive absentee record. Most of the absences were compensatable. During a routine absentee interview, the fact that the employee had accrued 183 work days in absences (an equivalent of one working year) in the previous four years, and the fact that long absences are not conducive to good customer relations were brought to his attention. The employee shrugged his shoulders and said "...I didn't think it was so much..." It was determined that a letter to the employee detailing absences, reasons, duration and a total of all days off (including scheduled days off that were attached to absences) accrued over the last five years be mailed to the employee and placed on his file. The letter was to include a paragraph stating: (a) that we depend on employees to report regularly for work; (b) it is imperative that the employee work safely while he was at work, feel free to discuss anything on the job or personal circumstances which prevented him from doing this; (c) that we looked forward to an improvement in attendance; and (d) monitoring will take place. It was felt that the letter would either improve or worsen the situation, it would not have no effect. Subsequently the employee requested a one year leave of absence to manage a resort. Leave of absence was denied and shortly after a letter of resignation was accepted.

Conclusion: The letter brought to a head a situation which could have gone on further. The absences, which all had the appearance of legitimacy, stopped and the employee was replaced.

(Also Information Dissemination, Criticism-Discipline.)

WORK FACILITATION

1. He actively supports our 'Quality is Free' program verbally and with changes in past policies. For example, extra time (over 8 hrs) spent on a quality and safety meeting now can be entered as overtime and banked. Both of these improves turnout at the meetings.
(Also Interaction Facilitation.)

2. We deal with two separate unions. Each collective agreement includes language which defines the terms and conditions under which employees may be moved from one job to another. The result of the separate contracts makes it very difficult (if not impossible) to temporarily loan employees from one union jurisdiction to another. Recently, there have been situations where one of the union jurisdictions has been in a surplus staff condition and the other has needed people. We negotiated deals locally with the two unions to "bend the rules" to provide temporary work for the surplus employees (i.e. temporary transfer from one jurisdiction to the other). This deal worked for a short time until the executives of the receiving jurisdiction cancelled the deal. The result was both very good and partially bad. Both local union jurisdictions were very happy about the deal. However, the receiving jurisdiction executive felt that it was an infringement on their rights. This may result in further bargaining demands.
(Also Problem Solving.)

INTERACTION FACILITATION

1. When the arbitration case load became very heavy, the IR manager set up a review procedure with the Chairman of the Local Union Grievance Committee. This review, which was merely a rational discussion of the facts of each case, resulted in a drastic reduction in the arbitration load without requiring a significant number of grievance concessions by the Company.
(Also Conflict Management, Decision Participation, Problem Solving.)

CONFLICT MANAGEMENT

1. In a recent grievance, the union proceeded to arbitration but asked for an expedited hearing - not an accepted practice yet in the industry. The I.R. Manager agreed to an expedited hearing, set out the facts of the case in writing and obtained union agreement on most. He worked out an arrangement where the result would not be precedent setting, and agreed to represent the company in-

stead of having legal counsel. The result was a speedy, amicable arbitration.

PLANNING/IMPLEMENTATION (PLANNING, ROLE CLARIFICATION, TRAINING)

(1) PLANNING

1. A system of job progression is being introduced in place of specific work assignments. This affects long standing union rights of seniority, job rotation, etc., and replaces it with job progression and subsequent pay progression according to a worker's ability to learn and develop. The onus for improvement in performance and quality has shifted to the worker. This change has been introduced with minimal disruption. This change represents a major direction change for the union but it has been received well because of careful preparation and full and open explanation.

(Also Information Dissemination.)

2. Planning for previously mentioned layoff was extremely well-handled as employees were given good lead-time to plan for vacation. The shutdown occurred in July when most were able to take vacation with their families. In general, most employees appreciated the timing of the shutdown and the advance notice, and understood the need for the shutdown. The previously mentioned seniority dispute was the only major negative reaction.

(Also Consideration, Information Dissemination, Interaction Facilitation.)

3. No one grievance or arbitration can stand out as an example; however, generally I would comment that our labour relations group researches every grievance or arbitration case very thoroughly and are well prepared, with well-organized briefs and reports for every case that goes to arbitration.

(Also Conflict Management.)

4. At arbitration, had accumulated all the facts and, quietly in a low key way, went ahead and presented a systematic, overwhelming case without antagonizing union rep.

(Also Interaction Facilitation, Conflict Management.)

5. Excellent preparation for arbitration. Contract prohibits work on statutory holidays except for (a) protection of plant, and (b) emergency maintenance to avoid subsequent production loss and layoff of people. The Union challenged the company's desire to run turbo-generators during the Christmas shutdown at the time of very cold weather. Our

need was on the basis that they provided backup power in the event of loss of purchased power which could result in plant freeze-up. This went through the complete grievance procedure, with the Union stating that running the generators was making "product." Company position was extremely well-handled through the steps. At the arbitration hearing, selection of excellent company testimony and witnesses resulted in the Union claim being denied. Good preparation, in fact, resulted in more of a "win" than expected, as the arbitration ruled that the company had the right at any time to decide on what constituted "protection of plant and property" and did not even have to consult the union.

(2) ROLE CLARIFICATION

1. During second stage of grievances, Industrial Relations manager is very patient in informing grievor of rights, company policies, mining act infractions if this is the area involved, etc.
(Also Information Dissemination, Conflict Management.)

2. Our IR manager insists on practices being "up front" with the Union and employees in all areas of concern to management/union relations and employees, both verbally and on bulletin board notices; for example, (a) Production schedules or forecasts and the effect on the work force; (b) Company policy (on items not covered by collective agreement); and (c) Factory rules and regulations.
(Also Information Dissemination.)

3. Certain non-scheduled employees were recently included into the bargaining unit, and as a result lost some of their benefits; i.e., Employees reporting sick were allowed a maximum of three days without loss of wages provided that the Corporation was not put to additional expense. The manager told the newly organized employees that although the collective agreement did not provide paid sick leave, the Corporation would honour the past practice and continue to pay for sick leave provided that the practice was not abused. Following research, lost time as a result of employees' absence was reduced to a minimum, and employee morale improved with the assurance that the benefit was continued.
(Also Consideration, Problem Solving.)

(3) TRAINING

1. Divisional I.R. delivered a Consultation Training package to senior Divisional management and this has resulted in improved and more productive consultation meetings.

2. Although it is very difficult to find an example of "very good performance," I was nevertheless gratified recently to see the Labour Relations people take a proactive position in helping my line managers to become more familiar with the consultation process. This took the form of a series of seminars put on by LR officers and I believe it was constructive and my line managers are better equipped to consult with their union counterparts.
(Also Work Facilitation, Information Dissemination, Interaction Facilitation.)

3. Prior to a force adjustment of 20 employees from the Smelter to Underground, a one day underground orientation program was established approximately one month prior to the adjustment. This allayed fears and actually created volunteers for the move.
(Also Interaction Facilitation.)

4. He said union members and union executive will be involved in steering committee of major training program.
(Also Decision Participation, Interaction Facilitation.)

5. Supervision has been given courses too numerous to list; i.e., first aid, effective interviewing, understanding the collective agreement, employee involvement, etc....

6. Quite recently the Industrial Relations manager organized a 'Safety Awareness' day. All of our top management people together with the joint union/management committee participated in the Safety Awareness day by greeting everyone as they came to work at the mill gate and then the group toured the mill speaking to all employees about our safety program.
(Also Information Dissemination, Interaction Facilitation.)

7. Arbitrations are not frequent events (fortunately) and supervisors and managers often do not understand the process or their role as witnesses. The I.R. Manager spends much time explaining the process and then, regardless of the outcome, they will feel they performed their role well. He acts as a coach for management participants in addition to assisting legal counsel.
(Also Role Clarification.)

8. The IR department appointed Employee Advisees in the field to work closely with all levels of supervision. Their purpose was not to make decisions for the Supervisors but to advise them in their decision making. This has helped relations tremendously and has provided consistency in all areas of our operations.
(Also Information Dissemination.)

PRAISE/RECOGNITION--CRITICISM/DISCIPLINE

1. It is now a set procedure that any person in the steam plant who obtains a higher grade of operation Stationary Engineers Certificate, the company takes them out to dinner. I know that this was very much appreciated by the two employees who were taken out to dinner.
(Also Consideration.)

2. At joint consultation meetings, gave credit to union members for "job well done." This was in regard to a request management was making to union to encourage members to not abuse coffeekbreak time.
(Also Information Dissemination.)

3. The I.R. manager said to a problem employee, in front of both the union rep and the supervisor, that, if he "didn't become a model employee, and listen to his supervisor, he would eventually lose his job." The I.R. manager let the employee know where he stood.
(Also Information Dissemination.)
(Contrast incident #1 in the equivalent section, "Appendix Q. Examples of Critical Incidents of Ineffective Contract Administration" on page 304.)

4. The difficulty with providing examples of very good performance from an I.R. point of view is that we seldom receive any feedback from the Union or the bargaining unit employees unless it is a decision that created negative feedback. In a number of grievance instances, I.R. has assisted our managers to adjust their views on suspensions for various disciplinary infractions, particularly first-time vehicle accidents, and I believe that we, as a company, have gained a measure of respect from the employees because of our efforts to become more consistent in dealing with this type of infraction.
(Also Role Clarification.)

APPENDIX Q. EXAMPLES OF CRITICAL INCIDENTS OF INEFFECTIVE
CONTRACT ADMINISTRATION

CONSIDERATION

1. Background - We had probably the most unreliable employee of all time, anywhere. Attendance was poor, work (while there) was unacceptable. Our area had all kinds of documentation supporting a case for dismissal. The industrial relations manager continually thwarted our wish to fire this employee.

Action - The industrial relations manager said that we had to show compassion as this individual was a native, single parent with an admitted drinking problem. While the statement of compassion is laudable, it should be noted that the situation had been going on for over one year and was causing a severe morale problem in the rest of the department. To our way of thinking the industrial relations manager was sacrificing the forest to save one rotten tree.
(Also Problem Solving, Discipline-Criticism.)

DECISION PARTICIPATION

1. Management tends to think that unionized employees should not be consulted on changes in the workplace. In most cases the employee doing a specific job can best give ideas for improvements or change.

2. There is a developing tendency to be over-trusting of union representatives in the name of full cooperation. Management must still take full responsibility for the company's actions and therefore must retain full decision powers. Cannot share decision powers with union representatives without the union being willing to share responsibilities and consequences. Management teams and union representatives each have their place but not necessarily in bed with each other. This situation is closely monitored.

(Also Interaction Facilitation.)

3. In a grievance concerning rights of job bid and transfer the Industrial Relations manager said "I was out there for twenty years, you guys can't tell me..." The local union reps are all about 2 years younger than the manager and

proceeded to explain how things had changed; the district rep pointed out that history was history etc. The sheer statement of "I know how it is" rather than specifically questioning or discussing the problem so as to demonstrate the awareness seemed to cause rancor - the original problem was lost and a new one created. (The Labour Relations manager had been a union officer for many years).
(Also Problem Solving, Interaction Facilitation.)

4. In our latest collective agreement we negotiated a joint health and safety committee. Approximately one month into the agreement we had a fatality on the job. The Union was excluded from the accident investigation. The attitude of one IR manager was "what the hell good could you do in an investigation anyway."
(Also Interaction Facilitation.)

5. After a few days of elusive talks with Union Reps the IR manager became exasperated and proposed the use of language that might be taken as inflammatory. He said, "we've got to show them." He did, however, accept his group's criticism and reverted to more conciliatory terms.
(Also Conflict Management, Interaction Facilitation.)

INFORMATION DISSEMINATION

1. We have a program in place to curb absenteeism and abuse of the Worker's Compensation system. We often interview workers with poor work records and use information from the interviews to bring these workers back to work on modified duties. We had one such interview with a man who had a chronic knee problem. We set up the interview and told him we were interested in his returning to work. We worked out a program whereby he could return to work on a light job underground (conveyor drive operator, in a coal mine). When the man reported back for work on the night shift, his supervisor did not put him at the job specified. The man was told to "load material." He re-injured his knee walking to the place where he was to "load material." We found that the communications between top management & I. R. manager & first line supervisor had broken down and the supervisor was not aware of the rehabilitation program.
(Also Role Clarification, Interaction Facilitation.)

2. Problem: Difficulties for Industrial Relations management to be straight forward in their communication with union representatives when we disagree with a specific union's, or group of unionized employees', behavior.
Example: After a group of employees (mechanics) refused to do any overtime during a period of 2 1/2 months it had been decided by management that Industrial Relations represen-

tatives should communicate verbally and in writing with union representatives to express our total disagreement with the union's attitude regarding that problem and the fact that the collective agreement has not been respected. The verbal communication has been done rapidly, but the written communication was not done after many reminders from line management.

PROBLEM SOLVING

1. A shop steward aggravated an employee and a fist fight erupted. The plant manager, after hearing all of the witnesses, and the two parties, suspended the employee who started the fight for five days and the shop steward two days for provoking the confrontation. The union grieved the steward's suspension and demanded the employee who hit him be fired. The IR manager, without consultation with the plant manager, revised the two day suspension of the shop steward and paid him for two lost days. The explanation was "Let's not get into a fight with the Union about this; besides we owe them one!" No consideration was given to what such action did to the plant manager's ability to manage the work force or his stature in the eyes of the unionized employees.

(Also Decision Participation, Role Clarification.)

WORK FACILITATION

1. Unable to convince one union to act together with a second union in matters of Health and Safety.

(Also Interaction Facilitation.)

2. A company has been hired to study our productivity level in this property. However, they seem very inhuman and unhealthy to have around. They don't realize their behaviour has caused insecurity. Timing every single move and step is not a way to improve productivity.

(Also Problem Solving.)

3. We are experiencing tough times economically, to the extent that we have had to cut back on some underground employees. The milling department has been forced to accept a large number of these "underground rejects." As a result the mills (primarily operations) now have substandard labour pools. Most of the underground people are those that the mining department wanted to get rid of because of age or health or attitudinal problems and they have neither motivation nor ability to become productive mill employees.

(Also Problem Solving.)

INTERACTION FACILITATION

1. I, as a union rep, have had numerous examples of less than desirable comments from managers (not all). In trying to resolve a simple grievance I had an employer say, "You must have jumped out of an airplane while flying over Cape Breton, is that how you got here? for they do not allow assholes across the causeway."

(Also Consideration, Conflict Management.)

CONFLICT MANAGEMENT

1. When hourly employees were not happy with new work schedules introduced which led to work stoppage, Industrial Relations manager waited until too late to discuss with rank and file employees. Should not have let the union executive spread one-sided information which led to the work stoppage. I.R. manager knew the proposed changes would not sit well with employees and more effort should have gone into explaining the reasons for the change.

(Also Information Dissemination, Problem Solving.)

2. Time study grievance pertaining to inclusion of work formerly performed on hourly basis in setting of new rate (piece work). I.R. Manager met with Union business rep and shop steward with a view to settling matter. He engaged in extended acrimonious debate with Union officials re: settlement proposals without including employees affected in discussion or even canvassing their views in concert with Union officials. Matter was resolved in a matter of several minutes once I.R. Manager was instructed to elicit opinions of employees concerned with subject matter of grievance. While it is incumbent upon Union officials to appraise themselves of the views of the bargaining unit employees, the I.R. manager was aware that in this instance, they had not done so. Matter was unnecessarily protracted and unnecessarily heated.

(Also Decision Participation, Problem Solving.)

PLANNING/IMPLEMENTATION (PLANNING, ROLE CLARIFICATION, TRAINING)

(1) PLANNING

1. Three employees have been permitted to stay at home and received full pay until year-end at which time they will be retired early by way of a special retirement package. The reason they will be allowed to stay home is that the closing down of the work area was advanced from October '85 to July '85 because of scheduling improvements. There ap-

peared to be no consideration that there may be other useful work available for these employees during the "stay-at-home" period. This incident did nothing for the morale of others.

(Also Consideration, Problem Solving.)

2. An IR manager supplied documentation and statistics at a Union-Management meeting without a complete explanation and caution about their purpose. Eventually, new documentation was issued at subsequent meetings which tended to cause or infer mistrust or deception. This indicated poor planning.

(Also Information Dissemination.)

(2) ROLE CLARIFICATION

1. Employees at this plant, for the most part, have not worked at any other plant due to the isolation of the area. They have poor work habits and, in most cases, have never had apprenticeship training. Hence, they have little respect for company rules, regulations, and property. Hence, company policy in regard to behavior, performance, and employee morale, backed up by a positive management and supervisory ongoing control, is not evident enough.

2. Manager told employees to do jobs that were not their own and, if not, they no longer had a job there.

(Also Consideration.)

3. We have a plant rule re "failure to report necessary absences from work." The rule has been in effect for some time, is well-known, and has been consistently applied. We recently lost an arbitration because the Union was able to establish that exceptions had occurred in one area.

(Also Information Dissemination.)

4. Lack of firm smoking regulations which are enforceable or enforced.

5. My recollection of "very poor performance" examples relate to communication problems only. A lack of information provided to union or management peers caused hardships. A new maintenance supervisor was brought online and his relief duties for other foremen were not spelled out.

Result: a work stoppage. Clear definition of his responsibilities would have prevented such a situation.

(Also Information Dissemination.)

(3) TRAINING

1. I have difficulty in identifying areas of very poor performance relative to my previous industrial relations manager's performance. It would be difficult to comment on the successor in light of the short period of time in the position. If I was to be critical, it would be in the area of training of first line supervision/operations foremen in that not enough training was provided at that level in first line supervision.

2. Not enough interaction and/or training with 1st line supervisors. More visibility of the IR people would ease the frustrations of 1st line supervisors in handling complaints, policies and grievances.
(Also Interaction Facilitation.)

PRAISE/RECOGNITION--CRITICISM/DISCIPLINE

1. Criticism of a unionized employee in front of his peers and union representative for an attendance problem.
(Also Interaction Facilitation.)
(Contrast incident #3 in the equivalent section, "Appendix P. Examples of Critical Incidents of Effective Contract Administration" on page 295.)

2. In a one-on-one situation (no shop steward) the I.R. Manager intimidated an employee into quitting. The employee was a problem but the first thing he did was get a shop steward and revoke his resignation.
(Also Problem Solving, Conflict Management.)

3. Our area had an employee in it with whom we were not satisfied with the level of work attendance. We contacted Labour Relations on how we were to proceed on correcting the problem and/or having the employee's employment terminated. We were advised to "not waste our time" as the employee had 34 years of service and it would be a long drawn out process - not worth the time or effort. We are proceeding without the benefit of L.R. counsel.
(Also Problem Solving, Role Clarification.)

4. Employee had been suspended pending investigation of an alleged theft. Employee was scheduled in a discussion with the supervisor. The shop steward was involved. The Union called for and received a full Plant Committee meeting at which this case was discussed in full with the employee before any decision was reached by company. Employee was embarrassed, supervision was uncomfortable - the meeting should not have been allowed to occur in that way. We let the Union control the events.

(Also Problem Solving, Interaction Facilitation, Role Clarification.)

5. After firing an employee who was habitually absent from work and who would not advise his supervisors that he was sick or had pressing necessity to be absent, and after ensuring all procedures were followed "to the letter," upon a telephone request to the V.P. Human Relations, he permitted him to retain employment with the Corporation on the Employee Assistance Program. No communication with the line authority. This incident was considered shocking with Management and Union staff alike.

6. Unionized employees and union representatives are free to do what they want to, and our discipline is too weak. Example: in my department we took disciplinary action on a welder who refused to do the quantity of work asked. First we gave him a warning slip, and the second time, a day off. Finally, we got what we asked for and then the union vice president asked us to withdraw those measures and management has accepted.

7. Reinstated an employee after employee had been terminated - with pay! Employee was terminated for not reporting to work for one week. Employee travelled to Hawaii and decided to spend extra time instead of returning as planned. Overall performance of employee in question was "poor." This particular incident contributed to very strong friction within department, particularly from people with excellent attendance.
(Also Conflict Management, Problem Solving.)

APPENDIX R. -EXAMPLES OF CRITICAL INCIDENTS OF EFFECTIVE
NEGOTIATING

CONSIDERATION

1. (Personal name) of (Company name) agreed to an \$800 a month minimum monthly payment for disability recipients of EDB despite the fact that nothing similar had ever been negotiated in the U.S.

DECISION PARTICIPATION

1. In an upcoming negotiation, the company wanted to change the work schedule of certain employees. A year's preparation went into the planning, which meant much discussion with the Union, and pre-conditioning which enabled the Union bargaining committee time to plan their strategy in order to be well-informed in front of their membership. Helps build trust and understanding.

(Also Planning, Information Dissemination, Interaction Facilitation.)

2. Met with first-level foremen/supervisors to review specific articles outlined by them and discussed in groups with case studies, five groups of eight/group - out of these ten sessions solicited revisions or changes to upcoming agreement.

3. Discussed contingency planning in the event of a work stoppage with senior managers.

(Also Planning.)

4. Negotiated an agreement which defines and clarifies the difference between "accident" and "illness" as it pertains to sick leave provisions of our agreement. Through a series of discussions with personnel, benefits, and union reps definitions were developed along with an extensive list of examples in each area i.e. accident or illness. The difference between accident and illness outside of the physical aspects is the application of payment where accident/injury victims are paid sick benefits from first day whereas illness victims are eligible only for the eighth day.

(Also Information Dissemination, Problem Solving.)

5. He actively set up and took part in meetings with both our local unions to explore possible changes in the way we negotiate our collective agreements to: (1) improve communication, trust (2) reduce the size of the bargaining unit (3) obtain long term agreement.

(Also Information Dissemination, Interaction Facilitation.)

INFORMATION DISSEMINATION

1. IR Manager believes in thorough preparation and research of union demands. Union demanded that Company be precluded from changing shift start times for maintenance employees on Friday nights. Union alleged that Company had been doing this in an on-going manner and for no apparent reason - Union further alleged that this was a source of extreme agitation among the maintenance workforce. IR Manager asked "When did this happen last?" Union rep replied "I'm not sure but many, many times in the last three years." IR Manager stated "Our facts indicate, that we have only changed start times once in the last three years." Union rep replied "I guess I didn't do my homework." IR Manager then stated "We had to change start time from 3:00 p.m. to 4:30 p.m. because not enough people were prepared to work overtime ... the people were needed to 'shutdown' the equipment for the weekend." Union Plant Chairman then replied "Consider the issue dead. Our only problem appears to be lack of preparation."

(Also Planning.)

PROBLEM SOLVING

1. The Collective Agreement was on the verge of ratification and one issue relating to one of the four plants represented at negotiations could not be resolved. It dealt with procedures of job discontinuance and historic job rights. The Industrial Relations negotiator had tried to get the matter off the table several times and, in fact, had settled the monetary issues. Finally, the issue, which had been identified by operational people as "an administrative nightmare," was simply handed to the team members to settle - i.e., the Industrial Relations negotiator said "It's your problem - it's the key to settlement - you work it out." An Industrial Relations plant level manager and the operational manager conversed with the representatives from the plant in question, jointly hammered out a manageable compromise and made a joint submission to the full teams at the table. This clause was accepted and the contract signed. What was so "good" was the Industrial Relations manager's recognition that the very particular proposal was not of interest to most of the negotiating

team and misunderstood except by the individual players. His approach provided efficacy and good rapport for those who were involved.

(Also Conflict Management.)

WORK FACILITATION

1. Preparation of a financial presentation was done so that immediate responses could be given and hence the maximum results could be obtained with no last minute time pressures and hence stress on the negotiating committee. (Also Planning, Information Dissemination, Interaction Facilitation.)

INTERACTION FACILITATION

1. During the last set of negotiations, there was a severe problem concerning the mechanical department. The problem basically concerned overtime contracting out and some actions of the new department head. The General Manager of Personnel/Industrial Relations solved the problem by bringing the Department Manager of Maintenance into the negotiations and allowed the union president and the department manager to air out the problems and this rectified a potentially serious situation. This was a very good performance because both sides went away with the thought that the co-operation shown could benefit both and would carry on even after the new contract was signed.

(Also Decision Participation, Problem Solving.)

CONFLICT MANAGEMENT

1. The mediator had concluded that no settlement was obtainable and had broken off the meetings and returned to Toronto. As we were getting ready to leave the hotel, the IR Manager approached a bargaining committee member and told him it was a real shame the meetings were cancelled because he thought we were so close to a settlement. When the rest of the bargaining committee was informed of the statement, we (Union team) requested a face-to-face meeting with the company and we had an agreement four hours later. (Also Interaction Facilitation, Information Dissemination.)

PLANNING/IMPLEMENTATION (PLANNING, ROLE CLARIFICATION, TRAINING)

(1) PLANNING

1. He obtained input from 1st line supervisors to anticipate demands and establish company priorities.
2. Good preparation prior to negotiations -- getting "Top Plant Level" agreement on key company issues and a "lock-in" of strategy.
(Also Decision Participation, Information Dissemination.)
3. Preparation for negotiations start a significantly long time before the bargaining of the negotiation, through first line supervisor consultation, salary and benefits studies in the community.
(Also Information Dissemination.)
4. Industrial relations manager had prepared game plan strategy which he followed throughout the bargaining and which outlined areas where he was prepared to make concessions, areas where he expected to receive concessions in exchange for his concessions, and areas where he stood firm.
5. Our Industrial Relations people have always prepared well ahead for negotiations and have avoided many lineups which could have occurred by notifying the union executive what our stand will be through informal discussions far in advance of sitting down to negotiate.
(Also Information Dissemination, Work Facilitation, Interaction Facilitation.)
6. An Industrial Relations Manager took the time to become very familiar with the company's market share, P & L, etc., and prepared an indisputable presentation in terms any employee could understand for use at the opening meeting of collective bargaining.
(Also Information Dissemination, Work Facilitation.)
7. Considerable effort in preparing a company "State of the Economy" message was made by our I.R. manager. This was presented to the union negotiating committee. There is no doubt that this presentation, by slides and overheads, followed by a very frank discussion, changed the union's position and resulted in a two year agreement with no overall increase.
(Also Information Dissemination, Conflict Management.)
8. He has shown an exceptional ability to anticipate Union argument and prepare counter arguments and supporting data,

in advance. This has been effective in creating greater credibility for him personally and for the Company.
(Also Information Dissemination.)

9. In my association with an Industrial Relations manager, I found him to be very diligent in all of the aspects of negotiating agreements. Many hours were spent putting together wording for contract proposals, etc., even though often it was in vain.

10. During the last collective agreement negotiation, the union bargaining committee tabled the members' demands in a document of ten pages containing 34 articles, each with a number of subheadings. After a preliminary review the Company proposed to segregate those demands in two separate categories, those having monetary implications and the others dealing with protocol, procedures, administration, i.e. non-monetary. This procedure was accepted by the Union after deliberation, and it was agreed to seek agreement on all non-monetary demands before negotiating wages and fringe benefits. This decision speeded up the negotiations as the Union was anxious to discuss the monetary aspect which is the real interest of the membership.
(Also Interaction Facilitation.)

11. During negotiations all arguments were prepared and written out (typed) in advance of presentation to the union team.
(Also Information Dissemination, Work Facilitation.)

12. Numerous occasions of an Industrial Relations manager presenting a monetary package in such a way that it would be palatable to both union committee and union membership. In these types of counter-proposals, the actual monetary content is important. However, the "type," "thoroughness," etc., etc., which showed that considerable thought had been put into the presentation, is also important. What made it all the easier for members of the union committee was that very little work had to be done to present the whole package to union membership.
(Also Information Dissemination, Conflict Management.)

13. Strike preparation has been difficult as the Company does not want to have employees perceive we are looking at a possible strike. The necessary precautions were handled well in a low profile attitude.
(Also Information Dissemination, Work Facilitation.)

14. Discussed contingency planning in the event of a work stoppage with senior managers.
(Also Decision Participation.)

(2) ROLE CLARIFICATION

1. We have a local agreement which allows us to schedule a full shift of steam plant personnel in 8 hours in advance of mill start up following statutory holidays. In doing so, it allows us to advance mill start up by close to 8 hours. Steam plant personnel are dissatisfied with their rate of pay and therefore wanted to cancel the local agreement; attempting to bring pressure to increase their rate. Our local union advised us in negotiations that this agreement would no longer be honoured. In response we said we were shocked at their actions. "If that is the method you intend to operate rather than only cancel the one local agreement we will postpone further discussions and review all local agreements and determine which ones we were not happy with and subsequently advise them we would cancel." The Local Union returned and said all Local Agreements would be honoured by them provided we did not unilaterally serve notice of any change.

(Also Problem Solving, Conflict Management.)

(3) TRAINING

1. In preparation for negotiations it was ensured that each member of the bargaining team had attended a course on negotiating the collective agreement.

2. He preset rules/tasks of negotiating team and trained two new people.

3. Strike Preparations - Very well prepared with excellent communication, contrary to the last collective agreement. Communication sessions, training sessions for staff employees. "We will do everything we can think of to help or assist you, just let us know."

4. Also conducted workshop on any changes negotiated in new collective agreement.

PRAISE/RECOGNITION--CRITICISM/DISCIPLINE

1. At one point of the negotiations where it seemed that an impasse was coming up and that the attitude of the union was not too positive, our IR manager told the union representative that his ways and attitudes had created a problem in the other contracts we had negotiated and that we wonder why we were able to sign and have good relations with other Union representatives of different groups that we deal with also but that the actual union representative was the only one with whom we always had to play games and use concil-

iation. It had an effect which was positive for the few following days only. It did not change the man but helped....(writing illegible).

(Also Conflict Management, Interaction Facilitation, information Dissemination.)

2. The I.R. manager accused the union President of bad faith bargaining when it occurred. The I.R. manager did not overlook this one instance and surprised the union. This brought the union on side.

(Also Conflict Management.)

APPENDIX S. EXAMPLES OF CRITICAL INCIDENTS OF INEFFECTIVE
NEGOTIATING

CONSIDERATION

1. The collective agreement covers two types of business (a) one warehousing, in which no incentive (piece rate) system exists, and (b) the other export packing, in which a piece rate incentive program operates. The plan provides for an average weekly bonus to be paid to "indirect" employees in the plant, based on the actual incentive earnings of incentive employees.

The result: a fork lift operator in warehousing earns less/hour because he has no opportunity to earn an indirect incentive bonus. The base wage is slightly higher than that of the export packing driver, but historically the "bonus" exceeds the wage differential. At negotiations the union proposed an increase in the differential between fork lift operators in warehousing vs. export. The company negotiator, explaining the reason for the Company's denial of the proposal, said "they (export) earn their wages." A disastrous breakdown in negotiations occurred. While the contract was settled without strike, the line has been quoted and requoted fully two years into the agreement. Credibility concerning the company's approach to warehousing, which is a small portion of business and manpower, has been questioned in all areas of industrial relations. (Also Information Dissemination, Interaction Facilitation, Conflict Management.)

2. He asked his assistant to research a certain aspect of the agreement while we were closeted in a Toronto hotel. His assistant asked for four senior Industrial Relations reps to come to his room to assist. The manager came to the room and shouted "Get out, he's busy, what's the matter with you?"

(Also Interaction Facilitation.)

DECISION PARTICIPATION

1. Negotiated away the supervisor's right to return to the bargaining unit without consulting people involved first.

2. Supervisor's have little input into contract negotiations (i.e. just lip service). The question is "Does our negotiation committee know our problems or not? -- (Implied answer is "No it does not!")
(Also Interaction Facilitation.)

3. The area which causes major difficulty is that company negotiators must always first check with head office in USA. The US company reps only see items as they pertain to conditions in their own country and therefore the negotiating team is often at odds with them. Many of the company's objectives or goals are established through the US firm and often they far exceed terms and conditions that were negotiated at the various US facilities.

4. Bargaining team agreed that we will not give into an increase in coverage in the group insurance, but at the bargaining table he did exactly the opposite - he gave in. He later said that he thought we had agreed to increase the coverage. Note: If he would have taken in writing our discussion he would not have given in to the increase.
(Also Problem Solving, Planning.)

5. The Industrial Relations manager was careless in responding to a union proposal, and granted a concession which was neither justified nor did the union expect to get it. The matter being discussed had to do with the the company granting notice to the union prior to a layoff. The union was seeking an increase in the number of days of notice provided in the agreement. Their proposal was for a significant increase and during a heated debate the union was able to "bait" the Industrial Relations manager into wanting to look like he could make snap decisions. The problem was the decision to grant the union's demand in order to look good created a situation the company couldn't live with reasonably.
(Also Problem Solving.)

INFORMATION DISSEMINATION

1. Negotiating collective agreements is done on an industry basis in B.C.; therefore, comments on pp. 6 & 7 (of the questionnaire) refer to local issues negotiated on a mill by mill basis (Bull Sessions). In 1981 we concluded our Bull Session negotiations with a signed commitment to complete certain tasks during the term of the agreement. In 1982 we entered the severe recession and didn't have the capital available to perform the commitments. Rather than meet the Local Union and advise them of the problems, we kept hoping things would improve. Eventually we got caught in a situation where the jobs could not be completed on

time, and certain managers were refusing to spend the money due to the high cost. Our credibility was seriously questioned.

(Also Interaction Facilitation, Conflict Management.)

PROBLEM SOLVING

1. We poorly handled the specific issue of wanting to negotiate better utilization of our plant capacity. Rather than pursue this in a problem solving fashion towards a mutually agreed upon solution, we instead made a demand for removal of a two-week plant shutdown in July. This shutdown is a "sacred cow" -- by attacking it in this direct fashion, we put the union negotiators into an extremely negative position.

(Also Decision Participation.)

WORK FACILITATION

1. In negotiating the last collective agreement the company was looking for flexible working hours, a matter of great importance. The Union representative was firm in his position not to grant the change. The Industrial Relations manager gave an example where a group of Union employees made an agreement outside the collective agreement. These were carpenters working on a hot roof. They wanted to start work earlier in the day to avoid the hot sun. The manager suggested the company cared more for the Union employees' welfare than he (the union rep) did. This caused a violent response which ended any hope of obtaining the desired results. This also hurt past practise of overlooking certain concessions if the local felt it was not detrimental to the bargaining unit.

(Also Problem Solving, Consideration, Role Clarification, Interaction Facilitation.)

2. In our last set of negotiations, there was set up a time to negotiate changes in the contract after a year's time. The union asked for a \$.25/hour increase for the fourth class engineers on the grounds that they were now asked to do more work on shift and also asked to step up as a third class engineer. The plant manager, Industrial Relations manager, and myself (another line manager) retired and discussed this. I disagreed with it and was in favour of giving them even more of a raise but only if they passed the exams and received a third class certificate. We have a problem that people do not want to take the time to write the examinations for a higher grade of certificate. I feel by giving the fourth class employees a raise of \$.25/hour

that it was even reducing the initiative of the employee to get the higher grade certificate.

(Also Problem Solving, Decision Participation.)

3. The two-week plant shut down was negotiated for the last two weeks of July rather than the middle two weeks of July, in order to link vacation with civic holiday. As a result, higher finished goods inventories will be carried with slower reaction to support August promotional sales activity.

INTERACTION FACILITATION

1. To be specific is rather tricky but, in general, the worst thing the IR Manager will do is to countermand his own manager's decisions. He will give him full authority to decide a grievance case, only to reverse it if it suits him to. This has brought resentment from the present and previous managers and leaves the grievor and union in limbo until "God" has spoken.

(Also Conflict Management, Work Facilitation.)

CONFLICT MANAGEMENT

1. At the opening of a negotiating session, the agent for the Union asked the company spokesman if his mandate was changed since the last meeting -- that is to say, since the presentation of the company's first offer which dealt with monetary considerations. The company representative answered: "The mandate is not changed, but we are here to negotiate." At that moment, all the members of the Union side stood up and left the negotiating room. Less than an hour later, there was an illegal strike of twenty-four hour duration, and an occupation of the management office lasting the afternoon.

(Also Planning, Work Facilitation.)

PLANNING/IMPLEMENTATION (PLANNING, ROLE CLARIFICATION, TRAINING)

(1) PLANNING

1. Company goes into negotiations with very few requests due to lack of preparation. We end up with nothing in our "hip pockets" so it is not always a "give and take" situation, but all "take" on the part of the union and all "give" from the company.

2. During the last set of negotiations, the Union bargaining committee received all their demands (got everything they asked for) for major concessions on our part, i.e., the company gave in to all union demands. Very poor preparation as to the objective of negotiations in respect to where North American Manufacturing must be to be competitive.

3. Did not prepare for negotiations properly. Could not give answers (on several occasions) to the Union until area in question was researched or opinions and answers received from head office.

(Also Decision Participation, Interaction Facilitation.)

4. In recent negotiations, the company negotiating committee (line and labour relations managers) drafted language on an article without fully examining all ramifications for the company. As a result the group had to consider renegeing on the 'offer' in order to protect the company's interest. Finally a compromise was reached with the departments affected, allowing the 'offer' to stand but conditional on certain agreements by the union, and the committee avoided losing credibility as a result of poor preparation.

5. Made a statement of a benefit cost, but could not back it up, not well-prepared.

(Also Information Dissemination.)

6. The negotiator came to the table to discuss cost of living statistics and it became very apparent that he had not done his homework. It not only aborted a meeting but put his credibility/reliability in question which hurt the negotiations for some time.

(Also Information Dissemination, Interaction Facilitation.)

7. At one point of our negotiation, the union representative told our IR Manager that such and such an offer would be accepted and would pass my vote. He would himself and his committee recommend the offer. Our IR Manager had believed him and was going to recommend to his own committee the acceptance of the offer. However, in committee, we knew the past tactics and ways of the union representative. We believed that he was just a monetary (?) person, that he did not have the full leadership to change over the people that would be recalcitrant in assembly. We made an offer 5 cents below in each year. It was to keep as an extra move, if it became necessary. The offer was accepted and it was signed that it would be recommended. At the Union assembly the offer was rejected not for the money, but for a problem that was not talked about at the negotiation. But when we met to settle that problem, the union represen-

tative asked for an extra 5 cents to give more room at his next union assembly. (This was almost a habit to come back to have an extra nickle). We gave him an extra 5 cents on the last year of a three-year contract. I believe our IR manager had forgotten the normal tactics of the union representative.

(Also Decision Participation.)

8. In the 1980 Negotiations, the Company agreed to vacation pay being either a % of earnings or a normal week's pay, whichever is greater. This was agreed to without a "minimum hours of work" requirement to qualify. Without this qualification the company was forced to pay vacation monies to people whom it had not intended to cover.

9. In recent negotiations, we were convinced employees would not strike; therefore, strike vote followed by immediate walkout caught us by surprise and, to a degree, unprepared.

(Also Conflict Management.)

(2) ROLE CLARIFICATION

1. Our Labour Relations Manger and Team do very little other than interpret new clauses or help us in calculating how many operational advantages we have given away.

PRAISE/RECOGNITION--CRITICISM/DISCIPLINE

1. An employee with a very bad work record was finally terminated prior to negotiations of a collective agreement. This employee was re-instated in the company as part of the new collective agreement. This re-instatement of the employee affected the attitudes of both union and non-union employees. Supervisors who had done their job of building a file against the worker were very disillusioned to the point of taking the attitude of "who cares" or "what are we doing all this work for, they will only let the workers off anyway." The majority of union employees felt that the company had made a mistake by re-instating this worker. Their remarks were "if he can get away with that, I guess I can do the same without losing my job." This decision clearly lowered the morale and motivation of the majority of employees.

(Also Problem Solving.)

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