

THE RELATIONSHIP BETWEEN JOB  
SATISFACTION AND ORGANIZATIONAL COMMITMENT  
AS PERCEIVED BY IRRIGATION WORKERS IN A QUASI IRRIGATION  
COMPANY IN JAMAICA

By

Solvalyn Eccles

A DISSERTATION

Submitted To

H. Wayne Huizenga School of Business and Entrepreneurship

Nova Southeastern University

in partial fulfillment of the requirements for the degree of

DOCTOR OF BUSINESS ADMINISTRATION

2003

UMI Number: 3096346

Copyright 2003 by  
Eccles, Solvalyn

All rights reserved.

**UMI**<sup>®</sup>

---

UMI Microform 3096346

Copyright 2003 by ProQuest Information and Learning Company.  
All rights reserved. This microform edition is protected against  
unauthorized copying under Title 17, United States Code.

ProQuest Information and Learning Company  
300 North Zeeb Road  
P.O. Box 1346  
Ann Arbor, MI 48106-1346

A Dissertation

Entitled

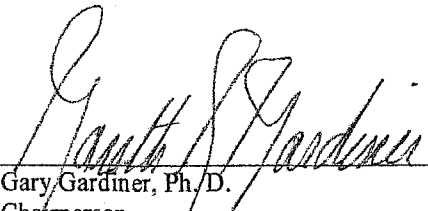
THE RELATIONSHIP BETWEEN JOB  
SATISFACTION AND ORGANIZATIONAL COMMITMENT  
AS PERCEIVED BY IRRIGATION WORKERS IN A QUASI IRRIGATION  
COMPANY IN JAMAICA

By

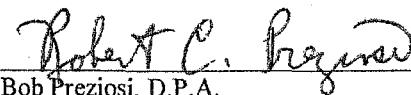
Solvalyn Eccles

We hereby certify that this dissertation submitted by Solvalyn Eccles conforms to the acceptable standards, and as such, is fully adequate in scope and quality. It is therefore approved as the fulfillment of the Dissertation requirements for the degree of Doctor of Business Administration.

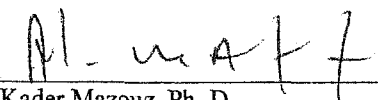
Approved

  
\_\_\_\_\_  
Gary Gardiner, Ph. D.  
Chairperson

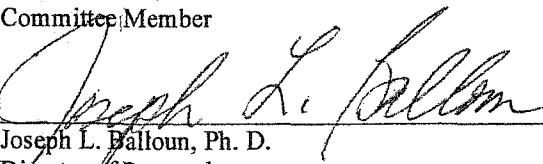
4/30/03  
Date

  
\_\_\_\_\_  
Bob Preziosi, D.P.A.  
Committee Member


5/2/03  
Date

  
\_\_\_\_\_  
Kader Mazouz, Ph. D.  
Committee Member

5/2/03  
Date

  
\_\_\_\_\_  
Joseph L. Balloun, Ph. D.  
Director of Research

5/5/03  
Date

  
\_\_\_\_\_  
J. Preston Jones, D.B.A.  
Dean, Wayne Huizenga Graduate School of Business and  
Entrepreneurship

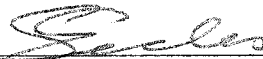
9 May 2003  
Date

Nova Southeastern University  
2003

### CERTIFICATION STATEMENT

I hereby certify that this paper constitute my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, ideas, expressions or writing of another.

Sign



Solvalyn Eccles



## **Abstract**

### **THE RELATIONSHIP BETWEEN JOB SATISFACTION AND ORGANIZATIONAL COMMITMENT AS PERCEIVED BY IRRIGATION WORKERS IN A QUASI IRRIGATION COMPANY IN JAMAICA**

**By**

**Solvalyn Eccles**

#### **The Purpose of The Study:**

The purpose of this study was to measure the nature and magnitude of the relationship between job satisfaction and the organizational commitment of irrigation workers in a Quasi Irrigation Company (Jamaica WI) and to determine if personal characteristics, job characteristics, and organizational characteristics of the employees affect this relationship.

A sample of 164 employees employed by the National Irrigation Commission was selected to complete the surveys and 111 responded. The sample comprise 42.6 percent females and 53.8 percent males, 10 managers/supervisors, 48 technical/engineers, 51 field/support workers, and 55 support services/clerical workers, with 13.5 percent holding college degrees, 31.7 percent technical/vocational training, 27.9 high school diploma, and 26.9 percent having very little formal education. Seventy-eight point eight percent were between 18 and 49 years of age, with 43 .3 percent working at the Irrigation Commission for 10 years or longer.

Four separate measuring instruments were used for this study. They were used to measure job satisfaction and organizational commitment: (a) Hackman-Oldham's Job Diagnostic Survey, (b) Gee-Kilpatrick's Job Satisfaction and Organizational Commitment Outcome Survey, (c) Steers' Organizational Commitment Questionnaire, and (d) Gee-Kilpatrick's Demographic Data Questionnaire. One hundred and four participant's questionnaires were accepted and seven were rejected. The data was then subjected to parametric statistical tests to describe the respondents and answer the research questions.

Statistical Analyses included (i) simple product-moment correlations, (ii) factor analysis, and (iii) canonical correlations to assess the relationship between job satisfaction and organizational commitment as well as between the three variables (job characteristics, personal characteristics, and organizational characteristics) and job satisfaction and organizational commitment responses.

The findings confirmed the first four hypotheses. The first hypothesis hypothesized that intrinsic job satisfaction, as measured by core dimensions and basic motivators, is significantly and positively related to organizational commitment. The second hypothesis anticipated that all job characteristics influenced satisfaction and commitment this was supported by the findings. The third hypothesis anticipated that personal characteristics of the employees would influence satisfaction and commitment. The fourth hypothesis anticipated that organizational characteristics would influence satisfaction and commitment. The fifth hypothesis was not supported by the findings. It was further hypothesized that the pattern of correlations among measures of the seven sets of selected variables matches the degree of linkages among the seven sets specified in the theoretical model. The findings and conclusions drawn from this study has pointed to the need and

importance of continuing research to improve theories surrounding job satisfaction and commitment among a wide cross section of workers in diverse organizational settings and economies.

## ACKNOWLEDGEMENTS

A number of individuals have assisted me in completing this journey, I relied on their love, care and understanding. To my parents, Harold George and Sarah Ann Eccles may your souls rest in peace. I would like to thank my wife Jean Eccles for her patience, heartaches and pain. My daughter, Kimberly, sons, Andrae, Stefan, Xavier, and Kevin, your sacrifices will always be remembered.

I owe special thanks to the members of my Dissertation Committee: Dr. Gary Gardiner (Chairperson), Dr. Bob Preziosi, and Dr. Kader Mazouz (Committee Members), in guiding the preparation of this document, Dr. Joe Balloun, Director of Research - Nova Southeastern University, for the speedy review of the document. The Board and Staff at the National Irrigation Commission Limited (Jamaica WI) who allowed me to use their organization to collect the data. Hamilton, Jasett; Edwards-Gayle, Andrea; Legore, Everette; Cowan, Donna; Leach, Lurene; and Cammock, Viola your assistance with collecting the data was most valuable.

I salute all the authors listed in the reference section of this research. Their work has positively influenced how I approached and solved most of the problems I encountered during the period of studying this research.

I would also like to thank the following persons who participated in many ways untold:

The Administrative Staff - Nova Southeastern University - Especially Cheryl Roxborough & Anders.

The Administrative Staff - National Irrigation Commission Limited (NIC).

The Library Staff - Nova Southeastern University.

My Professors - Nova Southeastern University (too many to name).

My Friends, especially those whose support and encouragement have motivated me to pursue and successfully complete this program.

## TABLE OF CONTENTS

	Page
Approval.....	ii
Certification.....	iii
Abstract.....	iv
Acknowledgement.....	v
List of Tables.....	vi
List of Figures.....	vii
Chapter.	
1. INTRODUCTION.....	1 - 12
Statement of Problem.....	13 -13
Purpose of the Study.....	13 - 13
Need for the Study.....	13 -15
Dissertation and Research Goals.....	15 - 16
Research Question.....	16 - 17
Variables.....	17 - 18
Hypotheses.....	18 - 20
Research Significance.....	20 - 21
Justification and Rationale For This Research.....	21 - 22
Definition of Terms.....	22 - 23

Chapter

II. LITERATURE REVIEW

Introduction.....	24 - 25
Content Theories	
Maslow's Hierarchy of Needs.....	26 - 27
Alderfer's ERG Theory.....	27 - 28
Herzberg's Two Factor Theory.....	28 - 30
McClland's Learned Needs Theory.....	30 - 31
Comparison of Four Content Theories of Motivation.....	32 - 32
Process Theories.....	
Motivation Through The Design of Work.....	33 - 34
Job Characteristics Model.....	34 - 35
Theoretical Models.....	35 - 37
The Gee - Kilpatrick Model.....	37 - 42
Review of Existing Theoretical Literature.....	43 - 46
Organizational Commitment.....	46 - 47
Job Satisfaction.....	47 - 48
Outcomes.....	48 - 49

Chapter

III. METHODOLOGY

Restatement of Problem.....	50 - 50
Research Design and Methodology.....	50 - 51
Proposed Hypotheses.....	51 - 53
Population and Sample.....	53 - 54
Instrumentation.....	54 - 54
Job Diagnostic Survey.....	55 - 57
Organizational Commitment Questionnaire.....	57 - 59
Job Satisfaction / Organizational Commitment Outcomes Survey.....	60 - 61
Demographic Data Questionnaire.....	61 - 62
Data Collection Process.....	62 - 63
Analysis of Data.....	63 - 65

Chapter

IV. FINDINGS OF THE STUDY

Overview.....	66 - 67
Demographic Information.....	67 - 69
Job Task Characteristics.....	69 - 71
Organizational Characteristics.....	71 - 72
Behavioral Outcomes.....	73 - 75
Descriptive Analysis of Job Diagnostic Survey (JDS).....	75 - 75
Descriptive Analysis of Organizational Commitment Questionnaire (OCQ).....	76 - 76
Descriptive Analysis of Job Satisfaction and Organization Commitment	

Outcomes Survey (JOOS).....	76 - 77
-----------------------------	---------

#### Study Results

Hypothesis 1.....	77 - 83
Hypothesis 2.....	83 - 84
Hypothesis 3.....	84 - 85
Hypothesis 4.....	85 - 88
Hypothesis 5.....	88 - 99

#### Chapter

### V. SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Summery.....	100 - 101
Conclusions	
Research Question One.....	101 - 102
Research Question Two.....	102 - 102
Research Question Three.....	102 - 102
Research Question Four.....	103 - 103
Research Question Five.....	103 - 103
Discussion of Findings.....	104 - 106
Summary of Conclusions.....	107 - 107
Implications and Recommendations.....	107 - 110
Recommendations for Future Study.....	110 - 112



## APPENDICES

A. The Job Diagnostic Survey.....	113 - 118
B. Organizational Commitment Questionnaire.....	119 - 120
C. Job Satisfaction & Organizational Commitment Outcomes Survey.....	121 - 123
D. Employee Demographic Instrument.....	124 - 126
E. Employees Demographic Survey Instruments Responses.....	127 - 135
F. Correlation Between Organizational Commitment & Basic Motivators.....	136 - 138
G. Letter To The Chairman of NIC.....	139 - 141
H. Letters To Colleague at NIC.....	142 - 143
I. Letter to J. Richard Hackman, Ph. D.....	144 - 145
J. Letter to Richard, T. Mowday, Ph. D.....	146 - 147
REFERENCES.....	148 - 157
BIBLIOGRAPHY.....	158 - 169

## LIST OF TABLES

### Table

1. Kouzes and Posner's Leadership Practices and Behavior strategies.....	8
2. Managerial Perceptive of Content and Process Theories of motivation.....	26
3. Comparison of Four Content Theories of motivation.....	32
4. Frequency Distribution.....	127 - 135
5. Correlations.....	78 - 80
6. Sum of Significant Canonical $R^2$ s.....	90
7. Distance Matrix of the Number of Links Between Sets.....	91
8. Eigenvalues By Lautensclager's Tables.....	92
9. Eigenvalues Before Varimax Rotation.....	93
10. Rotated factor Matrix Factor Loading and Varimax Rotation.....	95
11. Component Transformation Matrix.....	95
12. Factor Loading Summary By Size Loading.....	97
13. Correlation Between Organizational Commitment and Basic Motivators.....	136 - 138

## LIST OF FIGURES

1. GEE - PATRICK integrated Job Satisfaction and Organizational Commitment model.....	39
2. Irrigation Professions Occupational Categories.....	62
3. Scatter Plot - Relationship Between Job satisfaction and Organizational Commitment.....	82
4. Theoretical Model Showing Links Between Sets.....	91
5. Scree Plot.....	94

# CHAPTER I

## Introduction

In this era of increasing competition and scarce resources, maximizing employees' productivity, job satisfaction, and commitment to organizations are critical issues for administrators (Brown & Schultz, 1991; Peters 1987,1988, 1992; Robbins, 1993). While there are some mixed results, most research findings have suggested that employees who are experiencing job satisfaction are more likely to be productive (Agho, Mueller, & Price, 1993; Vandenberg & Lance, 1992) and to stay on the job (McNeese-Smith, 1996; Taunton, Krampitz, & Woods 1989; Tett & Meyer, 1993). To get employees to be committed requires leaders to understand what effect their actions have on the employees; "leaders must move us towards commitment" (Gardner, 1990, p, 191) and the empowerment of their workers.

From the 1970's to the present, many businesses have been undergoing structural adjustments; in response to the impact of globalization, which increases competition, and the use of scarce resources, resulting in downsizing and turnover challenges. In the past, employees joined an organization and stayed until their retirement (Lee & Mowday, 1992). Due to the possibility of downsizing, some employee's attitudes and commitment may be changing. Loyalty and job security, we're told, have gone the way of the dodo bird, instead we have a new societal contract that promises interesting work and greater employability in exchange for commitment to excellence. But how do leaders create commitment? (Posner B. & Kouzes J, 1995). While numerous factors have been linked with turnover, job satisfaction is the most often mentioned (Blegen, 1993; Judge, 1993).

As most companies try to cope with the effects of downsizing and staff turnover; those employees remaining with the company are often asked to do more with less. Thus it is important that the administrators and managers understand the concepts of organizational commitment and job satisfaction and attempt to attract and retain employees capable of exhibiting those behaviors.

Organizational commitment has been a topic of discussion in a number of studies and has been identified as an important variable in understanding the work behavior of employees in organizations (Hrbiniak & Alutto, 1972; Mowday, Porter, & Steers, 1979; Porter, Steers, Mowday, & Boulian, 1974; Steers, 1977; Meyer & Allen, 1991). Organizational commitment of individuals has been found to impact performance, absenteeism, attendance, and turnover (Matheiu & Zajacc, 1990). Besides the impact of organizational commitment on the individual, commitment may represent a useful indicator of the effectiveness of an organization (Steers, 1977). Organizational commitment is defined as the relative strength of an individual's identification with and involvement in a particular organization (Mowday, Porter & Steers, 1982, Tett & Meyer, 1993) and job satisfaction refers to a person's general attitude towards the job or the extent to which employees like their work (Agho et al., 1993).

Steers' and Mowday's (1981) research contributes greatly to the basic understanding of employee attachment to an organization. Recent research has found that organizations could protect their employees by heuristically producing an environment that promotes job satisfaction and commitment to the organization (Berry, Parasyraman, & Zeitbaml, 1990). Job satisfaction also affects customer outcomes. Many studies have demonstrated a positive relationship between workers' job satisfaction levels and

customers' satisfaction (Parrinello, 1990; Shian, 1990; Weisman & Nathanson, 1985). It is likely that all workers provide better service when they are satisfied with their jobs and when they are committed to their organization (McNeese-Smith, 1996).

Undoubtedly, factors affecting productivity, job satisfaction, and organizational commitment are complex. Since the early industrial research of Argyris (1957, 1964), Herzberg (1957, 1959), Likert (1961, 1967), and McGregor (1961), authors and researchers have postulated a relationship between productivity, job satisfaction, and commitment to the organization. (McNeese-Smith, 1996, p. 161). Current research has identified a number of variables that appear to contribute to either job satisfaction or organizational commitment. It is therefore worth noting that during the early 1990's Meyer and Allen (1990) developed a three-component approach to organizational commitment. The three components include:

1. Affective commitment: Affective commitment involves the variables that describe the characteristics of the job tasks performed by the worker.
2. Continuance commitment: Continuance commitment involves the variables that describe characteristics of organization in which tasks are performed.
3. Normative commitment: Normative commitment involves the variables that describe characteristics of workers who perform the tasks (Agho, Mueller, & Price, 1993; Agho, Price and Mueller, 1992; Blegen, 1993; Lee, Ashford, Walch, & Mowday, 1992; Lee & Mowday, 1992). Dunham et al. (1994) found that the Mowday et al. (1982) Organizational Commitment Questionnaire identified strongly with the Affective Commitment scale of Meyer and Allen. In other research, Mark Somers (1995) found that Affective (attitudinal) Commitment was

a better predictor of organizational commitment than Meyer and Allen's other two components.

Given the reality of these issues, organization leaders clearly have to understand and acknowledge the influence their leadership styles and resultant credibility have on their subordinates' commitment. Kouzes and Posner (1993) acknowledge high levels of credibility and increased willingness of people to exert themselves more on behalf of their respective organizational shared values and vision. Therefore, it would be quite realistic to argue that some organizations are focusing increased attention and efforts on ways of improving their employees' motivation to work through intrinsic job satisfaction and organizational commitment.

A strong belief in organizational values is associated with an individual's value system becoming aligned with that of the organization as part of the development of organizational commitment. Kagan (1958) states that identification is when the organization's attributes, motives, and characteristic are part of the person's psychological orientation. A willingness to exert considerable effort on behalf of the organization, and a strong desire to maintain membership in the organization reflect the behavioral intentions of the individual. To shed light on the concept of commitment, Robert Dailey (1988) states: "Organizational commitment is more than loyalty to an employer. It means that the employee actively promotes the organization to colleagues, customers, and critics. The employee also shows willingness to give something of him or herself to the organization. When employees defend their employer and actively promote the organization goals, they are strengthening their organizational commitment" (p. 149).

To make the concept of commitment more useful, a better understanding of the process by which commitments are formed and how these commitments influence other behavior in organizational setting is needed (Steers, 1977). Organizational commitment has both antecedents (causes) and consequences (outcomes). Steers (1997) outlines three categories of antecedents: personal characteristics, job characteristics, and work experiences. Personal characteristics include age, education, and need for achievement. Job characteristics include challenge, opportunities for interaction, and feedback. Work experiences include attitude toward the organization. The second aspect of the model suggests that commitment leads to several specific outcomes (consequences). Consequences provided by Steers (1997) include desire to remain, attendance, employee retention, and job performance. Employees who have strong commitment to the organization will desire to stay. Positive commitment often means lower absenteeism and better job performance that is related to quality and quantity of service delivery.

A variable that influences organizational commitment but has received very little research attention is "Job Fit". Another area is the relationship of leadership practices antecedent to organizational commitment. The impact of leadership practices as an antecedent to organizational commitment is also an unexplored variable. A significant factor within any organization is leadership. According to research by Robert Kelly (1992), followers are becoming more and more dissatisfied with the quality of leadership behavior:

1. Two out of five bosses have questionable abilities to lead.
2. Only one in seven leaders is someone that followers see as a potential role model to emulate.



3. Less than half of the leaders are able to instill trust in subordinates.
4. Nearly 40 percent have "ego" problems, are threatened by talented subordinates, have a need to act superior, do not share the limelight (Kelly, 1993, p. 201).

A U.S. Department of labor statistics states, "46 percent of workers that quit their job (1996) did so because they felt unappreciated" (Canfield and Miller, 1996, p. 161).

If followers are dissatisfied with the practices of their leaders to the point of quitting their jobs, then what practices by leaders will help create more committed followers? Research has shown that leadership initiatives are often correlated with organizational commitment (Mathieu & Zajac, 1990). However, little research has been carried out examining how leadership practices impact organizational commitment.

Barry Posner and James Kouzes (1988b) developed a leadership practices model that proposes five practices that are most important for good leaders:

1. Challenging the Process
2. Inspiring a Shared Vision
3. Enabling Other to Act
4. Modeling the Way
5. Encouraging the Heart

These five practices are what help leaders become successful. The instrument developed by Kouzes and Posner called the Leadership Practices Inventory is used to measure the five practices of leadership. The Leadership Practices Inventory has been validated and tested within several studies.

Research leading to an understanding of the leadership practices that define organizational commitment could have beneficial effects both from an organizational and

an individual viewpoint. Determining the leadership practices that best influence organizational commitment would provide leaders with valuable information regarding the turnover, performance, and effectiveness of the individuals within an organization, it is therefore of value to study these topics. Kouzes and Posner (1997) concluded that leadership is simply a set of behaviors that supervisors and managers at all hierarchical levels and all levels of seniority, experience and education can learn and apply. The expected outcome of all public, private, or for-profit organizations is the achievement of operational and strategic objectives with more committed employees. Kouzes and Posner (1988) suggest the process of extraordinary achievements through ordinary people comes from following the five leadership practices each containing two basic strategies.

Table 1. Kouzes and Posner's Leadership Practices and Behavior Strategies.

LEADERSHIP PRACTICES	BEHAVIOR STRATEGIES
Challenging the Process	<p>(a) Search out challenging opportunities to change, grow, motivate, and improve; and</p> <p>(b) Experiment, take risks, and learn from the accompanying mistakes</p>
Inspiring a Shared Vision	<p>(a) Envision an uplifting and ennobling future; and</p> <p>(b) Enlist others in a common vision by appealing to their values, interests, hopes and dreams.</p>
Enabling Others to Act	<p>(a) Foster collaboration by promoting cooperation goals and building trust; and</p> <p>(b) Strengthen people by giving power away, providing choice, developing competence, assigning ethical tasks, and offering visible support.</p>

Modeling the Way	<p>(a) Set the example by behaving in ways that are consistent with shared values; and</p> <p>(b) Achieve small wins that promote consistent progress and build commitment</p>
Encouraging the Heart	<p>(a) Recognize individual contributions to the success of every project; and</p> <p>(b) Celebrate team accomplishments regularly.</p>

Source: Kouzes and Posner (1988)

### Challenging the Process

Challenging the Process consists of two components: (a) search out challenging opportunities to change, grow, innovate, and improve; and (b) experiment, take risks, and learn from mistakes. Kouzes and Posner's (1988) research found that most of their subjects talked about extraordinary leadership during times of revolution and not continuation. The search for challenging opportunities such as when new products or services are being developed, or new territories are being explored is when leadership prospers.

Experiment, take risks, and learn from the accompanying mistakes is the second commitment of the challenging the process practice. For organizations to achieve a climate of sustained competitive advantage, the individuals within the organizations must

adopt experimentation with analytical risk-taking. The overall objective is to maximize performance while carefully weighing the advantages and disadvantages of every risk (Kouzes & Posner, 1988).

### Inspiring a Shared Vision

Inspiring a Shared Vision consists of two components: (a) envision an uplifting and ennobling future; and (b) enlist others in a shared vision by appealing to their values, interests, hopes, and dreams. Kouzes and Posner (1988) found that leaders are not satisfied just continuing to produce and/or service the same constituencies, customers, and programs, they want to be innovative in developing new products and services, and reaching new markets, customers, and territories. Leaders view their futures as constrained only by the scope of their imaginations. They use their imagination to build intensity and determination in visualizing future opportunities and challenges.

Kouzes and Posner (1988) conclude that leaders also possess the ability to enlist others in a common vision by appealing to their values, interest, hopes, and dreams. They communicate their vision with others because leaders seek company and not solace in doing things differently for the sake of progress and not boredom. Quite literally, leaders desire to involve and excite employees to make a collaborative effort to achieve uniqueness and not complacency.

### Enabling Others to Act

Enabling Others to Act consists of two components: (a) foster collaboration by promoting cooperative goals and building trust, and (b) strengthen people by giving

power away, providing choice, developing competence, assigning critical tasks, and offering visible support (Kouzes & Posner, 1988). Leaders accomplish extraordinary things by ensuring that all divisions, work units, and internal and external interests are involved in the process for developing cooperative goals.

Kouzes and Posner (1988) identify the second part for enabling others to act as the commitment of strengthening people by giving power away, providing choice, developing competence, assigning critical tasks, and offering visible support. Extraordinary managers understand this principle; these managers seek to create and sustain an organizational culture where employees want to do their best because of internally imposed controls and not those that are externally directed. The method of accomplishing this outcome is managers who give their authority and responsibility to subordinates to make them become stronger and more capable (Kouzes & Posner, (1988).

### Modeling the Way

Modeling the Way consists of two commitments: (a) set an example by behaving in ways that are consistent with shared values, and (b) achieve small wins that promote consistent progress and build commitment (Kouzes & Posner, 1988). Setting an example by behaving in ways that are consistent with shared values is easy for many leaders because they accept the challenge of “walking the walk”. Employees usually utilize two senses for assessing their supervisors' commitment to organization processes: hearing and vision. First employees listen to what their bosses say, and then they watch what they do. Only with congruency between their words and deeds will these leaders be judged to have credibility.

Kouzes and Posner (1988) conclude that achieving small wins that promote consistent progress and build commitment is the final commitment for modeling the way. Extraordinary leaders understand that implementing change and achieving results is a slow, steady, consistent process. To talk only in terms of long-term strategic objectives creates a situation where it is difficult to measure progress, commitment, and satisfaction. Visionary leaders know the 'true' value of incremental assignments to achieve progress for modeling the way.

#### Encouraging the Heart.

Encouraging the Heart consist of two components: (a) recognize individual contribution to the success of every task; and (b) celebrate team accomplishments regularly (Kouzes & Posner, 1988). Annual performance evaluations are regrettably the only source of feedback for many employees. However, extraordinary leaders aggressively seek opportunities and options for formally acknowledging individual contributions throughout the work life. Celebrations and recognition are meaningful, individualized, and reflect the achievement of success and contributions towards success.

Kouzes and Posner (1988) conclude that celebrating team accomplishments regularly demands highly published forums, partying, and yelling about team achievements. The overall objective is to get everyone involved in hard work to achieve the objectives, letting them plan the celebration, and then letting them celebrate. It is extremely important to celebrate using themes representing the obtainment of the key values, hard work, and dedication to those who contributed. Praising team accomplishments builds trust, commitment to work and creates satisfaction.

### Statement of the Problem

This research will seek information regarding perceived leadership practices and organizational commitment at a leading Developing Country - National Irrigation Company. It is assumed that leadership practices may potentially have had an impact on workers job satisfaction and their organizational commitment; however, no research has yet been done to demonstrate the impact of these claims.

### Purpose of the Study

The purpose of this study will be to measure the nature and magnitude of the relationship between job satisfaction and the organizational commitment of irrigation workers [(professionals), administrators, managers, engineers, accountants, field supervisors and support staff] at an established National Irrigation Company and to determine if workers characteristics, job-task characteristic, and organizational characteristics of the employees affect this relationship.

### Need for the Study

The company under study is a National Irrigation Company (NIC) pivotal to the development of the agricultural sector of the country in which it is located. This company has traditionally practiced worker participation programs.

Numerous public administration studies (e.g. Romzek, 1990; Perry & Wise, 1990; Dobel, 1990) have identified the necessity of studying the motivation of public sector employees. Their primary research suggests that organizational commitment is a key to increased public service motivation, and they recommend that more empirical studies of



employee commitment are needed to understand its motivational function in public organizations.

The Volcker Commission (1989) suggests that organizational commitment is a key to increasing public service motivation and recommends more empirical studies of employee commitment. Such studies are warranted for helping understand the motivational base of public sector employees. This research should help to understand the motivational base of irrigation workers as one example of a public sector organization within a developing country. Thus, research to evaluate the level of job satisfaction and worker commitment is relevant management insights for public sector companies such as the National Irrigation Commission (NIC), along with answers to questions such as:

1. Why do employees act the way they do?
2. How do managers obtain the cooperation of employees?
3. Why is it that employees in the same job doing similar tasks in the same department may experience different levels of intrinsic satisfaction? (Wright & Bonnet, 1992).

The answers to these questions involve many variables, but the key element is the concept of motivation (Burton, 1994; Herzberg, 1987; Lacy, 1994).

Finding ways of motivating employees is one of the major challenges for most businesses today. A substantial amount of research has been done on motivation theory. This research will attempt to explain work motivation through two basic types of motivational theories: (a) content and (b) process theories. Content theories are concerned with what energizes behavior, whereas process theories focus on how behavior is energized

(Herzberg, 1987). The conceptual framework of this research will be based on content theories of motivation and, more specifically, on intrinsic motivation.

Irrigation administrators and managers endeavor to maximize employees' productivity, job satisfaction, and organizational commitment in this conflicting and uncertain environment (caused by globalization) that consists of (a) mixed and confused goals of public accountability and service profitability; (b) discordant and multiple customer markets (e.g., farmers, industrial users, domestic users and manufacturers); dual, internal authority hierarchies within the irrigation sector (Irrigation Board, Government Ministry, Farmers Associations and Lobby Groups, Staff Associations and Trade Unions); rising costs of doing business (e.g., rehabilitation works, introduction of new and expensive technology, wage increases [catching up with inflation and currency devaluation]; and intense global competition for foreign loans and local competition for government budgetary support. These factors have forced the irrigation company to implement imaginative strategies to make effective use of its existing employees. The need for this research is evident by the conditions described and the fact that the local irrigation administrators and their management teams are exploring ways to improve employee motivation to work through improving intrinsic job satisfaction.

#### Dissertation and Research Goals

The goals of this dissertation research are to: (a) investigate the motivation to work, and explain if employees in the same job doing similar task experiences different levels of intrinsic satisfaction, (b) to identify acceptable and appropriate management tools for improving employees' motivation to work through intrinsic job satisfaction, (c)

to identify ways to raise employees' involvement in work related decision-making process, (d) to identify strategies aimed at increasing the motivational properties of different jobs in an organizational system as experienced or perceived by employees, and (e) to investigate a basis for job diagnosis and the evaluation of job redesign projects (irrigation).

### Research Questions

This research will address the following five questions posed by combining the Job Dimensions Models by Hackman-Oldham and Herzberg and the Organizational Commitment Model by Steers:

1. What is the relationship between job satisfaction and organizational commitment as perceived by irrigation workers attached to the National Irrigation Commission (NIC), Jamaica?
2. What is the relationship between employees' job-task characteristics (skill variety, task identity, task autonomy, task significance, feedback) and their perception of job satisfaction and organizational commitment?
3. What is the relationship between employees' personal characteristics (age, gender, profession, education, length of time (as irrigation professional), length of time (with the company), length of time in present job classification (job title), and their perception of job satisfaction and organizational commitment?
4. What is the relationship between employees' organizational characteristics (leadership, supervision, co-workers, workgroup cohesion, organizational

dependability), and their perception of job satisfaction and organizational commitment?

5. Is there a pattern of correlation among measures of the following sets of variables (core job dimensions/job characteristics, organizational commitment, job satisfaction and outcomes) and does these matches the degree of linkages among the sets mentioned in the theoretical model?

### Variables

Independent variables are those variables that can be altered by the management of an organization (Hersey & Blanchard, 1993). Leadership skills, strategies, and behavior are examples of independent variables found in organizational behavior. The model that will be used in this research is a combination of the Job Dimension Models by Hackman-Oldham and Herzberg and the Organizational Commitment Model by Steers; identify specific variables: skills variety, task identity/completion, task autonomy, task significance, feedback, achievement/accomplishment, recognition, challenging work, personal growth, age gender, education, profession, length of time as an irrigation worker, length of time with the company, length of time in present job classification, job title/present position, leadership, supervision, co-workers, workgroup cohesion, and organizational dependability. The survey instruments that will be used to measure these variables include the Job Diagnostic Survey (JDS), the Organizational Commitment Questionnaire (OCQ), the Job Satisfaction and Organizational Commitment Outcomes Survey (JOOS), and the Demographic Data Survey.

Dependent variables are outputs or end-results that reflect the achievement of an organization (Hersey & Blanchard, 1993). Examples of dependent variables often used in organizational behavior consist of organizational and individual outcomes such as productivity, satisfaction, tardiness, absenteeism, and turnover. The dependent variables to be measured will be job satisfaction, to be measured by the JDS, and organizational commitment Questionnaire.

After these variables are tested individually, the variables in the theoretical model will be grouped into sets to look at the overall pattern of relationships. All the variables will be grouped into the following subsets to test for their overall correlations. The subsets will consist of the following groups: (a) Hackman-Oldham's core job dimensions/Steers' job task characteristics, (b) Herzberg's basic motivators, (c) Steers' personal characteristics, (d) Steers' organizational characteristics, (e) Steers' organizational commitment, (f) Herzberg, Porter and Stone's job satisfaction, and (g) Steers' outcomes.

### Hypotheses

The general hypothesis of this study will be that intrinsic job satisfaction correlates positively and significantly with commitment to the organization. Therefore, based on the dependent and independent variables, the following hypotheses are identified in the null and alternative positive forms:

#### Hypothesis 1

H01: There is no significant correlation between intrinsic job satisfaction, as measured by core dimensions and basic motivators, and organizational commitment as perceived by

the National Irrigation Commission (NIC) workers [Support Service / Clerical; Managers / Supervisors; Engineering / Technical; and Field / System Support Workers].

HA1: There is a significant correlation between intrinsic job satisfaction, as measured by core dimensions and basic motivators, and organizational commitment as perceived by the (NIC) workers [Support Service / Clerical; Managers / Supervisors; Engineering / Technical; and Field / System Support Workers].

### Hypothesis 2

H02: There is no correlation between employees' job-task characteristics (skill variety, task identity, task autonomy, task significance, feedback) and their perception of job satisfaction and organizational commitment.

HA2: There is a correlation between employees' job-task characteristics (skill variety, task identity, task autonomy, task significance, feedback) and their perception of job satisfaction and organizational commitment.

### Hypothesis 3.

H03: There is no correlation between employees' personal characteristics (age, gender, profession, education, length of time as an irrigation worker, length of time with the NIC, length of time in present job classification, job title) and their perception of job satisfaction and organizational commitment.

HA3: There is a correlation between employees' personal characteristics (age, gender, profession, education, length of time as an irrigation worker, length of time with the NIC, length of time in present job classification, job title) and their perception of job satisfaction and organizational commitment.

#### Hypothesis 4

H04: There is no correlation between employees' organizational characteristics (leadership, supervision, co-workers, workgroup cohesion, organizational dependability) and their perception of job satisfaction and organizational commitment.

HA4: There is a correlation between employees' organizational characteristics (leadership, supervision, co-workers, workgroup cohesion, organizational dependability) and their perception of job satisfaction and organizational commitment.

#### Hypothesis 5

H05: The pattern of correlations among measures of the seven sets of variables (core job dimension/job characteristics, basic motivators, personal characteristics, organizational characteristics, organizational commitment, job satisfaction, and outcomes) does not match the degree of linkages among the seven sets specified in the theoretical model.

HA5: The pattern of correlations among measures of the seven sets of variables (core job dimension/job characteristics, basic motivators, personal characteristics, organizational characteristics, organizational commitment, job satisfaction, and outcomes) matches the degree of linkages among the seven sets specified in the theoretical model.

#### Research Significance

It is expected that responses from the survey will add to the literature on job satisfaction and organizational commitment. In addition, it is also expected that these responses will help the NIC managers and administrators develop solutions to their organization's staff current morale, productivity, and staffing challenges. The hope is that the research results will enable managers to promote job satisfaction. This will help the

NIC to reduce any anticipated work disruption of downsizing and costly turnover among its staff. Also because job satisfaction and organizational commitment seem to play key roles in the occurrence of both turnover and burnout in the human services, the implications of understanding the etiology of satisfaction and commitment extend beyond the concerns of the well-being of employees to include the quality of services delivered to the company's customers (Porter, Steers, Mowday, & Boulian, 1974; Jayarante & Chess, 1984).

#### Justification and Rationale for this Research

The global economy is shrinking while competition among and within the economies for the use of available resources is taking on new meaning and actions that will eventually exclude the very unproductive and slow to adjust companies. Thus, organizations are continually looking at their workload, unit costs, productivity, service, and staff (McNeese-Smith, 1996). Research shows that managers need reliable measurement techniques to monitor their performance standards (Swiss, 1992). This being the case, these managers (especially the NIC/ irrigation company) can utilize the instruments and findings from this research to perform analysis before downsizing or realigning their organization.

1. In addition, this research can also be used to develop job redesign programs and to identify strategies for improving employee motivation and productivity (e.g., to determine the existing potential of a job for engendering internal work motivation, to identify these specific job characteristics that are most in need of improvement,



and to assess the "readiness" of employees to respond positively to "enriched" work).

2. Also, the model that will be used in this study can serve as a framework for assessing and interpreting measurements collected to evaluate the effect of changes that will be carried out (e.g., to determine which job dimension will and will not change), to assess the impact of the changes on the affective and motivational responses of employees, and to test for any past change attractions in the growth need strength of the employees whose jobs were redesign (Hackman & Oldham, 1976, pp. 275-276).

In addition, previous research findings show that a proven gauge of job satisfaction is the use of a satisfaction survey (Hyde, 1972).

### Definition of Terms

Definitions are offered for the following words and phrases that have been introduced, have not yet been defined and will be used repeatedly in this research:

1. Organizational commitment is defined as the "relative strength of an individual's identification with and involvement in a particular organization (Mowday et al., 1979, p. 226)," Three factors help explain the definition: (a) a strong belief in and acceptance of the organization's goals and values; (b) a willingness to exert considerable effort on behalf of the organization; and (c) a strong desire to maintain membership in the organization. Organizational commitment is measured by computing an average score on the organizational commitment

questionnaire and could have a possible range of zero (lowest level of commitment) to seven (highest level of commitment) for each individual.

2. Personal characteristics consist of variables, which help explain the individual. This include factors such as job classification, age, gender, education, and tenure. Specifically, for this research gender and job classification will be tested.
3. Job Classification is described, as weather the employee is a manager or non-manager.
4. Age is described as the age of the respondent.
5. Educational Level is described as the highest level of education attained by the individual.
6. Tenure is described as the total amount of time that individual has been employed by the organization.
7. Job Task describes the work the individual is employed to perform.
8. Turnover describes the attrition rate of employees.
9. Leadership practices are the tasks of a leader (administrator, manager or supervisor).
10. The Leadership Practices Inventory (LPI) is an instrument, which examines leadership practices, developed by James M. Kouzes and Barry Z. Posner (1988a).
11. Work motivation is generally defined as a series of energizing forces that originate within and beyond an individual.

## CHAPTER II

### Literature Review

#### Introduction

Organization/company managers may be adept at planning and organizing their resources, but unless they can motivate their staff to work effectively to achieve organizational goals, they cannot accomplish their mission (Rakich, Longest, & Darr, 1992). Finding ways of motivating employees was one of the major issues in the 1990's and presumably will be in this current decade. A substantial amount of work has been done on motivation theory and what motivates employees (Burton, 1994; Frings, 1993; Kennish, 1994; Lacey 1994). Work motivation is generally defined as a series of energizing forces that originate within and beyond an individual. These forces both initiate the work-related behavior and determine the nature, direction, intensity, and duration of the individual's behavior (Higgins, 1991; Holt, 1990; Lock & Wood, 1990; Mountain, Bowie & Dobbs, 1990).

Because human motivation is not well understood, a confusing diversity of theories has developed to explain it. At present, there is disagreement as to how motivation occurs in people, as well as what its causes are. Significant research continues, and eventually motivation may be completely understood. Until then, however, knowledge about motivation will remain piecemeal. One consequence of incomplete knowledge is that many competing theories are vying to explain motivation. Another consequence is that students of management must absorb many theories and a great deal of related information to understand motivation (Rakich et al., 1992, p. 501).

The most important motivation theories can be divided into two broad categories: content theories and process theories (Herzberg, 1987).

1. Content theories focus on the internal needs and desires that initiate, sustain, and eventually terminate behavior. They focus on what motivates employees.
2. In contrast, process theories seek to explain how behavior is initiated, sustained, and terminated.

Combined, these theories define variables and explained motivated behavior and show how they interact and influence each other to produce certain behavior patterns (Rakich et al., 1992, p. 501).

Table 2 (Gibson, Ivancevich, & Donnelly, 1991) summarizes examples of the most important theoretical development in both categories from a management perspective. Perhaps the most widely recognized content theory of motivation, and certainly one of the most important, was that of Abraham Maslow half a century ago (Herzberg, 1987).

Table 2

## Managerial Perceptive of Content and Process Theories of Motivation

Theoretical Base	Theoretical Explanation	Founder of the Theories	Managerial Application
Content	Focuses on factors within the person that energize, direct, sustain, and stop behavior. These factors can only be inferred.	<u>Maslow</u> - five-level need hierarchy <u>Alderfer</u> - three-level hierarchy (ERG) <u>Herzberg</u> - two major factors called hygiene-motivators <u>McClelland</u> - three learned needs acquired from the culture: achievement, affiliation, and power	Managers need to be aware of differences in needs, desires, and goals because each individual is unique in many ways.
Process	Describes, explains, and analyzes how behavior is energized, directed, sustained, and stopped.	<u>Vroom</u> - an expectancy theory of choices <u>Adams</u> - equity theory based on comparisons that individuals make <u>Locke</u> - goal-setting theory that conscious goals and intentions are the determinants of behavior <u>Skinner</u> - reinforcement theory concerned with the learning that occurs as a consequence of behavior.	Managers need to understand the process of motivation and how individuals make choices based on preference, rewards, and accomplishments.

Source: Gibson, Ivancevich, Donnelly, 1991

### Content Theories

#### Maslow's Hierarchy of Needs

Abraham Maslow, a psychologist, formulated a theory of motivation that stressed two fundamental premises: (a) human beings are wanting beings whose needs depend on what they already have and (b) human needs are arranged in a hierarchy. The lowest level needs are the physiological needs and the highest-level needs are the self-actualization needs. Maslow's needs stress the idea that, within the hierarchy, a person attempts to satisfy the more basic needs before directing behavior towards satisfying upper-level needs.

From lowest to highest, Maslow identifies five categories of needs (Maslow, 1954, 1968):

1. Basic physiological needs. This category includes basic survival needs such as air, food, water, and shelter.
2. Safety and security needs. Once survival needs are met, attention is turned to ensuring continued survival by protecting oneself against physical harm and deprivation.
3. Affection and social activity needs. This third level relates to people's social and gregarious, not the quasi-physical needs of the first two levels. This level reflects people's need for association or companionship, for belonging to groups, and for giving and receiving friendship, affection, and love.
4. Esteem and status. The need for self-respect or self-esteem results from awareness of one's importance to others.
5. Self-actualization needs. This highest level of needs includes developing one's potential. It is evidenced by the need to be creative and the need to have opportunities for self-expression and self-fulfillment.

### Alderfer's ERG Theory

Building on Maslow's theoretical base, an improved theory was developed by Clayton Alderfer, who agrees with Maslow that individual needs are arranged in a hierarchy. In Alderfer's view, however, the hierarchy of needs is more accurately conceptualized as having only three distinct categories, not five as Maslow had hypothesized (Rakich et al., 1992, p. 503). The three categories are existence needs, related-ness needs, and growth needs; thus, the title of the ERG theory of motivation (Alderfer, 1972). Alderfer's ERG theory is similar to Maslow's hierarchy of needs. The

theories differ, however, in an important respect: the manner in which needs predominate in influencing behavior. Alderfer's three categories of human needs can be described as follows:

1. Existence needs. These include material and physical needs, needs that can be satisfied by such things as air, water, money, and working conditions.
2. Relatedness needs. These include all needs that involve other people, needs satisfied by meaningful social and interpersonal relationships. Relatedness needs include anger and hostility, as well as more positive needs such as friendship.
3. Growth needs. These include all needs involving creative efforts, needs satisfied by an individual through creative or productive contributions.

#### Herzberg's Two-Factor Theory

Fredrick Herzberg takes a different approach to the study of what factors motivate human behavior in the workplace. His theory is largely based on Maslow's needs hierarchy. The key difference between Herzberg and Maslow's theories is that Herzberg proposes two different influences in the workplace. Hygiene factors affect job dissatisfaction, and motivators affect job satisfaction (Rakich et al., 1992 p. 505)

Herzberg (1987) and his associates conclude that job satisfaction consists of two separate dimensions, and they postulate a "two-factor" theory of motivation. Herzberg's two-factor theory is most useful in describing intrinsic motivation. This theory has been widely applied by managers concerned with how to motivate their employees (Burton, 1994; Higgins, 1991; Holt, 1990; Lacey, 1994; Mountain et al., 1990). According to Herzberg (1987), two unique dimensions may be used to describe motivation: extrinsic

factors (hygiene) and intrinsic factors (motivators). Herzberg identifies 10 hygiene or maintenance factors:

- (a) Organizational policy and administration
- (b) Technical supervision
- (c) Interpersonal relations with supervisor
- (d) Interpersonal relations with peers
- (e) Interpersonal relations with subordinates
- (f) Salary
- (g) Job security
- (h) Personal life
- (i) Work conditions
- (j) Status

In Herzberg's theory, the presence of other job conditions tends to build high levels of motivation and job satisfaction. Herzberg (1987) identifies six motivational factors or satisfiers:

- (a) Achievement
- (b) Recognition
- (c) Advancement
- (d) The work itself
- (e) The possibility of growth
- (f) Responsibility

Whereas hygiene factors are external to the work itself, motivators are characterized by positive feelings about the job and the work in themselves (Herzberg,



1987). If hygiene factors are lacking in a job environment, a state of dissatisfaction is created within the employee. However, even if these factors are present and dissatisfies are reduced, this may not necessarily lead to a state of satisfaction. Motivators include the intrinsic characteristics of a job which, when present, lead to satisfaction and motivational performance (Burton, 1994; Lacey, 1994).

Herzberg's two-factor theory suggests that jobs can be enriched to sustain or increase intrinsic job satisfaction among employees. Job enrichment provides the employee with an opportunity for psychological growth (Burton, 1994; Lacey, 1994).

Herzberg (1987) identifies seven principles useful for job enrichment:

- (a) Removing control while maintaining accountability
- (b) Increasing individual's accountability for their work
- (c) Giving employees a complete and natural work unit
- (d) Granting employees additional authority in their tasks
- (e) Making periodic reports available to workers
- (f) Introducing new and more difficult tasks
- (g) Assigning specific or specialized tasks to certain individuals.

#### McClelland's Learned Needs Theory

Another important contribution to content theory was made by McClelland (1965). McClelland's theory, called the learned or acquired needs theory, posits that people learn their needs through life experiences; they were not born with them. This theory builds on much earlier work of Henry Murray (1938), who theorized that people acquire an individual profile of needs by interacting with the environment. McClelland

was also influenced by the work of John Atkinson. Both McClelland and Atkinson suggest that people have three sets of needs (Rakich et al., 1992, p. 507):

- (a) Need for Achievement: the need to excel, achieve in relation to standards, accomplish complex tasks, and resolve problems
- (b) Need for Power: the need to control or influence how others behave and to exercise authority over others
- (c) Need for Affiliation: the need to associate with others, to form and sustain friendly and close interpersonal relationships, and to avoid conflict.

The common thread of the four content theories is the focus on what needs motivate human behavior. Each defines human needs differently, but each holds that managers motivate employees by helping them identify and meet their needs in the workplace (Table 3). The content theories provide a conceptual foundation for research intended to explain how individuals are motivated (Burton, 1994; Gibson et al., 1991; Lacey, 1994). This research led to the development of a number of process motivation theories.

Table 3  
Comparison of Four Content Theories of Motivation

Theories and Assumptions Made	How Motivation is Measured	Practical Application Value	Problems and Limitations
<u>Maslow's Need Hierarchy:</u> Individuals attempt to satisfy basic needs before directing behavior toward higher-order needs	Maslow, as a clinical psychologist, used his patients in asking questions and listening to answers. Organizational researchers have relied on self-report scales.	Makes sense to managers and gives many a feeling of knowing how motivation works for their employees.	Does not address the issue of individual differences, has received limited research support, and fails to caution about the dynamic nature of needs-needs change
<u>Alderfer's ERG Theory:</u> Individuals who fail to satisfy growth needs become frustrated, regress and refocus attention at lower-order needs.	Self-report scales are used to assess three need categories.	Calls attention to what happens when and if need satisfaction does not occur; frustrations can be a major reason why performance levels are not attained or sustained	Not enough research has been conducted; available research is self-report in nature, which raises the issue of how good measurement is. Another issue is whether individuals really only have three needs area.
<u>Herzberg's Two-Factor Theory:</u> Only one-job features and characteristics can result in motivation. Some of the characteristics that managers have focused on may result in a comfortable work setting, but do not motivate employees.	Ask employees in interviews to describe ethical job incidents.	Talk in terms that managers understand. Identifies motivators that managers can develop, fine-tune and use.	Assumes that every worker is similar in needs and preferences; fails to meet scientific measurement standards; has not been updated to reflect changes in society with regard to job security and pay needs.
<u>McClelland's Learned Needs:</u> The needs of a person are learned from the culture (society); therefore training and education can enhance and influence a person's need strength.	Thematic Appreciation Test (TAT), a projective technique that encourages respondents to reveal their needs.	If a person's needs can be assessed, then management can intervene through training to develop needs that are compatible with organizational goals.	Interpreting the TAT is difficult; the effect that training has on changing needs has not been sufficiently tested.

### Process Theories

The content theories focus on the needs and the incentives that cause behavior and are primarily concerned about which specific things that motivate people (Herzberg, 1987; Ivancevich & Matteson, 1990). Process theorists focus on how individuals' expectations and preferences for outcomes associated with their performance actually

influence performance. They are concerned with answering the questions of how individual behavior is energized, directed, maintained and stopped (Ivancevich & Matteson, 1990). Vroom's expectancy theory, Adams' equity theory, Locke's goal setting theory, and Skinner's reinforcement theory are the major models of processes by which motivation occurs (Gibson et al., 1991; Rakich et al., 1992). The conceptual framework of this study will be aligned with the content theories of motivation, in particular, intrinsic motivation; therefore, the process theories will not be discussed in any great detail.

#### Motivation Through the Design of Work

Work redesign is becoming increasingly prominent as a strategy for attempting to improve simultaneously the productivity and quality of work experience of employees in contemporary organizations (Hackman & Oldham, 1975, 1976, 1980). By far the most influential theory relevant to work redesign has been the Herzberg two-factor theory of satisfaction and motivation (Herzberg, 1987).

In essence the theory proposes that the primary determinants of employees' satisfaction are factors intrinsic to the work that is done (i.e., recognition, achievement, responsibility, advancement, challenging work, personal growth in competence). These factors are called "motivators" because they are believed to be effective in motivating employees to superior effort and performance. Dissatisfaction, on the other hand, is seen as been caused by "hygiene factors" that are extrinsic to the work itself. Examples include company policies, supervisory practices, pay plans, and working conditions. The Herzberg theory specifies that a job will enhance work motivation and satisfaction only

to the degree that "motivators" are designed into the work itself (Hackman & Oldham, 1975, 1976, 1980).

### The Job Characteristic Model

Hackman and Oldham's (1976) Job Characteristics Model specifies the conditions under which individuals will become internally motivated to perform effectively on their jobs. This model focuses on the interaction among three classes of variables: (a) the psychological states of employees that must be present for internally motivated work behavior to develop, (b) the characteristics of jobs that can create these psychological states, and (c) the attitudes of individuals that determine how positively a person will respond to a complex and challenging job.

The Hackman and Oldham (1976) Job Characteristics Model contends that providing employees with task variety, task identity, task significance, task autonomy, and feedback will lead to three critical psychological states (experienced meaningfulness of the work, experienced responsibility for outcomes, and knowledge of actual results) which, in turn will lead to internal work motivation, high quality work performance, high work satisfaction, and low absenteeism and turnover (McFee, Quarstein, & Ardalan, 1995).

According to Hackman-Oldham, satisfaction of higher-order needs (which is the essence of *intrinsic job satisfaction*), occurs when the employee experiences these three psychological states (McFee et al., 1995). These are:

1. The job allows the employee to feel personally responsible for his or her work outcomes. Autonomy, defined as the degree to which the job

provides freedom and independence, is the primary core dimension contributing to the feeling of personal responsibility for outcomes (Hackman & Oldham, 1980).

2. The job involves doing something that is perceived as meaningful to the individual. There are three core dimensions that can make the jobs more meaningful or worthwhile. The first dimension, task identity, refers to the degree to which a job requires completion of a whole, identifiable task as oppose to just a portion of it. The second core dimension is skill variety. A job becomes more meaningful if it requires the employee to develop and utilize a number of different skills and talents. Task significance is the third core dimension. This dimension contributes to the perceived meaningfulness of a job; it refers to the degree to which a job has a substantial impact on the lives of other people.
3. The job provides the employee with feedback about the results. Feedback is the extent to which a worker can obtain information about the effectiveness of his or her work. Knowledge of how well one is performing is necessary for the satisfaction of higher-order needs. Feedback can be provided either by the job itself or by another individual.

### Theoretical Models

There is agreement among researchers that needs determine an individual's behavior (Atkinson, 1974; Cofer & Appley, 1964; Maslow, 1968; Murray, 1938). The individual develops an urge to fulfill the need he or she is experiencing. Consequently,

the individual begins to search the environment for potentially satisfying goals which once attained, will lead to a fulfillment of his or her needs (Burton, 1994). In a work situation, motivation is explained by the degree to which the employees need's can be satisfied on the job (Argyris, 1957; Herzberg, 1986; Higgins, 1991; Holt, 1990; McClelland, 1965; McGregor, 1960).

The conceptual framework of this research will be based on the content theories of motivation and, more specifically, intrinsic motivation. Intrinsic satisfaction is determined by those motivational factors that are inherent in the work itself and independent of intrinsic reward (i.e., the satisfaction an employee receives from performing the specific duties and tasks of his or her job). A person receives intrinsic satisfaction from those internal job elements that contribute to his or her sense of what makes a job enjoyable and interesting (Steers & Porter, 1979).

Most organizational efforts to improve employee motivation focus on both intrinsic and extrinsic motivation. Extrinsic satisfaction is determined by external factors that influence an employee's satisfaction. Examples of extrinsic motivators include compensation, equal employment opportunity (EEO), job security, and social relations with peers, rewards, and evaluations.

Herzberg's two-factor theory is most useful in describing intrinsic motivation (Herzberg, 1987). According to Herzberg (1987), two unique dimensions may be used to describe motivation: (a) extrinsic (hygiene) and (b) intrinsic factors (Herzberg 1987). Whereas hygiene factors are external to the work itself, motivators are characterized by the positive feelings about the job and the work in themselves (e.g., feelings of achievement, recognition, responsibility, achievement and growth ((Herzberg, 1987).

Motivators include the intrinsic characteristics of a job which, when present, lead to satisfaction and motivated performance (Burton, 1994; Lacey, 1994).

This research will be based upon the combined Job Dimension Models by Hackman and Oldham (1980); Herzberg (1987); and Steers' (1977) theoretical model concerning antecedents and outcomes of employee commitment to organizations. The Hackman and Oldham Job Characteristics Model contends that providing employees with task variety, task autonomy, task significance, task identity, and feedback, will lead to three critical psychological states (experienced meaningfulness of the work, experienced responsibility for outcomes, and knowledge of actual results) which, in turn, will lead to high internal work motivation, high quality of work performance, high work satisfaction, and low absenteeism and turnover. Each of these variables contributes independently to intrinsic satisfaction. Herzberg's model suggests that feelings of accomplishment, personal growth, recognition, challenging work, and advanced opportunities contribute to intrinsic job satisfaction independently of one another. Steers' (1977) model suggests that organizational commitment and job satisfaction (Stone & Porter, 1975) is influenced by personal characteristics, job characteristics, and organizational characteristics and/or work experiences. Steers' model is modified to include job satisfaction.

#### The Gee-Kilpatrick Theoretical Model

The Gee-Kilpatrick Model is an integration of Hackman-Oldham's Herzberg's and Steers' Models. The model consists of three parts: (a) Hackman-Oldham and Herzberg's elements of intrinsic job satisfaction, (b) Steers' antecedents of job satisfaction and organizational commitment, and (c) Steers' outcomes of satisfaction and commitment.



The components dealing with antecedents draw heavily on previous research. Most studies reveal that satisfaction and organizational commitment are related. The controversy erupts when determining the casual ordering of satisfaction. Over the past thirty plus years, researchers have identified a number of variables that appear to contribute to either satisfaction or commitment. These antecedents can be divided roughly into three main categories: (a) personal characteristics, (b) job characteristics, and (c) organizational characteristics (Steers, 1977).

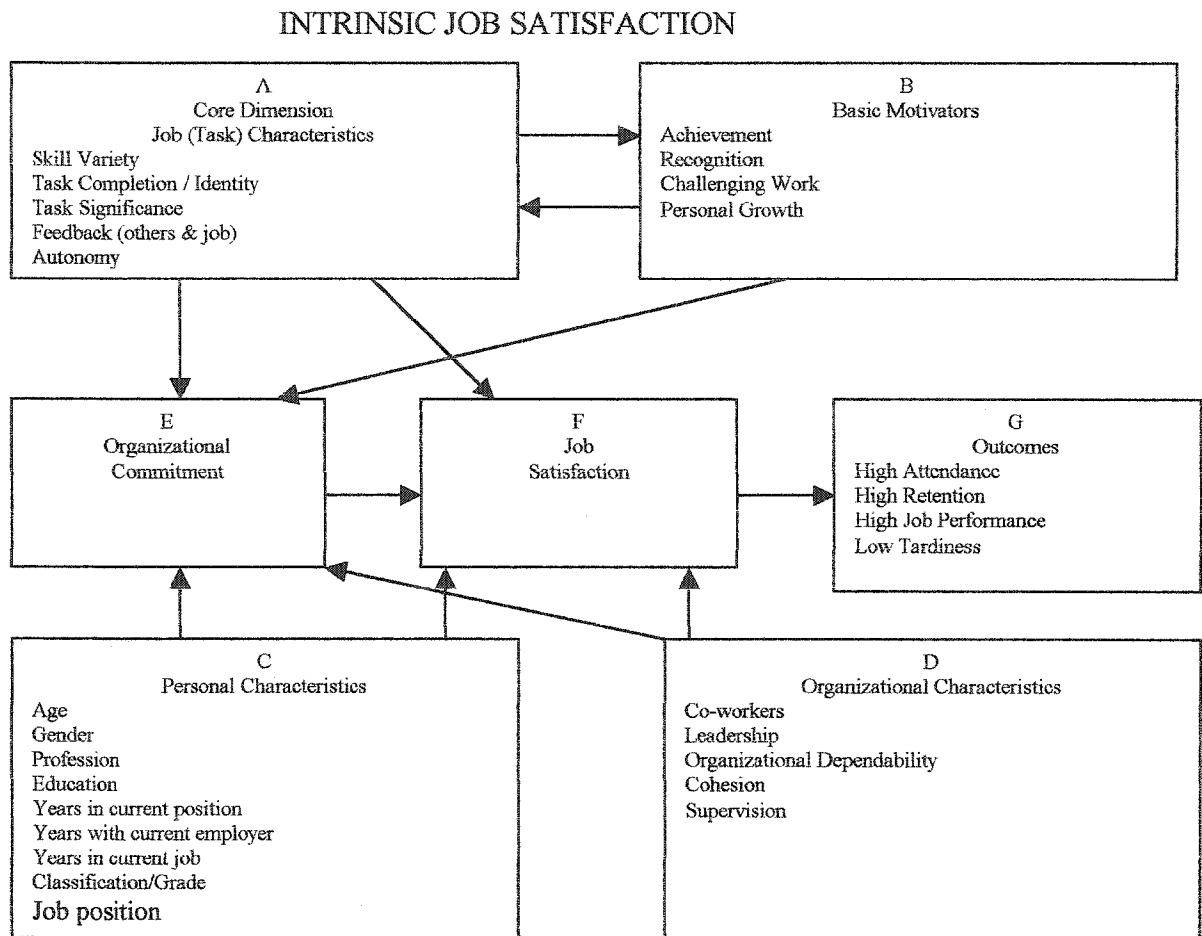
Figure 1 displays this model. It proposes that the following variables lead to an employee's job satisfaction and organizational commitment. It further suggests that satisfaction and commitment lead to certain behavioral outcomes.

Gee-Kilpatrick's model suggests the following:

1. Hackman and Oldham's "core job dimensions" and Herzberg's "basic motivators", contribute to intrinsic job satisfaction independently of one another.

Figure 1.

## Gee - Kilpatrick Integrated Job Satisfaction &amp; Organizational Commitment Model

**Commitment Characteristics:**

- a. Belief in and acceptance of organizational goals and values
- b. Strong desire to maintain membership in organization
- c. Willingness to exert considerable effort on behalf of the organization

**Stages in the Development of Commitment:**

- a. Pre-entry - anticipation
- b. Early employment - initiation
- c. Middle to late career - entrenchment

**Commitment Strength:**

- a. Affective commitment / identification
- b. Continuance / risk of losing value
- c. Normative / moral obligation

Note: This research will only address affective commitment.

2. Intrinsic job satisfaction, as measured by core dimensions and basic motivators is positively correlated with organizational commitment; but intrinsic job satisfaction and organizational commitment are independent of each other.
3. Job satisfaction and organizational commitment are influenced by three categories of variables: the characteristics of job-task, characteristics of workers, and characteristics of the organizations.
4. Outcomes of job satisfaction and organizational commitment are high job performance, attendance, and employee retention and low tardiness.

Various researchers also call Hackman and Oldham's "core job dimensions" "job characteristics" or "job task characteristics" in the literature. Hackman and Oldham's (1980) five core dimensions of work are defined as:

1. Skill Variety. To an extent, the more that different skills are involved, the greater the potential for a meaningful job.
2. Task Identity or Completion. To the extent that the job requires a complete piece of work that is identifiable to the worker, the job is more meaningful. Assembling and installing an entire deep well is more meaningful than attaching the probes to the deep well.
3. Task Significance. A significant task has a perceivable impact on others. A worker who assembles a flow meter instrument is more able to perceive the impact on others than is one who fills small boxes with paper clips.
4. Autonomy. This is the degree to which the job gives the worker independence, freedom, and discretion in scheduling and carrying out the task. Greater job autonomy leads to greater sense of personal responsibility.

5. Feedback From the Job. Feedback is the extent to which a worker can obtain information about the effectiveness of his or her work. Feedback is most successful when it comes directly from the work itself, rather than from some other source. If the worker builds an instrument and is able to test it him or herself, he or she gets prompt and immediate feedback. On many jobs, there is little or no feedback.
6. Feedback From Other Agents. Feedback is the extent to which supervisors and peers provide employees with direct and clear information about the effectiveness of his or her work.

Herzberg, Mauser, and Snyderman (1959) defined job enrichment as the improvement of such motivational factors of an individual's job as achievement, recognition, personal growth, and challenging work.

Personal or professional characteristics consist of these variables, which defined the individual (such as age, education, gender, profession, hobbies, etc) that have been shown to be related to organizational commitment (Hrebiniak & Alluto, 1972). The model further suggests that job characteristic (adopted from Hackman-Oldham's core dimensions) may also influence commitment to some degree, although the influence is properly more pronounced for job satisfaction (Stone & Porter, 1975).

Organizational characteristics consist of three variables that defined the organizational structure (leadership, co-workers, supervision, cohesion, and organizational dependability). The model suggests that commitment and satisfaction are

influenced by the employees' work experiences during his or her tenure in an organization.

Thus, the first component of the model suggests five 'core' job dimensions and four basic motivators are measures of intrinsic satisfaction. It was hypothesized that job satisfaction, as measured by these core dimensions and motivators, is significantly correlated with commitment and satisfaction.

The second component of the model proposed that important influences on satisfaction and commitment could be found in three areas of organizational life. Hence a major advantage of this research will be that it will simultaneously examine various influences in order to identify the relationship of each with satisfaction and commitment.

The third component of the model hypothesized that satisfaction and commitment leads to several specific outcomes. Porter et al. (1974) suggested that highly satisfied and committed employees should have a strong desire and intent to remain with the organization; thus, job satisfaction and organizational commitment influenced retention and turnover, high performance standards, and low tardiness records. In addition, satisfaction and commitment should influence attendance. Employees who are highly committed to the goals of the (NIC) and are satisfied with the company's policies should be more likely to have a desire to come to work and contribute towards mission accomplishment. Finally, satisfaction and commitment will be hypothesized to relate to performance under the assumption that committed and satisfied employees would expend greater efforts on the job.

### Review of Existing Literature

Over the last two decades, researchers have identified a number of variables that appear to contribute to either job satisfaction or organizational commitment (Blegen, 1993; Burton, 1994; Lacey, 1994; Lucas et al., 1993; Miller & Wheeler, 1992; McNeese-Smith, 1996). These variables can be divided into three groups: (a) variables that describe characteristics of the job tasks performed by the worker, (b) variables that describe characteristic of the organization in which the task are performed, and (c) variables that described characteristics of the workers who perform the tasks (Agho et al., 1993; Blegen, 1993; Lee et al., 1992; Lee & Mowday, 1992).

Of the three categories of predictors of attitudes, the category of variables that characterizes the job tasks performed by the worker has received the most empirical attention in studies of job satisfaction (Glick, Jenkins, & Gupta, 1986). Autonomy (Blegen, 1993; Gardner, 1991; Gleason-Wynn, 1995; Lucas et al., 1993; McCloskey, 1990), feedback (Blegen, 1993; Fried, 1991; Gerhart, 1987; Hackman and Oldham, 1976; Loher, Noe, Moeller, & Fitzgerald, 1985; Pearson, 1991), and task variety (Gleason-Wynn, 1995, Hackman & Oldham, 1975, Haynes, 1979) are three variables in the category that emerged as the strongest predictors of satisfaction. Other variables from this category of predictors that are found to affect job satisfaction are task identity and task significance (Bedeian & Armenakis, 1981; Hackman & Oldham, 1975, 1976; Haynes, 1979).

Thus, considerable research has been devoted to defining and understanding Hackman and Oldham's core job dimensions. Five core dimensions of work create three critical psychological states, which in turn, have personal and job outcomes. These

include internal work motivation, high-quality work performance, satisfaction with work, and low absenteeism and turnover (Hackman & Oldham, 1976).

The only variables from the second category of predictors, those that characterize the organization in which the worker performs his or her tasks, that have received substantial attention in the terms of possible effects of job satisfaction, are leadership (Bateman & Strasser, 1984; Blegen, 1993; Gladstein, 1984; McNeese-Smith, 1996; Sorrentino, Nailli & Schriesheim, 1992), supervision (Blegen, 1993; Brown, 1989; Garrett, 1989; Kratina, 1990; Sorrentino et al., 1992), and work group cohesion (Lucas et al., 1993).

The third category of predictors, the characteristics of the worker, has received less attention in the job satisfaction research literature. Most researchers strongly suggest that education and mental qualifications predict job satisfaction (Gardner, 1991; Mayer & Schoorman, 1992). Analyses of the demographic variables provided evidence for small but stable relationships between age and education and job satisfaction (Blegen, 1993; Gleason-Wynn, 1995; Lucas et al., 1993; McNeese-Smith, 1996). Recent work on demographic contextual effects suggested that it might be the variation in age, education, and tenure within work groups that affect job attitudes and behaviors rather than the individual's actual age, education, and tenure (Pfeffer & O'Reilly, 1987). Although Straw and Rose (1985) and Straw, Bell, and Clausen (1986) have provided evidence that job satisfaction is primarily a function of an individual's disposition, with the exception of age (Dewar & Werber, 1979, reported older workers to be more satisfied), and sex (McNeely, 1984, reported females to be more intrinsically satisfied), there is little

empirical support for the importance of individual worker characteristics in determining job satisfaction.

Worker characteristics have played a major role in research aimed at predicting organizational commitment. A variety of worker characteristics that described the worker's personality, personal needs, and values have been reported to be associated with commitment (Blegen, 1993; Gleason-Wynn, 1995; Lucas et al., 1993; McNeese-Smith, 1996).

Most research efforts have tended to examine variables from only one (or occasionally two) of the three categories of predictors at a time, making simultaneous comparisons of the unique effects of all categories impossible. Also, most individual studies have tended to investigate either the predictors of job satisfaction or those of commitment, making comparisons impossible between the relative effects on satisfaction and commitment of each predictor studied.

Several studies have reported a relationship between job satisfaction and organizational commitment but there continues to be disagreement regarding any causal ordering (Knoop, 1995; Hobson, 1991). Bateman and Strasser (1984) found commitment to be a precursor of satisfaction; Maesh and Mannari (1977) and Williams and Hazer (1986) found satisfaction to be a precursor of commitment; Porter et al. (1974) found the two to be correlated. More recently, Curry, Wakefield Price, and Mueller (1986) found no evidence of causal relationship in either direction.

Research among workers in areas of similar characteristics has also examined many independent variables affecting job satisfaction (Alexander, 1988; Blegen, 1993; Knoop, 1995; Lucas et al., 1993). In Bleben's Meta-analysis of research on job



satisfaction, the variables that demonstrated the strongest positive correlation to job satisfaction were commitment (.526), communication with the supervisor (.446), autonomy (.419), recognition (.415), and peer communication (.358). In Knoop's (1995) research on the relationship between job satisfaction and organizational commitment, the variables that demonstrated the strongest positive correlation to job satisfaction were commitment (.64), pay (.22), promotion opportunities (.55), supervision (.54), and co-workers (.30).

### Organizational Commitment

Recent research efforts indicate that commitment may be multidimensional, having both attitudinal and behavioral components (McGee & Ford, 1987; O'Rilly & Chatman, 1986). The behavioral approach views commitment as the state of being bound to the organization by personal achievement (Decottis & Summers 1987). In contrast, the attitudinal approach refers to commitment as a state in which an employee identifies with a particular organization and its goals and as the degree to which the employee wishes to maintain membership in the organization in order to assist in achieving those goals (Blau & Boal 1987). Organizational commitment depends mainly on the employee believing in the organization's values, goals and vision (Buchko, 1993). The definition of commitment to be used in this research will closely follow a combined approach established by Mowday et al. (1982) and Tett and Meyer (1993). They define commitment as the relative strength of an individual's identification with and involvement in a particular organization. It is characterized by three factors: (a) a belief in and acceptance of the organization's goals and values, (b) a strong desire to maintain membership in the

organization, and (c) a willingness to exert considerable effort on behalf of the organization.

There are three stages in the development of commitment: Pre-entry (anticipation), early employment (initiation), and middle to late career (entrenchment) (Meyer, Bobocel, & Allen, 1991). Meyer et al. (1991) articulated three forms of organizational commitment. Affective commitment denotes "the strength of an individual's identification with and involvement in a particular organization" (Porter et al., 1974, p. 604), continuance commitment arises from the recognition that one would lose valued "side bets" (e.g., pension) upon leaving the organization, and normative commitment denotes a willingness to remain with the organization due to a sense of moral obligation (Meyer et al., Shore & Wayne, 1993; Tett & Meyer, 1993). This research will be limited to affective commitment due to the relative scarcity of studies involving the other forms.

### Job Satisfaction

Job satisfaction, the extent to which employees like their work, has long been an important concept in the organizational study of the responses employees have to their jobs (Agho et al., 1992, 1993). Job satisfaction in the broadest sense simply refers to a person's general attitude toward the job or toward specific dimensions of the job (Hobson, 1991). The earliest systematic attempts to study job satisfaction date back to the 1930's (Happock, 1935; Kornhauser & Greenberg, 1932; Mayo, 1945; Roethlisberger & Dickerson, 1939). The recent interest in job satisfaction is focused primarily on its impact on employee commitment, absenteeism, and turnover (Blegen, 1993; Gleason-Wynn,

1995; Lucas et al., 1982; Mueller & Price, 1990; Price & Mueller, 1981, 1986; Sorrentino et al., 1982; Steers & Rhodes, 1978). Porter et al. (1974) and Agho et al. (1992) have shown that job satisfaction can partially explain variations in employees' identification and involvement in a particular organization (commitment), and missing of scheduled work (absenteeism) and the maintenance of membership in a particular work organization (turnover). Even though the importance of job satisfaction has been questioned (Nicholson, Brown, & Chadwick-Jones, 1985), job satisfaction remains the most studied concept in organizational research (Agho et al., 1992, 1993).

### Outcomes

Previous research shows that satisfaction and commitment lead to specific behavioral outcomes. The concept of employee commitment to organizations has received increased attention in the research literature recently as both managers and organization analysts seek ways to increase employee retention and performance. Steers (1977) found commitment to be strongly related to intent and desire to remain and moderately related to attendance and turnover. Highly satisfied and committed employees should have a strong desire and intent to remain with the organization, thus influencing retention and turnover (Porter et al., 1974), high performance standards, and low tardiness records. In addition, Price and Mueller (1981) found that job satisfaction influences turnover negatively; i.e., the higher the job satisfaction, the lower the turnover. Satisfaction and commitment should influence attendance. Therefore, employees who are highly committed to the goals of the organization, such as NIC employees, would be expected to be satisfied with the policies and should be more likely to have a desire to

come to work and contribute toward mission accomplishment. In this research, satisfaction and commitment are hypothesized to relate to performance under the assumption that committed and satisfied employees will expend greater effort on the job.

## CHAPTER III

### METHODOLOGY

#### Restatement of the Problem

The impact of globalization compounded by the problem of employee job satisfaction, commitment and turnover continues to haunt organizations despite the wealth of research available on these issues and the efforts of researchers and managers to provide organizational work redesign solutions.

Job satisfaction, commitment, motivation, and retention of the professional staff in any organization are critical issues. The employees' intent to stay in a particular position is influenced by many factors, including satisfaction with their work and their organizational commitment. Satisfaction and commitment stem from various aspects of the job, such as achievement, challenging work, responsibility, job-task characteristics, personal characteristics, and organizational characteristics. Studies strongly suggest that there is a positive correlation between job satisfaction and commitment to the organization.

This research will focus on job satisfaction, in addition to organizational commitment, and compares their respective relations to specific employees' behavioral outcomes.

#### Research Design and Methodology

This study will be an exploratory, correlational investigation that will explore and describe the relationship among intrinsic job satisfaction, organizational commitment, and employees' personal characteristics, job characteristics, organizational characteristics,

and specific behavioral outcomes at the National Irrigation Commission (NIC) - Jamaica West Indies to evaluate and possibly develop more effective strategies in human resources management. For this purpose, the NIC employees will be used as the sample statistics. The goal will be to determine the magnitude of the relationship among the variables mentioned. Data will be collected during a high work requirement time period in 2002.

## PROPOSED HYPOTHESES

### Hypothesis 1.

H01: There is no significant correlation between intrinsic job satisfaction, as measured by core dimensions and basic motivators, and organizational commitment as perceived by the National Irrigation Commission (NIC) workers [administrators, managers, supervisors, engineers and canal attendants {field workers}].

HA1: There is a significant correlation between intrinsic job satisfaction, as measured by core dimensions and basic motivators, and organizational commitment as perceived by the (NIC) workers [administrators, managers, supervisors, engineers and canal attendants {field workers}].

### Hypothesis 2

H02: There is no correlation between employees' job-task characteristics (skill variety, task identity, task autonomy, task significance, feedback) and their perception of job satisfaction and organizational commitment.

HA2: There is a correlation between employees' job-task characteristics (skill variety, task identity, task autonomy, task significance, feedback) and their perception of job satisfaction and organizational commitment.

### Hypothesis 3.

H03: There is no correlation between employees' personal characteristics (age, gender, profession, education, length of time as an irrigation worker, length of time with the NIC, length of time in present job classification, job title) and their perception of job satisfaction and organizational commitment.

HA3: There is a correlation between employees' personal characteristics (age, gender, profession, education, length of time as an irrigation worker, length of time with the NIC, length of time in present job classification, job title) and their perception of job satisfaction and organizational commitment.

### Hypothesis 4

H04: There is no correlation between employees' organizational characteristics (leadership, supervision, co-workers, workgroup cohesion, organizational dependability) and their perception of job satisfaction and organizational commitment.

HA4: There is a correlation between employees' organizational characteristics (leadership, supervision, co-workers, workgroup cohesion, organizational dependability) and their perception of job satisfaction and organizational commitment.

### Hypothesis 5

H05: The pattern of correlations among measures of the seven sets of variables (core job dimension/job characteristics, basic motivators, personal characteristics, organizational characteristics, organizational commitment, job satisfaction, and outcomes) does not match the degree of linkages among the seven sets specified in the theoretical model.

HA5: The pattern of correlations among measures of the seven sets of variables (core job dimension/job characteristics, basic motivators, personal characteristics, organizational characteristics, organizational commitment, job satisfaction, and outcomes) matches the degree of linkages among the seven sets specified in the theoretical model.

### Population and Sample

The National Irrigation Company Limited is the National Irrigation Company of Jamaica, responsible for providing irrigation water to the agricultural sector and some (other than agriculture) private commercial users. This is a well defined target group.

The National Irrigation Commission Limited staff compliment is managed by a Board of Directors, members of the Board of Directors represent the interest of the main groups and fund source the company service and receives' funds assistance. Permission was sought from the Board of Directors for the administration of the survey. The survey was administered to 164 employees. From the population the following numbers and percentages sampled returned the survey questionnaire: One hundred and eleven respondents. The sample comprise 42.6 percent females and 53.8 percent males, 10 managers/supervisors, 48 technical/engineers, 51 field/support workers, and 55 support



services/clerical workers, with 13.5 percent holding college degrees, 31.7 percent technical/vocational training, 27.9 high school diploma, and 26.9 percent having very little formal education. Seventy-eight point eight percent were between 18 and 49 years of age, with 43.3 percent working at the Irrigation Commission for 10 years or longer. Total questionnaire returned was 68 percent of the population.

### Instrumentation

A survey methodology was chosen because data can be collected systematically, easily, and confidentially, and can be used to explore a variety of relationships. Several demographic and employment variables will be assessed, namely: age, gender, profession by occupation, education, length of time as an irrigation worker, length of time with the company and in present job/post, job title/position, and employment status.

Four separate instruments will be used for this research. The following will be used to measure intrinsic job satisfaction and organizational commitment: (a) Hackman-Oldham's Job Diagnostic Survey (JDS), (b) Gee-Kilpatrick's Job Satisfaction and Organizational Commitment Outcomes Survey (JOOS), (c) Steers' Organizational Commitment Questionnaire (OCQ), and (d) Gee-Kilpatrick's Demographic Data Questionnaire. Prior to the distribution of the survey, the researcher requested authorization for their use the JDS, JOOS and OCQ from the originators See Appendices showing request letters and authorization.

### Job Diagnostic Survey

Hackman and Oldham developed the Job Diagnostic Survey (JDS) to measure core job dimensions, psychological state, and personal and work outcomes (satisfaction, motivation, performance, and attendance). It categorizes job characteristics as high and low on five core dimensions and assessed the reactions of individuals to their work and the broader work setting and the readiness of some individuals to take on enriched jobs. These five core dimensions of work create three psychological states, which in turn have personal and job outcomes. The JDS has two basic uses: to diagnose existing jobs on the core dimensions and to determine the effect of job changes on employees. The JDS also provides a diagnostic tool to determine how the individual job scores on five basic dimensions (Hackman & Oldham, 1975).

The JDS will be used to measure intrinsic job satisfaction. Employee perceptions will be used to measure the extent to which core job dimensions (skill variety, task identity, task autonomy, task significance, and feedback) are present in a job. Individual and combined scores on these core dimensions will provide an indication of the degree to which a particular job is capable of arousing intrinsic motivation for specific employees. The JDS used a seven-point (1 = low, 7 = high) response scale to measure the independent variable of job task characteristics (Hackman & Oldham, 1975). See Appendices for a copy of this instrument.

Previous studies (Hackman & Oldham, 1975) showed that employees were able to provide rather accurate descriptions of the characteristics of jobs; hence, employee-generated measures were used to measure job characteristics.

It can reasonably be argued that the intent will be to predict or understand employee attitudes or behavior at work, therefore, employee ratings of the job dimensions are preferable to use, since it is an employee's own perceptions of the objective job that is causal of his reactions to it (Hackman & Lawler, 1971).

In this research, job task characteristics will be measured by using a short form of Hackman-Oldham's (1975) Job Diagnostic Survey. The six core job dimensions (task characteristics) to be measured in this survey will be as follows:

1. Skill variety: the number of different skills used in performing tasks.
2. Task identity/completion: the completion of a meaningful, complete piece of work.
3. Task significance: the effect of one's work on the well being of others.
4. Autonomy: the worker's independence, freedom and discretion in scheduling and carrying out the task.
5. Feedback from the job: feedback about one's performance from the job.
6. Feedback from other agents: feedback about one's performance from supervisors.

Hackman and Lawler (1971) reported the psychometric properties of this instrument. Scale inter-correlations for the present study ranged from .13 to .61, with a median of .39.

#### Empirical Characteristics of the JDS

Hackman and Oldham (1975) suggested that:

The JDS has satisfactory psychometric characteristics, and that the variables it traps relate generally as predicted to appropriate external criteria. They noted internal consistency reliabilities (ranging from .88 to .56) are generally satisfactory, and the items, which compose the scale, show adequate discriminant validity. Ratings of job characteristics by employees, supervisors,

and outside observers show a moderate level of convergence for most of the job dimensions. Variances of the scale are generally satisfactory; although some JDS scales show greater sensitivity to between-job differences than do others. Relationships among the JDS scales are generally positive, indicating that either the concepts tapped by the instrument or the methodologies used to gauge these concepts (or both) are not completely independent. In general, theory-specified relationships among JDS scales (and between these scales and behaviorally based dependent measures) are in the predicted direction. (Hackman & Oldham, 1975, p. 168)

Based on previous studies among 271 employees in two organizations, test-retest and internal consistency reliabilities for this scale were satisfactory. Rousseau (1977) reported test-retest correlations for JDS job characteristics ranging from .41 to .66 and internal consistency ranging from .36 to .66.

Given the wide use and positive internal consistency mentioned herein, Hackman and Oldham (1975) and Rousseau (1977) claimed that the JDS is one of the most valid and reliable measures of satisfaction and appears to be very appropriate for the purposes of this research.

#### Organizational Commitment Questionnaire

The Organizational Commitment Questionnaire (OCQ), an instrument designed by Mowday, Steers, and Porter, was developed on the basis of a definition of organizational commitment, which conceptualized the construct as having three primary components:

1. A strong belief in and acceptance of the organization's goals and values
2. A willingness to exert considerable effort on behalf of the organization
3. A strong desire to maintain membership in the organization

Under this approach commitment is conceptualized as a state in which an individual identifies with a particular organization and its goals, and wishes to maintain membership in order to facilitate those goals (Mowday, Steers, & Porter, 1979). This instrument contains 15 items, and respondents are asked to indicate the extent of their agreement with the items on a seven-point, verbally anchored scale. See Appendices. The items reflect a combination of attitudes and behavioral intentions, and emphasize the employees' moral involvement with the organization. This instrument has been the most widely utilized to date (Angle & Perry, 1981; Dubin et al., 1975; Morris & Sherman, 1981; Mowday, Champoux, & Porter, 1974; Stone & Porter, 1975; Steers, 1977), and its scale characteristics have been analyzed by Mowday et al. (1979).

#### Empirical Characteristics of the OCO

The empirical characteristics of the OCQ, an instrument developed by Porter and his colleagues in 1979, is based on a series of studies among 2563 employees in nine divergent organizations (Mowday et al., 1979). Satisfactorily test-retest reliabilities ( $r = .53, .63, .75$  over 2-, 3-, and 4-month periods); ( $r = .72$  over a 2-month period and  $r = .62$  over a 3-month period) and internal consistency reliabilities from .82 to .93, with a median of .90, (Cronbach, 1951) were found. Smith, Kendall, and Hulin (1969) reported test-retest reliabilities for the JDI ranging from .45 to .75. These results compared favorably with most attitude measures (Smith et al., 1969) and the reliability coefficients reported in previous studies (Alutto, Krebiniak, & Alonzo, 1973; Mowday et al., 1979). Mowday et al. (1979) reported test-retest reliability coefficients ranging from .53 to .75 for the OCQ.

In addition, cross-validated evidence of acceptable levels of predictive, convergent, and discriminant validity emerged from this instrument. Hom, Katerberg, and Hulin (1978) noted convergent validity (ranging from .63 to .74 with a median of .70). There is substantial evidence that has emerged from studies on discriminant validity of the OCQ. Discriminant validity was noted by Brief and Aldag (1977) and Hom et al. (1978) ranging from .01 to .68 with a median correlation of .41. Lodahl and Kejner (1965) measures ranged from  $r = .30$  to  $r = .56$  and Steers and Braunstein (1976) measures of  $r = .39$  to  $r = .40$  emerged from the instrument.

The theory in this research will suggest that highly committed employees are more satisfied with their jobs, performed at higher levels and are less likely to leave their jobs than their less committed co-workers. Predictive validity of the OCQ has been examined in numerous studies (Hom et al., 1978; Mobley, Horner, & Hollingsworth, 1979; Mowday et al., 1974; Porter et al., 1974; Porter & Steers, 1973; Salancik, 1977; Steers, 1977; Stares & Rhodes, 1978) whose results indicate that the relationship between organizational commitment, job satisfaction and organizational (performance) outcomes is in the predicted direction.

The mean level of commitment ranges from a low of 4.0 to a high of 6.1 across the nine samples. Mean scores are usually slightly above the midpoint on the seven-point Likert scale.

Given the wide use of OCQ instrument in empirical research and the findings of the researchers mentioned herein, the OCQ appears to be reliable and a valid instrument for the purpose of this research.

### Job Satisfaction/Organizational Commitment Outcomes Survey

The Job Satisfaction and Organizational Commitment Outcomes Survey (JOOS) was developed by Gee and Kilpatrick in 1998 to measure specific outcomes behaviors of employees as a result of their job satisfaction organizational commitment. The scale is a self-assessment of employees' responses to satisfaction and commitment in relation to eight dimensions. Previous research showed that the effect of satisfaction and commitment on performance is highly complex and indirect. In addition, since most existing studies treated commitment and satisfaction as dependent variables, little is known about the behavioral outcomes of satisfaction and commitment (Steers, 1977). A review of the literature did not reveal prior evidence that exists on any favorable instruments that measure outcomes of satisfaction and commitment. Therefore, this research is valuable because it will assist with the provision of such an instrument to measure the data that will allow for the investigation of these issues.

To develop the outcomes scale, outcome indicators will be identified from review of the literature (Bain, 1982; Brayfield & Crockett, 1955; Cohen, 1993; Herzberg, 1987; McNeese- Smith, 1996; Mowday, Steers and Porter, 1979; Robbins, 1993; Suttermeister, 1976; Vandenberg & Lance, 1992) and it is expected that these will be evaluated by subject matter experts on organizational behavior. It is hoped that the arrived at indicators will include absenteeism, tardiness, retention (turnover), job performance, quality of work, quantity of work, advancement readiness, and overall job performance. Using both a five-point and a seven-point Likert-type scale, it is proposed that at least five statements about the employee's specific outcome behaviors will be asked.

Attendance (absence) will be measured as the number of days of an unanticipated failure to report to work (whether excused or unexcused) by an employee and tardiness will be measured as the number of days an employee arrived 10 or more minutes late to work. Single items measures of employees' retention (desire and intent to remain) in the organization will be secured on a five-point scale ranging from "I definitely will not leave to I will leave this organization." See Appendices. Job performance will be measured in the NIC sample by asking employees to rate themselves on four related performance dimensions: overall performance, quality of work, quantity of work, and promotion readiness. All outcomes measures will be self-reported by employees. The suggested questionnaire will undergo revision before its implementation. The results of any pre-test (pilot) will be reported as part of the findings of this study. Thus, the Gee- Kilpatrick Survey appears to be a valid instrument for this research.

#### Demographic Data Questionnaire

The employees of The National Irrigation Commission Limited will be divided into four categories (See Figure 2). Respondents will be classified as employees, supervisors, and managers. All employees work full time and primarily the day shift. Sex, profession and job position/title categories will be dummy coded for statistical analysis. However, each employee will be asked to indicate the following: age, gender, profession/skill, education, length of time as irrigation worker, length of time with present employer, length of time in present job, employment status, present position, and primary work shift.



Figure 2. Irrigation Professions Occupational Categories

Managers / Supervisors	Support Services & Clerical	Technical Engineering	Field & Support Workers
a. Division Directors & Managers.	a. Secretaries	a. Engineers	a. Systems Operators.
b. Financial Managers.	b. Accountants	b. Works Superintendents	b. Welders
c. Legal & Corporate Services Managers.	c. Administrative Officers	c. Draft & Design Personnel	c. Canal Attendants / Cleaners
d. Personnel Administration.	d. Public Relations Officers	d. Electricians	d. Watchmen
e. Operational Management. Executive Consultants.	e. Clerical Officers	e. Meter Technicians	e. Janitorial Workers
f. Development & Implementation Officers.	f. Billing Officers	f. General Technicians	f. Office Attendants
g. Operations & regional Managers	g. Security Officers	g. Mechanical Technicians	g. Sidemen
	h. Field Auditors	h. Senior Drivers	h. Handymen
	i. Typists		i. Heavy Equipment Operators
	j. Procurement Officers		
	k. Information & Program Officers		
	l. Internal Auditors		

### Data Collection

Prior to the distribution of the (committee to recommend) survey instruments, the researcher will meet with the Chairman of the Board, the General Manager, and the Personnel Department Head of the NIC to discuss the purpose and goals of this research, reinforce the researcher's request for their assistance and answer any questions or queries they might have about the study. See Appendices for copies of official correspondence.

After receiving final approval for conducting the survey, the researcher will distribute prepared packets to the voluntary participants in the study. It is proposed that each packet will contain the following:

1. A cover letter intended to introduce the researcher, the population being surveyed, a statement about anonymity and confidentiality, an opportunity to receive final results of the study, and a note of appreciation for their participation. See Appendices for a sample of the cover letter.
2. Four coded instruments, each containing completion instructions.
3. A large preaddressed and coded envelope.

Prior to distribution, the code number on each pocket will be recorded on a master list next to the name of each employee receiving a packet. The pockets will be hand delivered to all participants. The distribution of any subsequent follow-up letters will be handled in the same manner. Letters of reminders will be sent one week, before actual survey, to prospective respondents and their supervisors.

#### Analysis of Data

Four different survey instruments will be used to collect the data (the JDS, OCQ, JOOS, and demographic survey).

The JDS will be used to analyze the dependent variable, job satisfaction; the OCQ will be utilized to determine the dependent variable, employee commitment to the organization; the JOOS will be used to measure specific behavioral outcomes of employees; and items on the demographic data survey instrument will be utilized for statistical analysis.

Pearson product-moment correlations will be used to assess and describe the relationship between job satisfaction and organizational commitment as well as between job-task characteristics, personal characteristics, and organizational characteristics and job satisfaction and organizational commitment responses.

In addition, multiple regression analysis will be used to test each sets of recommended variables (job-task characteristics, organizational characteristics, and worker characteristics) of job satisfaction and commitment. Secondly, multiple regression analysis will be used to identify individual pairs of sets of variables and those specific variables that most strongly correlate with job satisfaction and commitment. Multiple regression analysis will also be used to test the outcome variables.

Finally, Canonical Correlations (CC) will be used to provide an index of the overall pattern of relationships among the recommended sets of variables seven sets of variables were identified in this study. Canonical correlations were used to assess all the possible two-way pairs of the seven sets of variables. Canonical correlations built a set of underlying dimensions that will describe the degree of relationships between two sets of variables. For each pair of sets of variables this relationship will yield one or more significant R-squares statistics. All significant R-squares for a pair or sets of variables will then be total to show how much they share in common. This process will be done for each pair of sets of variables. Then a table will be created to show the patterns of relationships among the 7 sets of variables. The degree of relationship will then be compared to the "nearness" of the sets of variables shown in the Theoretical Model (Figure 1). A Distance Matrix Table displaying the number of "Links" between each set

will then be developed. Finally, a simple non-parametric test will be run to show how closely the data matches the theory in the Model.

Factor analysis, another multivariate data reduction technique, will be used to consolidate the number of variables into smaller sets of factors. Factors or "new variables" will describe the relations among the individual variables in all the 7 sets simultaneously. The factors will be extracted through the method of linear combinations of variables (another name for principal components).

The factor analysis technique operates in three distinct phases; the variation in the data will be partitioned among the principal components. In the second phase of the analysis, each of the factors selected during phase one, will be listed in relation to each variable. This information will be used to determine which variables formed the linearly combination of each unique factor. At the third phase, the factors will be identified and defined. This will be accomplished by examining each factor and its corresponding factor matrix score. Each row of columns is expected to contain the coefficients of the standardized variable in terms of the factors. The values will be called "Factor Loading" since they are expected to indicate how much weight would be assigned to each factor. The factor loading scores of the seven factors were examined. The largest factor loading for each variable was selected and those tables are presented in chapter 4.

## CHAPTER IV

### FINDINGS OF THE STUDY

#### Overview

This study was designed to determine the nature and magnitude of the relationship between job satisfaction and organizational commitment as perceived by irrigation workers (Managers / Supervisors, Support Services / Clerical, Technical / Engineering, Field & Support Workers) at a quasi irrigation corporation in Jamaica W.I. The determination and magnitude of the relationship were measured by the use of the Job Diagnostic Survey (JDS), the Organizational Commitment Questionnaire (OCQ), and Job Satisfaction and Organizational Commitment Outcomes Survey (JOOS). A descriptive analysis of the demographic information was initially presented to display the findings of the study and followed by a descriptive analysis of the JDS (job satisfaction), OCQ (commitment) and JOOS (outcome) scores. In supportive summary, the results of the analyses of the data were presented relative to each of the research questions. The research questions posed in chapter one was then answered as the hypotheses were tested to determine whether to reject or fail to reject each proposed hypothesis.

A sample of 164 was used representing all departments and category of workers (Managers / Supervisors 10, Support services / Clerical 55, Technical / Engineering 48, Field & Support Workers 51). A total of 111 respondents completed the questionnaire of which 104 were accepted (7 Managers / Supervisors, 46 Support Services / Clerical, 24 technical / Engineering, 27 Field & Support Workers). The overall response rate was 68 percent. There were 7 incomplete (rejected) questionnaires (displayed missing data). The

available sample for analysis was 104 questionnaires, 63 percent of the population broken down as follows: 7 percent Managers / Supervisors, 44 percent Support Services / Clerical, 23 percent Technical / Engineers, 26 percent Field & Support Workers.

### Demographic Information

The demographic information included personal/professional characteristics of the respondents. Information was obtained on age, gender, profession, education, and length of time as an irrigation worker, length of time with present employer, length of time in present job classification, present position, employment status, and primary job shift.

Table 4 summarizes the frequency distribution of the personal/professional characteristics. The age of the employees was predicted to influence organizational commitment. The age of the respondents/subjects (questionnaires accepted) ranged from 18 to over 60 years. Seventeen (17) employees (16.3 percent) were in the 18 to 29 age groups. Thirty-nine (39) employees (37.5 percent) were in 30 to 39-age group. Twenty-six (26) employees (25 percent) were in the 40 to 49-age group. Twenty-one (20.2 percent) were in the 50 to 59 age groups, and one employee (1 percent) was over 60 years old. Among the 104 questionnaires accepted from respondents 48 (46 percent) were females and 56 (54 percent) were males.

The education level of the employees was also predicted to influence employee's job satisfaction and organizational commitment. Thirty-three employees (33) (31.7 percent) had vocational training. Four employees (4) (3.8) had an Associate Degree. Twenty-nine employees (29) (27.8 percent) had a Diploma. One employee (1) (1.0 percent) had a Masters Degree. No (0) (0 percent) had a Doctorate Degree. Nine (9) (8.7 percent) had a

Bachelors Degree. Twenty-eight (28) (26.9 percent) classified themselves in the other category.

Organizational commitment was influenced by the number of years an employee spent in current irrigation profession, and the number of years employed with the irrigation company. Job satisfaction and commitment showed a slight positive correlation with the number of years in present job classification.

Job Classification: Four employees (4) (3.9 percent) had less than one year in their present job classification. Twenty-nine employees (29) (28.0 percent) were between one and four years. Thirty (30) (29.0 percent) had between five and nine years. Forty employees (40) (38.0 percent) had between ten and nineteen years. One employee (1) (1.0 percent) had over thirty years.

Years in Organization: Five employees (5) (4.8 percent) have been with the organization for less than one year. Eighteen employees (18) (17.3 percent) have been with the organization for between one to four years. Thirty-five (35) (33.7 percent) have been with the organization for between five and nine years. Forty-two employees (42) (40.4percent) have been with the organization for between ten and nineteen years. Two employees (2) (1.9 percent) have been with the organization for between twenty and twenty-nine years. Two employees (2) (1.9 percent) have been with the organization for over thirty years.

Leadership and supervision (both organizational characteristics) were predicted to influence job satisfaction and organizational commitment. Seventy-two (72) employees (69.2 percent) said that they did not hold a supervisory or leadership position. Twenty (20) employees (19.2 percent) were supervisors. Seven (7) employees (6.7 percent) were Director/Managers. Five employees (5) (4.8 percent) were not classified.

Employment Status: Ninety-nine employees (99) (95.2 percent) had full time employment. Five employees (5) (4.8 percent) worked part-time. One hundred-three employees (103) (99 percent) worked the "Day Shift" One employee (1) (1 percent) worked the "Night Shift". See Appendices for the employee's demographic data instrument. Table 4 summarizes the responses to the questions asked in the demographic instrument.

#### Job Task Characteristics

Core job dimensions (task autonomy, task significance, task identity, skills variety and feedback) were predicted to correlate with job satisfaction and organizational commitment. The frequencies of these dimensions are summarized in Table 4.

Task Autonomy: Sixty-six employees (62.5 percent) feel that they have moderately much, much and very much autonomy in their job (the job give them almost complete responsibility for deciding how and when the work is done. Eleven (11) employees (10.6 percent) feel that they have moderate or moderately little autonomy in their job (although things might be routine, repetitive and not requiring much initiative they can make some decision when it is necessary for them to so do). Twenty-eight (28) employees (26.9 percent) feel that they have little or very little autonomy in their job (the job gives them almost no personal say about how and when the work is to be done – they are generally told what to do and they comply). All employees responded to these questions.

Task Identity: Thirty (30) employees (28.8 percent) felt that they have very much, much task identity in their job (their job is adequate in relation to other employees tasks). Forty-six (46) employees (44.2 percent) felt that they have moderately much &



moderately 'size' task identity in their job (their job is moderately sized in comparison to the tasks of other employees). Twenty-eight (28) employees (26.9 percent) felt that they have moderately little, little, and very little task identity in their job (their job is only a tiny part of the overall piece of work and the results of their activities cannot be seen in the final product/service).

Task/Skill Variety: Forty-nine (49) employees (47.1 percent) felt that they have much, very much skill variety in their job (job require them to do many different things, using a number of different personal skills and talents). Twenty-eight (28) employees (26.9 percent) felt that they have moderate much & moderate skill variety in their job. Twenty-seven (27) employees (26 percent) felt that they have very little, little & moderately little skill variety in their job (the job requires them to do the same routine things repeatedly during their working hours).

Task Significance: Sixty-eight (68) employees (65.4 percent) felt that they have very much, & much task significance in their job (the outcome of their work can affect the product/service in very important ways). Twenty-five (25) employees (24.1 percent) felt that they have moderate, much & moderately significant task significance in their job (job moderately significant). Eleven (11) employees (10.6 percent) felt that they have little, very little & moderately little task significance in their job (the outcome of their work are not likely to have any important effect on others or the product/service).

Feedback / Job: Twenty-six (26) employees (25 percent) felt that they receive moderate, moderately much feedback on their job performance (most times managers provide feedback in very informal ways while other times they are simply ignored).

Sixty-five employees (65) (63.5 percent) felt that they receive very much, much feedback on their job performance (managers prove them with almost constant [very frequent] feedback about their progress and how very well they are doing. Eleven (11) employees (10.6 percent) felt that they receive little, moderately little feedback on their job (managers almost never let them know how well they are performing their job task). Two employees (2) (1.9 percent) felt that they have received very little feedback (managers never take the time to provide them with feedback on their job performance, they felt that they are left to do as they please).

Feedback / Agent (Coworkers): Forty-two employees (42) (40.4 percent) had much, very much feedback from coworkers. Forty-two employees (42) (40.4 percent) had moderate, moderately much feedback from their coworkers. Twenty employees (20) (19.2 percent) had little, moderately little feedback from their coworkers.

#### Organizational Characteristics.

Organizational characteristics (leadership, supervision, co-workers cohesion, and organizational dependability) were predicted to correlate with job satisfaction and organizational commitment. Table 4 contains the frequency distribution for organizational characteristics.

Co-workers cohesion: Twenty-seven employees (27) (25 percent) were extremely satisfied. Forty employees (40) (38.5 percent) were satisfied. Thirteen employees (13) (12.5 percent) were slightly satisfied. Sixteen employees (16) (5.4 percent) were neutral. Five employees (5) (4.8 percent) were slightly dissatisfied. Three (3) employees (2.9 percent) were dissatisfied. No (0) employees (0 percent) were extremely dissatisfied.

Leadership: Twenty-seven employees (27) (26 percent) were extremely satisfied. Forty-four employees (44) (42.3 percent) were satisfied. Twelve (12) employees (11.5 percent) were slightly satisfied. Sixteen employees (16) (15.4 percent) were neutral. One employee (1) (1 percent) was slightly dissatisfied. Three (3) employees (2.9 percent) were dissatisfied. One employee (1) (1 percent) was extremely dissatisfied.

Job Security: Ten employees (10) (9.6 percent) were extremely satisfied. Thirty-nine employees (39) (37.5 percent) were satisfied. Eight (8) employees (7.7 percent) were slightly satisfied. Twenty-eight employees (28) (26.9 percent) were neutral. Six employees (6) (5.8 percent) were slightly dissatisfied. Eight employees (8) (7.7 percent) were dissatisfied. Five employees (5) (4.8 percent) were extremely dissatisfied.

Work/Group Cohesion: Twenty-seven employees (27) (25 percent) were extremely satisfied. Thirteen employees (13) (12.5 percent) were slightly satisfied. Sixteen employees (16) (15.4 percent) were neutral. Five (5) employees (4.8 percent) were slightly dissatisfied. Three employees (3) (2.9 percent) were dissatisfied. No employee (0) (0 percent) was extremely dissatisfied.

Quality of Supervision Received: Seventeen employees (17) (18.3 percent) were extremely satisfied. Forty-three employees (43) (41.3 percent) were satisfied. Thirteen employees (13) (12.5 percent) were slightly satisfied. Sixteen employees (16) (15.4 percent) were neutral. Eight employees (8) (7.7 percent) were slightly dissatisfied. Six employees (6) (5.8 percent) were dissatisfied. One employee (1) (1 percent) was extremely dissatisfied.

## Behavioral Outcomes

Eight behavioral outcomes (turnover/retention, satisfaction with job performance, absenteeism, quality of work, quantity of work, tardiness, rating of job performance and advancement readiness) were identified as related to job satisfaction and organizational commitment. Table 4 contains the frequency distribution for behavioral outcomes of job satisfaction and commitment.

**Absenteeism (Absent from Work):** Three employees (3) (2.9 percent) were never absent (each month). Twenty-eight employees (28) (26.9 percent) were almost never absent (one day each month). Fifty-two employees (52) (50 percent) were absent sometimes (two day each month). Seventeen employees (17) (16.3 percent) were absent frequently (3-4 days each month). Four employees (4) (3.9 percent) were absent very frequently (5 or more days each month).

**Tardiness at Work:** Seventeen employees (17) (16.3 percent) were never late for work (each month). Eighteen employees (18) (17.3 percent) were almost never late (one day) each month. Fifty-seven (57) employees (54.8 percent) were late sometimes (two day each month). Eleven employees (11) (10.6 percent) were late frequently (3-4 days each month). One (1) employee (1 percent) was late very frequently (5 or more days) each month.

**Turnover / Retention:** Nine employees (9) (8.7 percent) said that they definitely will never leave the Irrigation Corporation prior to retirement. Seventeen (17) employees (16.3 percent) said that they probably would not leave the Irrigation Commission prior to retirement. Thirty-one employees (31) (29.8 percent) said that they are uncertain as to whether they would leave the Irrigation Commission prior to retiring. Twenty-eight

employees (28) (26.9 percent) said that they probably would leave the Irrigation Commission before their retirement. Nineteen employees (19) (18.3 percent) said that they definitely would leave the Irrigation Commission prior to retirement.

Job Performance: Five employees (5) (4.8 percent) were extremely satisfied with their overall job performance. Five employees (5) (4.8 percent) were satisfied. Eighteen employees (18) (17.3 percent) were slightly satisfied. Thirty-one employees (31) (29.8 percent) were neutral. Twenty-eight employees (28) (26.9 percent) were slightly dissatisfied. Seventeen employees (17) (16.3 percent) were dissatisfied.

Quality of Work: Thirty-one employees (31) (29 percent) were extremely satisfied with the quality of their work. Sixty-four employees (64) (61.5 percent) were satisfied. Three (3) employees (2.9 percent) were slightly satisfied. Five employees (5) (4.8 percent) were slightly dissatisfied. No (0) employee (0 percent) was dissatisfied. No employee (0) (0 percent) was extremely dissatisfied.

Quantity of Work: Eighteen employees (18) (17.3 percent) were extremely satisfied with the quantity of their work. Fifty-seven employees (57) (54.8 percent) were satisfied. Eight employees (8) (7.7 percent) were slightly satisfied. Ten employees (10) (9.6 percent) were neutral. Nine employees (9) (8.7 percent) were slightly dissatisfied. Two employees (2) (1.9 percent) were dissatisfied. No employee (0) (0 percent) was extremely dissatisfied.

Advancement / Promotion Readiness: Seventeen employees (17) (16.3 percent) were extremely satisfied with their promotion readiness. Forty-four employees (44) (42.3 percent) were satisfied. Ten employees (10) (9.6 percent) were slightly satisfied. Ten employees (10) (9.6 percent) were neutral. Ten employees (10) (9.6 percent) were

slightly dissatisfied. Ten employees (10) (9.6 percent) were dissatisfied. Three employees (3) (2.9 percent) were extremely dissatisfied.

Overall / Job Rating: Twenty-six (26) employees (25 percent) rated their overall job performance as outstanding. Sixty-eight employees (68) (55.8 percent) rated their overall job performance as excellent. Fifteen employees (15) (14.4 percent) rated their overall job performance as good. Four employees (4) (3.9 percent) rated their overall job performance as satisfactorily. One employee (1) (1 percent) rated their job performance as poor.

#### Descriptive Analysis of Job Diagnostic Survey (JDS)

The JDS scale was used to determine employee's overall job satisfaction. Hackman and Oldham (1975) concluded that it is easy to differentiate between high and low satisfaction. To do so, Hackman and Oldham suggested that the instrument should be used to interpret at the middle range of scale scores. Thus, those scores above the midpoint were classified as high satisfaction while those below were scored as low satisfaction. The scores of this study range between 2.2 and 6.8, with an N of 104 valid scores. The mean was 5.09 with standard deviation of .93. Score less than or equal to 3.5 were considered low satisfaction, and scores greater than 3.5 were recorded as high satisfaction. The mean score was above the midpoint on the seven-point Likert scale, and the standard deviation indicated an acceptable distribution of responses within the sample.

### Descriptive Analysis of Organizational Commitment Questionnaire (OCQ)

The OCQ scale was used to determine the employee's organizational commitment. To interpret these instruments the conclusions of Mowday et al. (1979) was followed. Mowday et al. states that it is easy to differentiate between high and low commitment near the middle range of scale scores. With the aid of Mowday et al suggestion, those scores above the midpoint were classified as high commitment while those below were classified as low commitment. The scores in this study range between 2.4 and 7.0 with an N of 104 valid scores. All employees responded to the commitment questions. The mean was 4.53 with a standard deviation of .69. Score less than or equal to 3.5 were considered low commitment, and scores greater than 3.5 were recorded as high commitment.

### Descriptive Analysis of Job Satisfaction and Organization Commitment Outcomes Survey (JOOS)

The JOOS scale was used to determine employee's behavioral outcomes to satisfaction and commitment. Respondents were asked eight questions. The score were interpreted by recording the scores above the midpoint as high scores and those below the midpoint as low scores. The absenteeism question had a mean score of 4.08 and a standard deviation of .87. 104 employees answered this question. Tardiness had a mean score of 3.38 and a standard deviation of .94. Retention had a mean score of 2.75 and standard deviation of 1.31. Satisfaction with job performance had a mean score of 6.19 and standard deviation of .65. Quality of work had a mean score of 6.14 and a standard deviation of .77. Quantity of work had a mean score of 5.57 and a standard deviation of 1.24. Promotion Readiness had a mean score of 5.06 and a standard deviation of 1.71.

Employee's ratings of their job performance had a mean score of 2.04 and standard deviation of .95. Table 5 shows the means and standard deviations and correlation for the variables.

## Study Results

### Hypothesis 1:

Intrinsic job satisfaction as measured by core job dimensions and basic motivators, is significantly correlated with organizational commitment. Initially focus was on the testing of Hypothesis 1 and the first part of the model dealing with intrinsic job satisfaction and commitment. Table 5 displays Pearson correlations among the seven sets of variables: core job dimensions, basic motivators, the components of organizational commitment and job satisfaction, and outcomes. The core job dimensions are task skill variety, task identity, task significance, task autonomy, and feedback (persons and job). The basic motivators are achievement/accomplishment, personal growth, recognition, and challenging work. The results showed a positive relationship .30 between job satisfaction and organizational commitment. There were positive correlations between core job dimensions and most of the items of organizational commitment. However, the relationship between basic motivators and organizational commitment was much stronger.

The premise postulated by the Hackman-Oldham and Herzberg's job dimension model was supported by the findings of this study. According to Hackman and Oldham, skill variety, task autonomy, task significance, and feedback each contribute independently to intrinsic job satisfaction; while feelings of accomplishment, personal



growth, recognition and challenging work contribute to intrinsic job satisfaction independent of one another. The basis of the support of Herzberg's theory comes from the lack of meaningful correlations between the six core job dimensions and Herzberg's motivators.

Correlations	Table 5		1	2	3	4	5	6	7	8	9	10
	Mean	Std. Deviation										
1 JOBSAT	5.09	0.93										
2 ORGCOMIT	4.53	0.69	0.30**									
3 TASKAUTO	4.47	1.86	-0.02	-0.17								
4 TASKID	4.48	1.71	-0.16	-0.19*	0.38**							
5 SKILLVAR	4.79	1.82	-0.18	-0.01	0.45**	0.45**						
6 TASKSIGN	5.65	1.68	-0.08	-0.08	0.34**	0.36**	0.24*					
7 FEEDJOB	5.45	1.53	0.21*	0.06	0.17	0.11	0.15	0.27**				
8 FEEDBACK	4.84	1.53	0.22*	0.08	0.10	-0.10	0.02	-0.01	0.37**			
9 DEVEL	4.64	1.72	0.47**	0.20*	-0.20*	-0.25*	-0.18	0.00	0.12	0.25*		
10 ACCOMPL	5.80	1.28	0.48**	0.37**	-0.01	0.02	0.12	0.06	0.23*	0.17	0.48**	
11 PAID	4.45	1.77	0.59**	0.27**	0.02	-0.23*	-0.07	-0.23*	0.00	0.26**	0.38**	0.13
12 JOBCHAL	5.15	1.32	0.35**	0.28**	-0.07	-0.02	0.17	-0.02	0.22*	0.14	0.42**	0.58**
13 AGE	2.52	1.02	0.21*	0.15	-0.02	0.08	0.03	-0.02	0.16	0.02	0.04	0.14
14 GENDER	1.54	0.50	0.19	0.13	0.00	0.06	0.08	-0.13	0.01	-0.06	0.19	0.23*
15 EDU	3.67	2.45	0.13	0.06	0.01	-0.08	0.04	0.13	0.01	0.13	0.14	0.00
16 PROF	3.37	1.15	0.02	0.01	-0.01	0.10	0.17	-0.04	0.03	-0.04	-0.07	0.10
17 ORG	3.23	0.99	0.05	-0.04	0.00	0.19	0.12	0.07	0.08	-0.08	-0.16	0.06
18 TSTEMP	0.69	0.46	-0.13	0.08	-0.01	-0.07	-0.02	-0.08	-0.01	0.01	-0.02	-0.14
19 TSUPER	0.38	0.79	0.08	-0.13	-0.03	0.05	-0.12	0.03	-0.05	-0.09	-0.06	0.10
20 TDIRMAN	0.20	0.76	0.00	-0.01	0.14	0.04	0.20*	0.10	0.12	0.16	0.06	0.04
21 TOTHER	0.19	0.86	0.14	0.09	-0.08	0.02	0.03	-0.01	-0.04	-0.03	0.07	0.07
22 TALK	5.33	1.13	0.32**	0.31**	-0.19	-0.36**	-0.21*	0.11	0.10	0.20*	0.36**	0.27*
23 SUPPORT	5.64	1.29	0.42**	0.05	-0.18	-0.24*	-0.29*	-0.08	0.24	0.13	0.36**	0.30**
24 FUTURE	4.58	1.51	0.59**	0.15	0.17	-0.03	-0.05	0.04	0.06	0.19	0.26**	0.22*
25 HELPPEO	5.57	1.31	0.27**	0.13	-0.21*	-0.13	-0.23	0.09	0.04	0.03	0.30**	0.23*
26 SUPERQU	5.22	1.47	0.38**	0.12	0.01	-0.35**	-0.30**	0.02	0.05	0.30**	0.28**	0.28**
27 WABSENT	4.08	0.87	0.16	0.02	-0.13	0.05	-0.12	-0.08	-0.19	0.15	0.14	0.08
28 WLATE	3.38	0.94	0.14	0.23**	-0.03	-0.14	0.03	0.09	-0.01	-0.02	0.03	0.02
29 REFLECT	2.75	1.31	-0.35**	-0.28**	0.11	0.19*	0.14	-0.08	0.03	-0.08	-0.14	-0.31**
30 OJOB	6.19	0.65	0.11	-0.01	-0.11	0.25*	-0.04	-0.08	0.12	0.09	-0.03	0.19
31 QWORK	6.14	0.77	0.19	-0.01	0.05	0.14	-0.12	0.00	0.16	0.11	-0.06	0.09
32 QTYWORK	5.57	1.24	0.18	-0.09	0.27**	0.06	0.17	0.11	0.32**	-0.03	0.11	0.18
33 READY	5.06	1.71	0.25*	0.06	0.02	-0.07	0.01	0.05	0.22*	0.07	0.07	0.26**
34 JOBRATE	2.04	0.95	0.04	0.06	0.00	0.02	0.05	-0.05	-0.04	-0.15	-0.02	-0.14

\*\*

Correlation is significant at the 0.01 level (2-tailed).

\*

Correlation is significant at the 0.05 level (2-tailed).

	11	12	13	14	15	16	17	18	19	20	21	22	23
	-0.01												
	0.19	0.00											
	0.19*	0.40**	-0.10										
	0.05	0.10	-0.20*	-0.17									
	0.07	-0.02	0.55**	0.01	-0.29**								
	-0.03	-0.12	0.50**	-0.16	-0.24*	0.81**							
	0.09	-0.10	-0.31**	0.01	0.12	-0.32**	-0.33**						
	-0.24*	0.02	0.25*	-0.09	-0.16	0.33**	0.38**	-0.73**					
	0.04	0.06	0.05	0.02	0.08	0.15	0.09	-0.40**	-0.13				
	0.20	0.11	0.15	0.12	-0.04	-0.11	-0.10	-0.34**	-0.11	-0.06			
	0.29**	0.15	-0.01	0.10	0.10	0.06	-0.01	0.06	-0.06	-0.04	0.01		
	0.28**	0.13	0.06	-0.02	0.09	-0.08	-0.07	-0.02	-0.09	0.07	0.13	0.29**	
	0.47**	-0.02	0.10	0.09	0.03	0.19	0.23*	-0.12	0.01	0.08	0.15	0.27**	0.17
	0.18	0.32**	-0.08	0.08	0.04	-0.09	-0.04	0.08	-0.14	0.06	0.01	0.26**	0.22*
	0.28**	0.34**	0.01	0.05	0.16	-0.10	-0.20*	-0.08	-0.04	0.12	0.12	0.35**	0.58**
	0.30**	-0.04	0.03	0.26**	-0.21*	-0.13	-0.20*	0.11	-0.10	-0.16	0.14	0.10	-0.13
	0.30**	-0.01	0.03	0.11	0.00	0.04	-0.02	0.19	-0.28**	-0.07	0.20*	0.18	-0.04
	-0.03	-0.22*	0.00	0.06	-0.18	0.19	0.17	0.06	-0.11	0.08	-0.03	-0.15	-0.02
	-0.06	0.11	0.10	0.04	0.02	0.00	-0.01	0.16	-0.14	-0.08	0.00	0.01	0.15
	-0.08	0.21*	-0.05	0.25*	0.05	0.05	-0.03	-0.01	-0.06	0.05	0.08	-0.07	-0.02
	0.09	0.18	-0.05	0.08	0.13	0.08	0.03	0.00	-0.14	0.19	0.04	0.01	-0.04
	0.13	0.02	-0.06	-0.21*	0.16	0.02	0.07	0.01	-0.12	0.17	-0.01	0.20*	0.09
	0.18	-0.10	0.24*	0.08	0.02	0.22*	0.16	-0.08	-0.02	0.03	0.18	-0.24*	-0.13

24 25 26 27 28 29 30 31 32 33

0.07										
0.26**	0.22*									
0.20*	-0.09	0.10								
0.06	0.05	0.10	0.19							
-0.17	0.00	-0.30**	-0.24*	-0.13						
-0.10	0.21*	0.04	0.03	0.15	-0.02					
0.04	0.10	0.14	0.04	0.15	-0.09	0.33**				
0.23*	0.16	0.06	-0.02	0.12	-0.06	0.06	0.25*			
0.29**	0.16	0.08	-0.05	-0.09	-0.13	0.23*	0.00	0.42**		
0.07	-0.27**	-0.14	0.02	0.27**	0.09	-0.15	-0.06	0.08	-0.18	

The correlation information contained in Table 5 has displayed distinct patterns that can be used to discuss the 15 elements of organizational commitment (although not displayed in the table, see appendices). The elements of personal growth, achievement, recognition, and challenging work seemed to play a core role among the 10 questions used to measure *intrinsic job satisfaction*. A moderate-strong relationship seemed to exist between these four basic motivators and six core job dimensions. The strongest relationship existed between recognition and security from the job  $r = .88$ . The following organizational commitment items were all related to job satisfaction. The extent to which the management of the Irrigation Commission inspired employees' job performance correlated moderately and positively in each case  $r = .24$  to  $r = .52$  with all 10 elements on *intrinsic job satisfaction*. The extent to which employees talk up the Commission, the extent to which employees felt their values and the Commission's values are similar, the extent to which the employees felt proud of working at the Commission, and the extent to which the employees felt glad they choose the Commission to work for correlated moderately-strongly in each case ranging from  $r = .19$  to  $r = .46$  with seven elements of *intrinsic job satisfaction*.

Similar correlations existed between the remaining elements of organizational commitment and *intrinsic job satisfaction*. The most significant correlations were between amounts of personal growth and development employees get from doing their job and the extent to which they feel their values and the Commission's values are similar  $r = .31$ ; between the amount of personal growth they experience and the extent to which the employees cared about the Commission  $r = .33$ ; and between the amount of personal

growth they experience and the extent to which the Commission inspires employees' job performance  $r = .33$ .

There is a strong interdependence of employees' attitudes about their organization, the intrinsic satisfaction they receive in performing their jobs, and the basic motivators built into the jobs themselves. These findings have positively supported Hypothesis 1. Figure 3 is a scatter plot of the mentioned variables. This diagram has shown positive relationship between job satisfaction and commitment.

Figure 3. Scatter Plot - Relationship Between Job Satisfaction and organizational Commitment

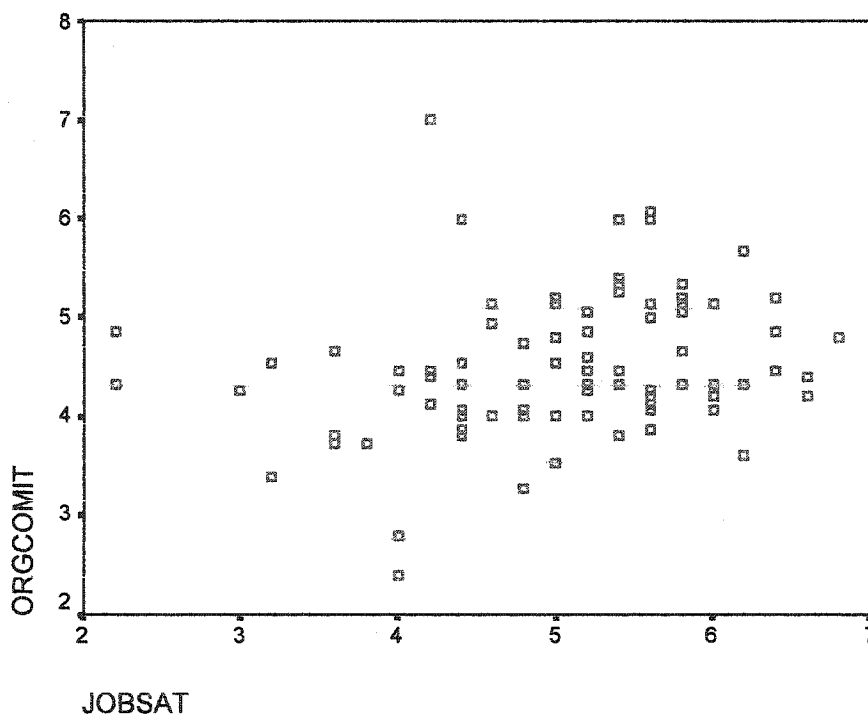


Table 5 presents the correlation matrix of the two criteria (dependent variables) and 32 independent variables. Canonical correlations, multiple regressions, and Pearson

correlations analysis were conducted on the data. At the zero-order level, variables from all three categories independent variables (personal, job, and organizational characteristics) correlate with both job satisfaction and organizational commitment. The highest zero-order correlations with satisfaction are accepted for feedback from co-worker .21, feedback from supervisor .22, supervision .42, cohesion .27, and organizational dependability .59. The highest zero-order correlations with commitment are reported for leadership .42, supervision .38, recognition .59, cohesion and co-workers .27. Thus, it is observed that satisfaction and organizational commitment are moderately correlated .30.

The variables with the greatest relationship to both job satisfaction and commitment were leadership: the more highly rated the leadership, the more the employee is satisfied and committed. The variables having the next greatest correlation with satisfaction and commitment are supervision, co-workers, and feedback from the job. The more feedback employees received, the more highly rated the level of supervision, the more highly rated the co-workers, the greater the job satisfaction and commitment of the employees.

#### Hypothesis 2:

The characteristics of the job tasks performed by the respondents was correlated with job satisfaction and organizational commitment. Based on the assumption contained in Hypothesis 2, the analysis revealed that the characteristics of job tasks performed by employees correlated most favorable with job satisfaction. The analysis demonstrated that all the job task characteristics have a positive correlation with job satisfaction. The job task variables with the greatest correlation with satisfaction are the two forms of

feedback the employees receive, feedback from the job .22, and feedback from co-workers .21. The following variables also showed positive correlation with satisfaction: Task Significance .08, task autonomy .02, and task identity .18. These variables has emerged as significant variables in this study. Other job characteristics variables such as: Feedback from the job .06, task significance .08, and feedback from supervisors/co-workers .08 showed slightly moderate correlation, thus these variables played less significant roles in modeling commitment. Previous research (Blegen, 1994; Burton, 1994; Knoop, 1995) has shown that beliefs about the organization are affected to some extent by experience on the job; those beliefs are replicated by the findings of this study. The findings also demonstrate that all job task characteristics were strongly correlated with satisfaction but are only slightly- moderately correlated with commitment.

### Hypothesis 3:

The characteristics of the employees were correlated with job satisfaction and organizational commitment. Table 5 provides the result of this test. From Table 5 it can be concluded that employees' personal characteristics are slightly related to satisfaction and less related to organizational commitment. There is also a very slight correlation between age and commitment .13 and a weak correlation between education and commitment .06. The correlation between the number of years employees worked in their profession and commitment is weak at .01 and the number of years employees worked for the Irrigation Commission and commitment is negative (-.04). However, the longer the employee worked at the Irrigation Commission, the more committed they were to the Irrigation Commission. The most committed categories in order of commitment were:

Field & Support Staff, next Support Services / Clerical, then Managers / Supervisors and the least committed Technical / Engineers. There was moderate correlation between age and satisfaction .21 and a slight correlation between education and job satisfaction .13. There was a moderate correlation between job title and satisfaction (managers/supervisors .00, clerical/support services .08, technical/engineers (-.13), field and support workers .14). These findings has shown support for Hypothesis 3 but not to the degree expected. The variables that were most strongly related to satisfaction and commitment were job title, the number of years worked in profession, and the number of years worked at the Irrigation Commission.

#### Hypothesis 4:

The characteristics of the organization in which the tasks were performed were correlated with job satisfaction and organizational commitment.

The analysis has revealed that the variables with the greatest relationship to commitment were the characteristics of the organization. Thus, all the organizational characteristics have a significant relationship to job satisfaction and a moderate correlation with commitment. The variables with the greatest organizational correlation with job satisfaction were cohesion .27, leadership .42, Supervision .38, co-workers .32, and organizational dependability .59. The more closely employees work together and the more highly related the supervision, leadership, and the co-workers in the organization, the more satisfied the employees.

The characteristics of the organization had the strongest correlation with commitment: coworker .31, organizational dependability .15, and supervision .12, having



the largest impact. Although leadership in this research was not the strongest correlated variable with commitment, the data supported Hypothesis 4 and underscore the conclusion of Morris and Sherman (1981) that leadership is an under-researched predictor of commitment. The theoretical effect of organizational age (dependability) may support Steers' (1977) findings that a belief about organizational dependability correlates with commitment. Co-workers .32 and Cohesion .27 were the two variables from the characteristics of the organization that moderately correlated with commitment. The more highly rated the co-workers and the greater extent to which employees get to know and help each other, the more committed they were to the organization. These findings have supported Hypothesis 4.

Pearson Product-Moment correlations, multiple regression correlations, and canonical correlations were run between job satisfaction and each outcome variable and commitment and each outcome variable, as a mean of testing the third component of the model. Table 5 has shown that satisfaction was found to be related to 6 of the 8 outcome variables: employees satisfaction with their job performance .11, quality of work .19, Quantity of work .18, promotion and advancement readiness .25, employees' rating of their performance .04, and employees desire to remain with the Irrigation Commission - .35. Although most employees appeared satisfied with their job, they have not displayed a strong desire to remain with the Irrigation Commission. An explanation for this phenomenon could be related to the Commission's recent reclassification exercise along with the Commission's history in staff reduction due to re-engineering (right sizing exercises), which has implications for an unstable future. Thus there is the sense of

suspicious job security or organizational dependability, and employees are actively considering move to other organizations for more job security and better advancement opportunities. From the result of the data it appeared that Job Satisfaction played a significant role in absenteeism .16 and tardiness .14.

Commitment was found to be related to 4 of the 8 outcome variables (See Table 5): employees' absenteeism .02, employee's tardiness .23, employees advancement readiness .06, and the employees' rating of their job performance .06. The employees who are more committed to the organization are more likely to remain with the Commission and are more satisfied with the various aspects (outcome variables) of their jobs. Commitment was not related to job performance (-.01), retention (-.28), Quality of work (-.09), and quantity of work (-.01). These findings agrees with Steers' research study, which suggest, "measures of organizational commitment may be more effective predictors of turnover than job satisfaction" (Steers, 1977), p. 46). For example, while the individual might be satisfied with either his or her pay or supervisor, a high degree of commitment to the organization and its goals may serve to override such dissatisfaction in the decision to continue participating in the organization. In other cases, for example, where money is very important to an employee and where he or she is highly dissatisfied with the salary, satisfaction with various aspects of the job may take precedence over commitment in the decision to participate.

These findings have supported the first four hypotheses. Previously, it was hypothesized that intrinsic job satisfaction, as measured by core dimensions and basic motivators, was significantly and positively related to organizational commitment. The findings have shown that satisfaction and organizational commitment are correlated .30.

The Basic Motivators have the greatest correlation with both satisfaction and commitment. However, the characteristics of the job tasks are significantly correlated with satisfaction while the characteristics of the organization are also greatly correlated with commitment. It was anticipated that all job-task characteristics would have correlated with satisfaction and commitment, this have proven not to be so. However, the two forms of feedback have the greatest correlation with satisfaction, although relatively weaker correlations with commitment. The third hypothesis anticipated that personal characteristics of the employees would be related to satisfaction and commitment. This was slightly-moderately supported, although age, gender and education had the greatest correlation with satisfaction and commitment. The number of years an employee worked in their irrigation profession and the number of years they worked at the Irrigation Commission were the strongest correlates of commitment. The employees' age .21, gender .19, and their education .13 have the greatest correlation with job satisfaction. The fourth hypothesis anticipated that the characteristics of the organization would be related to satisfaction and commitment. The findings have supported this hypothesis.

#### Hypothesis 5:

The rank orders of the canonical correlations match the 'nearness" of the sets of variables postulated in the theoretical model.

The first four hypotheses used Pearson correlation and multiple regressions to test the relationships among the selected sets of variables. However, Hypothesis 5 used canonical correlations and factor analysis to test for an overall pattern of relationships among the seven sets of variables in the theoretical model. Canonical correlations were performed

between the seven sets of variables (Sets A-G). Set A consisted of Hackman-Oldham core job dimensions (also adopted as Steers job characteristics); Set B was Herzberg's intrinsic motivators; Set C was Steers personal characteristics; Set D (modified) was Steers organizational characteristics; Set E was Steers organizational commitment; Set F was Herzberg, Porter, and Stone's job satisfaction; and Set G was Steers organizational outcomes.

Canonical correlations were used to describe the relationship among all possible two-way pairs of seven sets of variables, a total of 21 pairs of sets of variables. Each pair of variable sets yielded one or more significant ( $p < .05$ ) R - squared statistics. All significant R-Squared statistics were added up for a pair of sets of variables to show how much they shared in common.

Table 6 presents the pattern of relationships among the seven sets of variables. The degree of relationship shown in Table 6 was compared to the "nearness" of the sets of variables shown in the theoretical model, Figure 1. The hypothesized degree between the set of variables from the model were indexed by how many intervening steps it took to get from one set of variables to another. This process generated a matrix of dissimilarities. Figure 1 and Table 7 depict the resultant matrix of the number of "Links" between sets. A comparison of the model of Figure 1 to Table 6 of summed squared canonical correlations illustrates that the expected and observed patterns of relationship among the sets of variables were not very similar. Therefore, the model hypothesized in Figure 1 was not supported by the data. The Spearman rank order correlation between the dissimilarities of the variable sets with the matrix of summed Canonical R<sup>2</sup>s is .27. This is not satisfactorily significant.

TABLE 6: Sum of Significant Canonical R<sup>2</sup>s

## Pooled Within-Groups Matrices

	SET A	SET B	SET C	SET D	SET E	SET F	SET G
SET A	1.000	.009	.141	-.107	-.096	-.017	.157
SET B	.009	1.000	.188	.601	.392	.690	.169
SET C	.141	.188	1.000	.142	.104	.248	.156
SET D	-.107	.601	.142	1.000	.229	.630	.119
SET E	-.096	.392	.104	.229	1.000	.302	-.026
SET F	-.017	.690	.248	.630	.302	1.000	.209
SET G	.157	.169	.156	.119	-.026	.209	1.000

Table note: A - Hackman-Oldham's Core Job Dimensions / Steers Job Task Characteristics; B - Herzberg's Basic Motivators; C - Steers' Personal Characteristics; D - Steers' Organizational Characteristics; E - Steers' Organizational Commitment; D - Steers' Organizational Characteristics; E - Steers' Organizational Commitment; F - Herzberg, Porter, and Stone's Job Satisfaction; G - Steers Outcomes.

In addition, principal factors extraction before varimax rotation was also performed on all variables (Sets A - G) to analyze the overall relationship among the variables in the model. Principal components extraction was used to evaluate assumptions and limitations and to estimate the number of factors. Lautenschlager's (1989) Tables were used to generate appropriate cutoff values for the Eigenvalues expected by chance. The first 10 expected random values of the Eigenvalues by Lautenschlager's Tables are shown in Table 8. Lautenschlager suggest the number of components or factors to retain for rotation or other analysis is found by the last observed unrotated principal component Eigenvalue Table 9 that is above the expected by chance. Thus, as seen in Table 9, Lautenschlager results imply retention of six factors. However, seven were kept because these seven gave a highly interpretable solution.

TABLES 7: DISTANCE MATRIX OF THE NUMBER OF LINKS BETWEEN SETS

Distance Matrix of the Number of Links Between Sets

	SET A	SET B	SET C	SET D	SET E	SET F	SET G
SET A	0	1	2	2	1	1	2
SET B		0	2	2	1	2	3
SET C			0	2	1	1	2
SET D				0	1	1	2
SET E					0	1	2
SET F						0	1
SET G							0

Figure 1: Theoretical Model Showing Links Between Sets

INTRINSIC JOB SATISFACTION (Variables & Their Relationships)

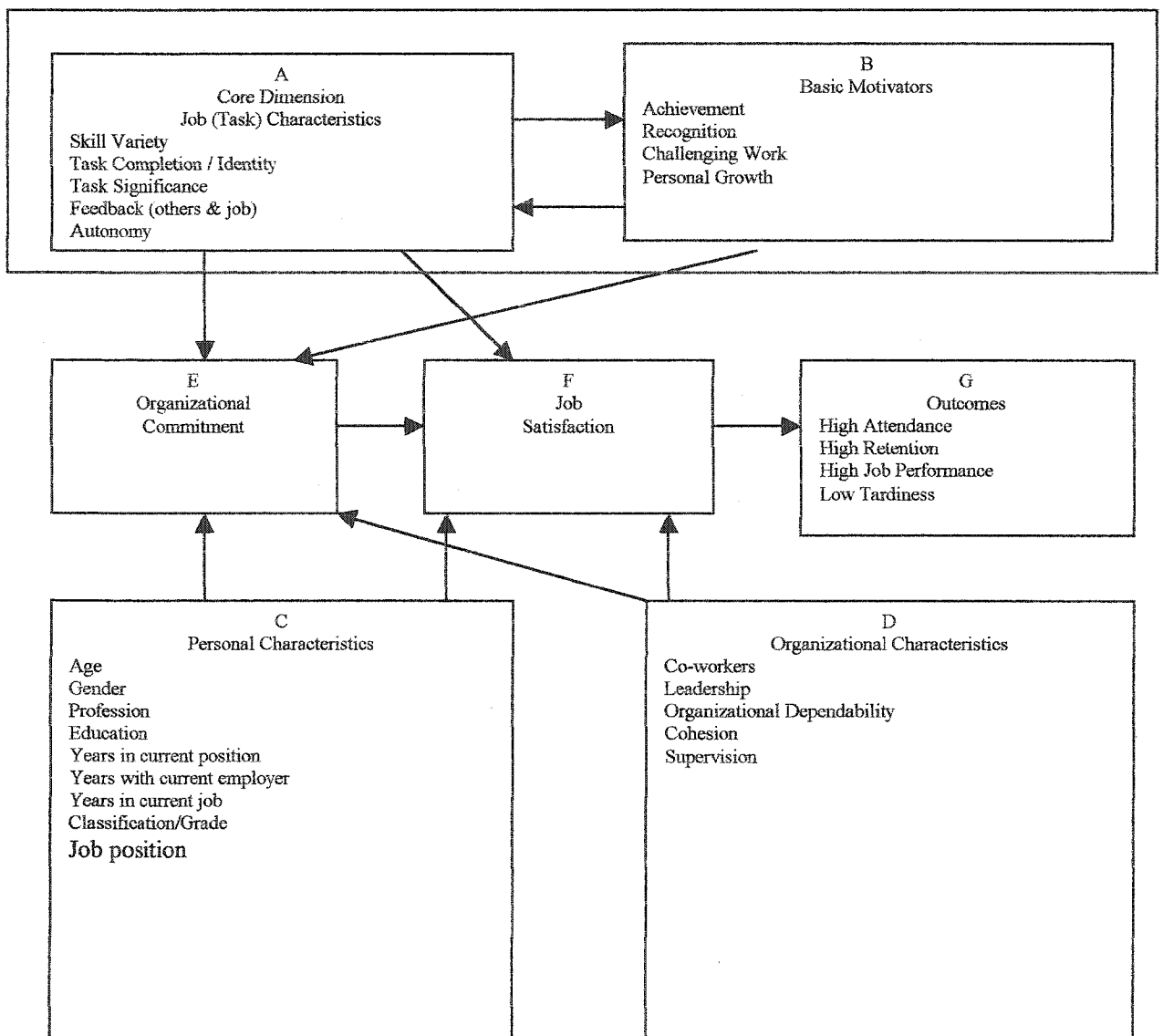


Table 8: Eigenvalues By Lautenschlager's Tables  
Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.609	37.264	37.264	2.609	37.264	37.264
2	1.284	18.336	55.601	1.284	18.336	55.601
3	.896	12.802	68.402			
4	.794	11.337	79.740			
5	.750	10.711	90.450			
6	.372	5.311	95.762			
7	.297	4.238	100.000			

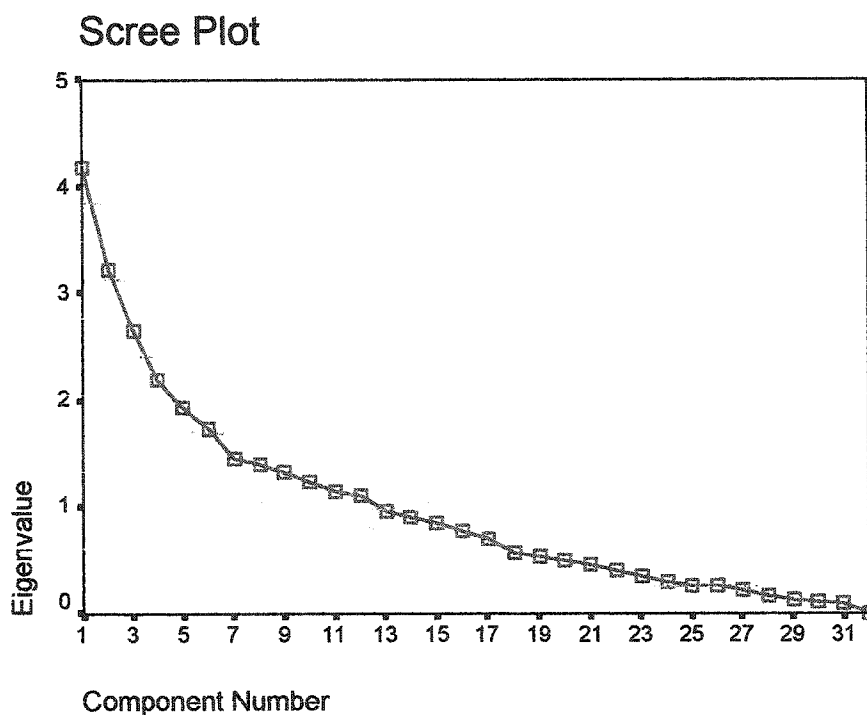
Extraction Method: Principal Component Analysis.

TABLE 9: EIGENVALUES BEFORE VARIMAX ROTATION

Component	Total Variance Explained			Extraction		
	Initial Eigenvalues	% of Variance	Cumulative %	Sums of Squared Loadings	% of Variance	Cumulative %
1	4.175	13.046	13.046	4.175	13.046	13.046
2	3.213	10.040	23.086	3.213	10.040	23.086
3	2.655	8.297	31.384	2.655	8.297	31.384
4	2.185	6.828	38.212	2.185	6.828	38.212
5	1.924	6.014	44.226	1.924	6.014	44.226
6	1.719	5.373	49.599	1.719	5.373	49.599
7	1.459	4.561	54.160	1.459	4.561	54.160
8	1.394	4.357	58.516	1.394	4.357	58.516
9	1.324	4.137	62.654	1.324	4.137	62.654
10	1.233	3.852	66.506	1.233	3.852	66.506
11	1.137	3.553	70.059	1.137	3.553	70.059
12	1.107	3.459	73.518	1.107	3.459	73.518
13	.947	2.960	76.477			
14	.901	2.817	79.294			
15	.839	2.623	81.918			
16	.763	2.385	84.302			
17	.698	2.180	86.482			
18	.570	1.781	88.263			
19	.526	1.643	89.906			
20	.497	1.552	91.458			
21	.458	1.430	92.889			
22	.411	1.285	94.174			
23	.345	1.078	95.252			
24	.293	.914	96.166			
25	.260	.814	96.980			
26	.251	.783	97.763			
27	.213	.664	98.428			
28	.162	.506	98.934			
29	.125	.392	99.326			
30	.117	.365	99.691			
31	9.875E-02	.309	100.000			
32	7.563E-17	2.363E-16	100.000			

Extraction Method: Principal Component Analysis.





Factors were interpreted through their factor loading. Loading of variables after varimax rotation and percents of variance are shown in Tables 10 and 6. Literature suggested only those loading with absolute value .40 or greater are considered large enough to use to describe the factor (Catell, 1966). The largest factor loading for each variable was selected. With the use of 4.0 cut, Table 10 was generated to further assist interpretation. For variables with more than one factor over .40, the largest loadings were used. Table 11 shows a more formal summary table of factor loading. By theory, seven factors should have been extracted if variables were associated within the seven sets more than between the seven sets. Table 11 shows the result was indeed seven factors.

Table 10 Rotated Factor Matrix Factor Loadings and Varimax Rotation

	1	2	3	4	5	6	7
SUPPORT	0.689	0.005	-0.137	-0.061	0.036	0.022	-0.174
SUPERQU	0.681	-0.102	-0.012	0.017	-0.042	0.116	0.225
DEVEL	0.653	-0.042	-0.033	0.066	-0.018	0.318	0.032
TALK	0.605	0.023	-0.096	0.139	0.099	-0.114	0.151
TASKID	-0.523	0.136	0.478	-0.071	0.240	0.143	0.025
ACCOMPL	0.479	0.172	0.217	-0.109	0.312	0.390	0.239
HELPPEO	0.455	-0.067	-0.094	-0.077	0.407	0.058	-0.152
FEEDBACK	0.410	-0.066	0.227	0.075	0.007	-0.013	0.045
PROF	-0.040	0.868	0.057	0.060	0.049	-0.034	-0.157
ORG	-0.087	0.860	0.095	-0.045	0.051	-0.208	-0.100
AGE	0.047	0.728	-0.013	0.112	-0.015	0.045	-0.003
TSTEMP	-0.087	-0.557	-0.126	0.402	0.369	-0.264	-0.247
TSUPER	-0.084	0.542	-0.121	-0.536	-0.207	0.059	0.396
EDU	0.262	-0.394	0.255	-0.072	-0.092	-0.189	0.027
TASKAUTO	-0.211	-0.063	0.710	0.061	-0.157	-0.023	0.009
SKILLVAR	-0.326	0.039	0.644	0.027	-0.053	0.213	-0.186
TASKSIGN	-0.060	-0.048	0.556	-0.152	0.003	-0.112	0.205
QTYWORK	0.156	0.024	0.544	0.192	0.242	-0.001	-0.009
FEEDJOB	0.272	0.094	0.479	-0.094	0.245	0.003	-0.182
TDIRMAN	0.228	0.120	0.418	-0.122	-0.223	0.079	-0.298
PAID	0.473	0.101	-0.018	0.674	-0.165	0.058	-0.041
WLATE	0.008	-0.006	-0.015	0.625	0.155	0.079	0.081
JOBRATE	-0.203	0.248	0.024	0.430	-0.338	0.171	-0.146
FUTURE	0.398	0.271	0.267	0.406	-0.129	-0.101	0.300
OJOB	0.006	0.042	-0.029	0.042	0.776	-0.027	-0.017
QWORK	-0.035	0.004	0.125	0.048	0.521	0.239	0.124
GENDER	0.006	-0.043	-0.033	0.229	0.146	0.740	-0.053
JOBCHAL	0.374	-0.051	0.154	-0.223	0.276	0.665	0.036
READY	0.356	0.044	0.347	0.031	0.292	-0.426	0.097
TOTHER	0.077	0.063	0.005	0.263	-0.155	0.368	0.154
REFLECT	-0.228	0.125	-0.014	0.024	-0.057	-0.006	-0.745
WABSENT	-0.057	-0.073	-0.166	0.499	0.047	0.203	0.524

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a Rotation converged in 17 iterations.

Table 11

Component Transformation Matrix

Component	1	2	3	4	5	6	7
1	.889	-.196	-.010	.209	.228	.202	.186
2	.173	.854	.457	-.087	-.005	.151	.040
3	-.135	-.410	.812	-.073	.362	.023	-.131
4	-.268	.046	.074	.899	-.046	.332	.017
5	.247	-.015	.250	.309	-.440	-.744	-.184
6	-.011	.241	-.252	.178	.735	-.347	-.431
7	.170	-.058	-.031	-.086	-.283	.390	-.853

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

However, one general factor, an organizational commitment factor and several smaller factors were produced through factors analysis. Factor 1, the general factor, consisted of 17 items; all six variables from Set A core job dimensions/job characteristics, three from Set B basic motivators, all five from Set D organizational characteristics and three from Set F job satisfaction. Factor 2 consisted of 16 items; all 15 of the organizational commitment variables and one variable (recognition) from Set B basic motivators. Factor 3 had 8 items; five variables from Set C personal characteristics, one each from Set D organizational characteristics, Set F job satisfaction and Set G outcomes. Factor 4 had 4 items; all from Set C personal characteristics. Factor 5 consisted of 6 items; one variable each from Set A core dimensions/job characteristics and Set F job satisfaction, two variables each from Set C personal characteristics and Set G outcomes.

Table 12: Factor Loading Summary By Size Loading

FACTOR STRUCTURE						
Factor 1 (General) 17 Items	Factor 2 Organ. Commit (14 Items)	Factor 3 Personal Charact. (7 Items)	Factor 4 Personal Charact. (4 Items)	Factor 5 No Domnt. Set (5 Items)	Factor 6 No Domnt. Set (1 Item)	Factor 7 Outcomes (4 Items)
SET A ▪ Task Autonomy ▪ Task Identity ▪ Skill Variety ▪ Task Significance ▪ Feedback (A) ▪ Feedback (J)	SET B ▪ Recognitio n	SETC ▪ Age ▪ Years in Profession ▪ Years With Organization ▪ Job category	SETC ▪ Managers Supervisors ▪ Support Services / Clerical ▪ Technical Engineers ▪ Field & Support Staff	No Dominant Set ▪ Gender ▪ Job Category ▪ Compensat ion ▪ Absentceis m ▪ Tardiness	No Dominant Set ▪ Managers ▪ Leadership	SET G ▪ Job Performance ▪ Quality of Work ▪ Quantity of Work ▪ Job Rating
SET B ▪ Personal Growth ▪ Achievement ▪ Challenging Work	SET E ▪ Extra Work ▪ Talk-up Company ▪ Loyalty ▪ Remain With Company ▪ Similar Values ▪ Pride Company ▪ Company Performance ▪ Leave Company ▪ Company Choice ▪ Advancem ent ▪ Company Policy ▪ Company Fate ▪ Decision	SET D ▪ Organizati onal Dependability				
SET D ▪ Leadership ▪ Cohesion ▪ Supervision ▪ Organizational Dependability ▪ Co- Workers		SET F ▪ Job Security				
SET E ▪ Performance		SET G ▪ Advance Readiness				
SET F ▪ Socialize ▪ Independence ▪ Equal Opportunity						

Factor 6 consisted of 4 items; two variables from Set C personal characteristics, one from Set D organizational characteristics, and one from Set G job satisfaction. Factor 7, consisted of 4 items (all from Set G outcomes).

Thus, this result was congruent with the canonical analysis and once again the overall pattern of relationships among variables in the model did not emerge. However, there were seven sets of variables and seven factors that emerged from the study. Although not identical, they do bare some resemblance to each other For example, Factor 1 has grouped together Sets A,B,D, and F, which are all the job satisfaction variables (intrinsic and extrinsic) and the organizational characteristics that influence satisfaction and commitment. Factor 2 is equivalent to Set C organizational commitment. Factor 3 contains predominantly personal characteristics from Set C. Factor 4 contains only personal characteristics from Set C. Thus, Set C personal characteristics appear to dominate two factors (3& 4). Factors 5 and 6 consisted of various items from Set A (core job dimensions/job characteristics), C (personal characteristics), D (organizational characteristics), F (job satisfaction), and G (outcomes). There was no specific set that was dominant in these two Factors. Factor 7 contained only variables from Set G (outcomes). The remaining four outcome variables were distributed among factors 3,5, and 6.

Loading of variables after varimax rotation and percents of variance are shown in Tables 10 and 11. Variables were ordered and grouped by Sets A-G to facilitate interpretation. Interpretative labels were suggested for each factor in Table 11 under factor numbers. Although the rotation process usually tends to destroy any general factor, the first factor had strong loadings with variables from all Set A, B, D, E, F, and G (except Set C) and looked like a general factor even after rotation.

In summary, Hypotheses 1-4 were supported when testing individual pairs of sets of variables or relationships among the sets; however, once grouped together and tested for an overall pattern, the sets were not correlated as suggested by the model and Hypothesis 5. Thus, the results of canonical analysis and factor analysis of seven sets of variables showed that the pattern of relationships presented in the theoretical model (Figure 1) was not supported by this study.

Organizational commitment is the strength of an employee's identification with or involvement in an organization and job satisfaction is the positive emotional attitude or feeling that results from one's job experiences in an organization. This study has clearly shown that among the important elements or components conducive to job satisfaction and organizational commitment are: (a) Hackman-Oldham's Core Job Dimensions' - task autonomy, task identity, skill variety, task significance, and feedback; (b) Herzberg's Basic Motivators'- personal growth, accomplishment, recognition, and challenging work; and (c) Steers' Job Task Characteristics- same as core job dimensions and Organizational Characteristics - co-workers, leadership, organizational dependability, cohesion, and supervision.

Although the study was set in an environment that has had significant socio-economic and cultural dissimilarities to environments where 'traditional' researches of this type have been conducted, no testing of this phenomenon was done as a means of validating the theories or instruments. The results generated did not suggest that the theories or instruments have had any inherent socio-economic or cultural biases and as such there were no need to validate the instruments under these conditions.

## CHAPTER V

## SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

## Summary

The focus of this study was to add to social researchers knowledge on the nature and magnitude of the relationship between job satisfaction and organizational commitment. The researcher's strategy was to start with an exploratory model of satisfaction and commitment that is embraced in the Hackman-Oldham's and Herzberg's Job Dimension Model. Previous researchers reactions to the combinations of this model have led to the integration of Steers' Organizational Commitment Model (with minor modifications) to create a more complex exploratory model of satisfaction and commitment (see Figure 1).

The theoretical work on the process through which employees are motivated to work through intrinsic job satisfaction has generated several major models, and researchers have empirically evaluated these models. Although the research of Hackman and Oldham's (1976) and Herzberg's (1987) Job Dimensions Models and Steers' (1977) Organizational Commitment Model have been extensive; much work is still needed to be done on the empirical testing of both models simultaneously. This study is intended to add to this need by empirically testing both models together. This study will therefore add to the growing body of theoretical empirical research on job satisfaction and commitment.

The Gee-Kilpatrick Model was tested with five predictions derived from the literature. The researcher has deduced from the study test results that the results have supported the model's major predictions in Hypotheses 1, 2, 3, and 4 that tested for

correlations among variables. However, there was no test result that suggested that the model was showing an overall pattern when Hypothesis 5 was examined against the seven components (sets) of the model.

There was a sample of 164 irrigation professionals 10 managers/supervisors, 48 technical engineering, -51 field/support workers, and 55 support services / clerical employed by the Irrigation Commission. The return sample was 111, 46 percent female, 53.8 percent male, with 13.5 percent holding college degree, 31.7 percent technical/vocational training, 27.9 percent high school training, and 31.7 percent no formal or very little schooling. The demographic modality of the respondents were: 78.8 percent were between 18 and 49 years of age, with 43.3 percent working at the Irrigation Commission for 10 years or longer. Four survey instruments were used to collect data. On hundred and eleven participants completed the surveys. Parts of the data were analyzed with the aid of the SPSS computer model while some sections were done manually.

## Conclusions

### Research Question One

What is the relationship between job satisfaction and organizational commitment as perceived by irrigation professionals (managers/supervisors, technical/engineers, and field/support workers)?

The findings of this study revealed that there was a statistically moderate-significant relationship between job satisfaction and organizational commitment. There was a strong interdependence of employees' attitudes towards their organization, the intrinsic



satisfaction they receive in performing their jobs, and the basic motivators built into the jobs themselves.

#### Research Question Two

What is the relationship between employees' job-task characteristics (skill variety, task identity, task autonomy, task significance, feedback) and their perception of job satisfaction and organizational commitment? There was a significant relationship between employees' job task characteristics and the respondents' perception of job satisfaction and organizational commitment.

#### Research Question Three

What is the relationship between employees' personal characteristics (age, gender, profession, education, length of time as irrigation professional, length of time with present employer, length of time in present job classification, job title) and their perception of job satisfaction and organizational commitment?

There were very weak statistical relationships found between the personal/professional characteristics and the respondents' perception of job satisfaction and organizational commitment (age gender & education), along with the other slight relationship that existed between the personal characteristics and the dependent variables.

#### Research Question Four

What is the relationship between employees' organizational characteristics (leadership, supervision, co-workers, workgroup cohesion, organizational dependability) and their perception of job satisfaction and organizational commitment?

There was a significant relationship between employees' organizational characteristics and the respondents' perceptions of job satisfaction and organizational commitment.

#### Research Question Five

Does the pattern of correlations among measures of the seven sets of variables (core job dimensions/job characteristics, basic motivators, personal characteristics, organizational characteristics, organizational commitment, job satisfaction, and outcomes) matches the degree of linkages among the seven sets specified in the theoretical model?

The overall pattern of relationship among the variables did not emerge as suggested in the model.

#### Discussion.

In retrospect, this research has made important contributions to the study of employee's job satisfaction and their organizational commitment. A comprehensive review of the literature have revealed that there are very few studies that have simultaneously examined the relationship between job satisfaction and organizational commitment, the ability of multiple variables from three categories (personal, job, and organizational characteristics) to correlate with both job satisfaction and organizational

commitment and their specific behavioral outcomes. In addition, only a few studies have examined any correlates of both satisfaction and commitment in a single sample. (Bateman & Strassur, 1984; Lee & Mowday, 1987; Porter et., O'Rilley & Caldwell, 1981; William & Hazer, 1986), while non have been conducted in the environment of a developing country context. Therefore, these findings are very unique by themselves and in and of themselves, in identifying the similarities and differences that exist between the independent variables and the two criteria within a developing country context. These data have clearly indicated that job characteristics are most strongly related to job satisfaction and organizational characteristics are most strongly related to commitment, regardless of the environmental context.

This study have added support to current research findings that suggest that employee's personal characteristics are only slightly related to satisfaction and moderately related to commitment. These findings have supported the importance of job experiences in the development of job satisfaction and the importance of beliefs about the organization in the development of organizational commitment both within the developed and developing country context.

Many researches have revealed that satisfaction and commitment are correlated; however, the findings that the variables have different degrees of correlation with satisfaction and commitment has provided evidence that the two criteria are distinct and separate constructs.

Evidence from this study have shown that to understand the factors influencing employee's satisfaction and commitment, research are required to examine the combine effects of personal characteristics, job characteristics, and organizational characteristics

variables. Various types of research models must be developed and used to explain satisfaction and commitment because it has been observed that no single model would be adequate by itself. While no claim can be made that a single model, by itself, is contextually unique to differentiate environmental factors.

Previous research attempts to find the determinants of satisfaction and commitment have ended in great controversy. The findings of this research have supported the traditional research emphasis on job characteristics as determinants of satisfaction, and to a lesser extent the examinations of organizational determinants such as organizational dependability and leadership (Bateman & Strasser, 1984). Further, these results have suggested that job satisfaction depends largely on opportunity for the irrigation workers to receive feedbacks on the job and use a variety of skills in performing job tasks. The results have also supported the findings of Schlenker and Gutek (1987) demonstrating that a reduction in skill variety among employees has a greater impact on job satisfaction than do the characteristics of the employees. Hackman and Oldham (1976). These results have, therefore, not provided justification for a growing spate of interest in employees' characteristics as determinants of job satisfaction. Therefore, further research needs to be done with this phenomenon.

The findings of this study have provided less support to previous researches that have concerned themselves with organizational commitment than for those that have concerned themselves with job satisfaction. The relevant commitment literature have been vary varied, with a lot of emphasis been placed on employees personal and job characteristics than on examinations of organizational characteristics (Buchanan, 1974; Hall & Schneider, 1972; Hrebiniak & Alutto, 1972). This study has found that

organizational characteristics were significantly related to commitment, thus, this finding has supported those studies that examined the relationships of variables such as organizational dependability and leadership (Morris & Sherman, 1981; Steers, 1977). Also, the secondary role played by job characteristics have replicated some previous research that had emphasize the importance of feedback and task significance. It is also significant to note that personal characteristics have also replicated earlier findings, however, the effect is not as strong as would be expected because of the level of emphasis placed on personal characteristics in the commitment literature. Moreover, an important finding of this study was the major correlates of organizational commitment could be found in all three categories (personal characteristics, job characteristics, and organizational characteristics). This finding has added support to the adequacy of the second component of the model presented in Figure 1.

The findings of this study have also provided support for the component of the model that has dealt with the possible outcome of organizational commitment. Moderate support was found for the preposition that job satisfaction and commitment are associated (at different variations and degrees) with employees' desire to remain with the Irrigation Commission, the employees' satisfaction with their quantity and quality of work, the employees' advancement readiness, job performance, and their rating of their performance. Notwithstanding these performances, job satisfaction and commitment were not related to attendance and tardiness. Also, there was no statistical evidence that the context of a developing economy environment had any impact on the study outcomes.

### Summary and Conclusions

Based on the results of the statistical analysis, the researcher rejected the null hypotheses for each of the first four hypotheses tested. To reject, the researcher relied on the evidence that a significant and positive relationship was not found between job satisfaction and commitment and the three categories of variables were all related to satisfaction and commitment. The research of Hackman and Oldham (1976) found similar results with a sample of 2356 employees and managers. The researcher accepted the null hypothesis 5 (that tested for an overall pattern of correlation among the seven sets of variables in the model) because the predicted pattern did not emerge as expected.

### Implications and Recommendations

The major findings in this study have important implications for both organization theory and the 'good' practice of management. The Gee-Kilpatrick Model represents a comprehensive summary of extensive research on employees' job satisfaction and organizational commitment. While the managerial implications associated with job classification and organizational commitment shows no significant relationships management leaders should not take this to conclude that the findings are a reflection of all organizations. The findings of this study were related only to one organization and other research has shown that job levels were related to organizational commitment (Mathieu & Zajac, 1990).

The model used in this study can be used to provide direction for future research and can help managers and researchers to better understand the process through which

employees are motivated to work and achieve job satisfaction and organizational commitment.

The casual ordering of satisfaction and commitment (as done in this study) has significant theoretical implications. If satisfaction is a determinant of commitment, as William and Hazer (1986) found in their research, then studies on commitment that omit satisfaction would have employed models with potentially erroneous information that may contaminate the expected outcomes. The same applies to satisfaction. Thus, both satisfaction and commitment are important components in theoretical models that are expected to lead to specific behavioral outcomes (e.g., turnover and absenteeism). Therefore, it is important to know the casual ordering of these two variables to apply the appropriate management strategies to ensure organizational success.

The ordering of satisfaction and commitment also has practical implications. The effectiveness and efficiency of workers require a high level of intrinsic morale, while it is important for managers to know how rewards and compensation are related to outcomes (satisfaction and commitment). Thus, managers must understand that strategies that increase satisfaction may not necessarily increase commitment.

The relationship between satisfaction and commitment has practical implications. Irrigation professionals who possessed certain personal characteristics, had certain basic motivators build into their jobs, and experienced certain job task characteristics and organizational characteristics, were particularly satisfied with their job and committed to the organization. For example, those individuals who identified with and were involved heavily in the Commission objectives seems also to receive greater intrinsic job satisfaction from performing their job, while they exhibited a greater level of motivation

to work. The Management of The Irrigation Commission should be very concern about this finding since dissatisfied staff are more likely to display burn-out, high absenteeism, high turnover, poor performance, poor socialization and other job related negative disciplines than satisfied staff. Negative symptoms usually affects' work morale, the achievement of the organization's mission, the fostering of a 'healthy and positive' work environment/climate, production efficiency and productivity.

Motivators and organizational characteristics had the strongest correlation with satisfaction, and organizational characteristics and motivators had the strongest correlation with commitment among the irrigation professionals; these characteristics must be identified and supported by the Irrigation Commission management in as many ways as are 'economically' feasible. Some possible techniques could be modeling and mentoring programs that may be develop to improve motivation among the workers. Fun days, peer counseling and evaluations are other forms of motivational tools.

Employees' identification with the organization (commitment) was importantly related to how they felt about their job and how they were motivated to work. This being the finding, it is therefore suggested that organizational development efforts should have concentrated on enabling employees to experience a degree of accomplishment and recognition for their achievements, obtain a sense of personal growth, and feel that their job provided achievement opportunities. Efforts to improve either the job itself or its motivational environment are usually highly specific in nature. Thus, management strategies are usually developed and implemented with specific jobs and functions in mind and not so much from a global organizational perceptive which is usually the case with most strategies. With the above approach being the rule rather than the exception,



the management of the organization should focus on solving problems and/or improving effectiveness and job satisfaction in specific functional areas of the organizations' operations.

#### Recommendations for Further Study

Despite the contributions of this study, additional research is needed in the area of job satisfaction and commitment especially in the environments of developing economies. With this focus, several unique recommendations are herein offered for future research in the study of job satisfaction and organizational commitment. It is highly suggested that this study be replicated in other developing economies and organizations of similar characteristics in which this study was undertaken. Cross references of findings using similar instruments, models and theories could be accomplished to validate the reliability and adoptability of the instruments and theories as means of assessing and assisting the management of those organizations. The model used in this study need further testing, therefore further research is required before theoretical refinements and improvements can be made and more reliable statements made regarding the usefulness of the model as a generally practical management guide for job diagnosis and work redesign especially within the context of developing economies environments. It is therefore strongly recommended that this study be replicated in a number of organizations in developing and developed economies to determine if the findings would be similar, and generally applicable to the management needs of organizations regardless of their economic environment.

The correlation research methods have been heavily used in satisfaction and commitment research, therefore, it is recommended that researchers should consider alternative models for testing satisfaction and commitment; models such as longitudinal and experimentation research studies. Some studies may even consider uniquely different research design and survey instruments in the settings of comparable populations and studies involving employees from different populations; populations that are development and service orientated. An example for a study could be one that examine changes in variables at specific time intervals to determine the direction of the relationships.

Although most studies have found that satisfaction and commitment are related, the findings might prove different if more complex models were to be used to examine the relationships, especially models that would examine the casual ordering (antecedents and consequences) of satisfaction and commitment because several research have shown mixed results to this phenomena. While many researches have suggested that satisfaction is a determinant of commitment (Angle & Perry, 1981; Buchanan, 1974; Hrebiniak & Alutto, 1972; Richers, 1985; Steers, 1977; Wakefield, 1982, William & Hazer, 1986), Bateman and Strasser (1984) have assumed that the reverse casual ordering is true. However, Price et al. (1986) replicated Bateman's study and found no support in either direction for casual ordering of satisfaction and commitment. Thus, knowledge of the correct casual ordering has both practical and theoretical implications and should be further research.

Future research could focus on employee types, this may offer quite challenging discoveries and be very interesting to compare the results of these employee types. For

example: male vs. female, graduates vs. technical, administrative/managers vs. non-supervisors, and young vs. older at the various career stages. Much more research need to be conducted in developing economies environments, mainly because these economies are generally labor intensive while their human resources are generally inadequately managed.

This chapter has contained the conclusions, managerial implications, and suggestions for future research that resulted from a study of job satisfaction and commitment. Job satisfaction and organizational commitment relationship have been one of the most investigated combines in organizational research. Notwithstanding this reality, there is still the need for more theoretical fine-tuning and improvements. It is a wish that the model used in this study and the recommendations for future research will sensitize others to continue the theoretical and empirical investigation of this relationship. In addition the theoretical model of Gee-Kilpatrick will provide researchers and managers with valuable information that they can utilize in bettering their understanding of the process through which employees are motivated to work, are satisfied with their jobs, and are committed to their organization and personal goals.

## **APPENDIX A.**

### THE JOB DIAGNOSTIC SURVEY

This questionnaire was developed as part of a Yale University study of jobs and how people react to them. The questionnaire helps to determine how jobs can be better designed, by obtaining information about how people react to different kind of jobs.

On the following pages you will find several different kinds of questions about your job. Specific instructions are given at the start of each section. Please read them carefully. It should take no more than 25 minutes to complete the entire questionnaire. Please move through it quickly.

The questions are designed to obtain your perception of your job and your reaction to it.

There are no trick questions. Your individual answers will be kept completely confidential. Please answer each item as honestly and frankly as possible.

THANK YOU FOR YOUR COOPERATION.

#### SECTION ONE

This part of the questionnaire asks you to describe your job, as objectively as you can. Please do not use this part of the questionnaire to show how much you like or dislike your job. Questions about that will come later. Instead, try to make your descriptions as accurate and as objective as you possible can.

A sample question is given below.

To what extent does your job require you to work with mechanical equipment?

1-----2-----3-----4-----5-----6-----7

- 1 = the job require no contact with mechanical equipment of any kind
- 2 = very little contact with mechanical equipment
- 3 = a little more than very little contact with mechanical equipment
- 4 = moderate contact with mechanical equipment
- 5 = a little more than moderate contact with mechanical equipment
- 6 = the job requires almost constant contact with mechanical equipment
- 7 = the job requires constant contact with mechanical equipment.

You are to circle the number that is the most accurate description of your job.

If, for example, your job require you only to have occasional contact with mechanical equipment, and a lot of your work time is taken up with other activities - you might circle the number two (2), as was done in the example above.

If you do not understand these instructions please ask for assistance. If you understand them, turn the page and begin.

1. To what extent does your job require you to work closely with other people (either 'district' or people in related jobs in your own organization)?

1-----2-----3-----4-----5-----6-----7

2. How much autonomy is there in your job? That is, to what extent does your job permit you to decide on your own how to go about doing the work?

1-----2-----3-----4-----5-----6-----7

3. To what extent does your job involve doing a 'whole' and identifiable piece of work? That is, is the job a complete piece of work that has a obvious beginning and end? Or is it only a small part of the overall piece of work, which is finished by other people or by autonomic machines?

1-----2-----3-----4-----5-----6-----7

4. How much variety is there in your job? That is, to what extent does the job require you to do many different things at work, using a variety of your skills and talents?

1-----2-----3-----4-----5-----6-----7

5. In general, how significant or important is your job? That is, are the results of your work likely to significantly affect the lives or well-being of other people?

1-----2-----3-----4-----5-----6-----7

6. To what extent do managers or co-workers let you know how well you are doing on your job?

1-----2-----3-----4-----5-----6-----7

7. To what extent does doing the job itself provides you with information about your work performance? That is, does the actual work itself provides clues about how well you are doing - aside from any 'feedback' co-workers or supervisors may provide?

1-----2-----3-----4-----5-----6-----7

#### SECTION TWO

Listed below are a number of statement which could be used to describe a job.

You are to indicate whether each statement is an accurate or an inaccurate description of your job.

Once again, please try to be as objective as you can in deciding how accurately each statement describe your job - regardless of weather you like or dislike your job.

Write a number in the blank beside each statement, base on the following scale:

1 = Very Inaccurate. 2 = Mostly Inaccurate. 3 = Slightly Inaccurate. 4 = Uncertain. 5 = Slightly Accurate. 6 = Mostly Accurate. 7 = Very Accurate.

- \_\_\_\_\_ 1. The job requires me to use a number of complex or high-level skills.
- \_\_\_\_\_ 2. The job requires a lot of cooperative work with other people.
- \_\_\_\_\_ 3. The job is arranged so that I do not have the chance to do an entire piece of work from beginning to end.
- \_\_\_\_\_ 4. Just doing the work required by the job provides many chances for me to figure out how well I am doing.
- \_\_\_\_\_ 5. The job is quite simple and repetitive.
- \_\_\_\_\_ 6. The job can be done adequately by a person working alone - without talking or checking with other people.
- \_\_\_\_\_ 7. The supervisors and co-workers on this job almost never give me any 'feedback' about how well I am doing in my work.
- \_\_\_\_\_ 8. This job is one where a lot of other people can be affected by how well the work gets done.
- \_\_\_\_\_ 9. The job denies me any chance to use my personal initiative or judgment in carrying out the work.
- \_\_\_\_\_ 10. Supervisors often let me know how well they think I am performing the job.
- \_\_\_\_\_ 11. The job provides me the chance to completely finish the piece of work I begin.
- \_\_\_\_\_ 12. The job itself provides very few clues about whether or not I am performing well.
- \_\_\_\_\_ 13. The job gives me considerable opportunity for independence and freedom in how I do the work.
- \_\_\_\_\_ 14. The job itself is not very significant or important in the broader scheme of things.

### SECTION THREE

Now please indicate how you personally feel about your job.

Each of the statements below are something that a person might say about his or her job. You are to indicate your own personal feeling about your job by marking how much you agree with each of the statements,

1 = Disagree Strongly. 2 = Disagree. 3 = Disagree slightly. 4 = Neutral. 5 = Agree Slightly. 6 = Agree. 7 = Agree Strongly.

- \_\_\_\_\_ 1. It's hard, on this job, for me to care very much about whether or not the work gets done right.
- \_\_\_\_\_ 2. My opinion of myself goes up when I do this job well.
- \_\_\_\_\_ 3. Generally speaking, I am very satisfied with this job.
- \_\_\_\_\_ 4. Most of the things I have to do on this job seems useless or trivial.
- \_\_\_\_\_ 5. I usually know whether or not my work is satisfactory on this job.
- \_\_\_\_\_ 6. I feel a great sense of personal satisfaction when I do this job well.
- \_\_\_\_\_ 7. The work I do on this job is very meaningful to me.
- \_\_\_\_\_ 8. I feel a high degree of personal responsibility for the work I do on this job.
- \_\_\_\_\_ 9. I frequently think of quitting this job.
- \_\_\_\_\_ 10. I feel bad and unhappy when I discover that I have performed poorly on this job.
- \_\_\_\_\_ 11. I often have trouble figuring out whether I am doing well or poorly on this job.
- \_\_\_\_\_ 12. I feel I should personally take the credit or blame for the results of my work on this job.
- \_\_\_\_\_ 13. I am generally satisfied with the kind of work I do in this job.
- \_\_\_\_\_ 14. My own feelings are generally not affected much one way or the other by how well I do on this job.
- \_\_\_\_\_ 15. Whether or not this job gets done right is clearly my responsibility.

#### SECTION FOUR

Now please indicate how satisfied you are with each aspect of your job listed below. Once again, write the appropriate number in the blank beside each statement.

How satisfied are you with this aspect of your job?

1 = Extremely Dissatisfied. 2 = Dissatisfied. 3 = Slightly Dissatisfied. 4 = Neutral. 5 = Slightly Satisfied. 6 = Satisfied. 7 = Extremely Satisfied.

- \_\_\_\_\_ 1. The amount of job security I have.
- \_\_\_\_\_ 2. The amount of pay and fringe benefits I receive.
- \_\_\_\_\_ 3. The amount of personal growth and development I get in doing my job.



- \_\_\_\_\_ 4. The people I talk to and work with on my job.
- \_\_\_\_\_ 5. The degree of respect and fair treatment I receive from my boss.
- \_\_\_\_\_ 6. The feeling of worthwhile accomplishment I get from doing my job.
- \_\_\_\_\_ 7. The chance I get to know other people while on the job.
- \_\_\_\_\_ 8. The amount of support and guidance I get from my supervisor.
- \_\_\_\_\_ 9. The degree to which I am fairly paid for what I contribute to this organization.
- \_\_\_\_\_ 10. The amount of independent thought and action I can exercise in my job.
- \_\_\_\_\_ 11. How secure things look for me in the future in this organization.
- \_\_\_\_\_ 12. The chance to help other people while at work.
- \_\_\_\_\_ 13. The amount of challenge in my job.
- \_\_\_\_\_ 14. The overall quality of the supervision I receive in my work.

#### SECTION FIVE

Now please think of the other people in your organization who hold the same job you do. If no one has exactly the same job as you, think of the job which is most similar to yours.

Please think about how accurately each of the statements describes the feelings of those people about the job.

It is quite all right if your answers here are different from when you described your own reactions to the job. Often different people feel quite differently about the same job.

Once again, write a number in the blank for each statement, based on this scale:

1 = Disagree Strongly. 2 = Disagree. 3 = Disagree Slightly. 4 = Neutral. 5 = Agree Slightly. 6 = Agree. 7 = Agree Strongly.

- \_\_\_\_\_ 1. Most people on this job feel a great sense of personal satisfaction when they do the job well.
- \_\_\_\_\_ 2. Most people on this job are very satisfied with the job.
- \_\_\_\_\_ 3. Most people on this job feel that the work is useless or trivial.
- \_\_\_\_\_ 4. Most people on this job feel a great deal of personal responsibility for the work they do.
- \_\_\_\_\_ 5. Most people on this job have a pretty good idea of how well they are performing their work.

## **APPENDIX B**

## ORGANIZATIONAL COMMITMENT QUESTIONNAIRE (OCQ)

### Instructions

Listed below are a series of statements that represent possible feelings that individuals might have about the company or organization for which they work. With respect to your own feelings about the National Irrigation Commission Limited please indicate the degree of your agreement or disagreement with each statement by checking one of the seven alternatives given below:

### Alternatives:

1 = Strongly disagree. 2 = Moderately disagree. 3 = Slightly disagree. 4 = neither disagree nor agree. 5 = Slightly agree. 6 = Moderately agree. 7 = Strongly agree. Item marked with an R denotes a negatively phrased and reversed-scored item. (Adopted from - Mowday, Steers and Porter, Journal of Vocational Behavior, 1979, 14, 224 - 247).

- \_\_\_\_\_ 1. I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful.
- \_\_\_\_\_ 2. I talk up this organization to my friends as a great organization to work for
- \_\_\_\_\_ 3. I feel very little loyalty to this organization. ®
- \_\_\_\_\_ 4. I would accept almost any kind of job assignment in order to keep working for this organization.
- \_\_\_\_\_ 5. I find that my values and the organization's values are very similar
- \_\_\_\_\_ 6. I am proud to tell others that I am a part of this organization
- \_\_\_\_\_ 7. I could just as well be working for a different organization as long as the type of work was similar. ®
- \_\_\_\_\_ 8. This organization really inspires the very best in me in the way of job performance.
- \_\_\_\_\_ 9. It would take very little change in my present circumstances to cause me to leave this organization ®
- \_\_\_\_\_ 10. I am extremely glad that I chose this organization to work for over others I was considering at the time I joined.
- \_\_\_\_\_ 11. There's not too much to be gained by sticking with this organization indefinitely. ®
- \_\_\_\_\_ 12. Often, I find it difficult to agree with this organization's policies on important matters relating to its employees. ®
- \_\_\_\_\_ 13. I really care about the faith of this organization.
- \_\_\_\_\_ 14. For me this is the best of all possible organizations for which to work.
- \_\_\_\_\_ 15. Deciding to work for this organization was a definite mistake on my part. ®

## **APPENDIX C**

## JOB SATISFACTION &amp; ORGANIZATIONAL COMMITMENT OUTCOMES SURVEY

Please check the appropriate block for each of the following items.

1. How often are you absent from work each month? Please do not include assigned temporary leave of absence.

\_\_\_\_\_ Very frequent (5 or more days)

\_\_\_\_\_ Frequent (3 -4 days)

\_\_\_\_\_ Sometimes (2 days)

\_\_\_\_\_ Almost never (1 day)

\_\_\_\_\_ Never (0 days)

2. How often are you late for work each month?

\_\_\_\_\_ Very frequent (5 or more days)

\_\_\_\_\_ Frequent (3 -4 days)

\_\_\_\_\_ Sometimes (2 days)

\_\_\_\_\_ Almost never (1 day)

\_\_\_\_\_ Never (0 days)

3. Which of the following statements most clearly reflect your feeling about your future at this particular organization?

\_\_\_\_\_ I definitely will not leave

\_\_\_\_\_ I probably will not leave

\_\_\_\_\_ I am uncertain

\_\_\_\_\_ I probably will leave

\_\_\_\_\_ I definitely will leave

4. Which of the following statements most clearly reflect your feelings about your future at the National Irrigation Commission Limited.?

\_\_\_\_\_ I definitely will not leave

\_\_\_\_\_ I probably will not leave

\_\_\_\_\_ I am uncertain

\_\_\_\_\_ I probably will leave

\_\_\_\_\_ I definitely will leave

5. How satisfied are you with the following aspect of your job? Indicate how satisfied you are with each aspect of your job listed below. Write the appropriate number in blank for each statement base on this scale.

Scale: 1-----2-----3-----4-----5-----6-----7

1 = Extremely Dissatisfied. 2 = Dissatisfied. 3 = Slightly Dissatisfied. 4 = Neutral. 5 = Slightly Satisfied. 6 = Satisfied. 7 = Extremely Satisfied.

\_\_\_\_\_ a. Overall job performance

\_\_\_\_\_ b. Quality of work

\_\_\_\_\_ c. Quantity of work

\_\_\_\_\_ d. Promotion readiness

6. How do you rate your overall job performance?

\_\_\_\_\_ a. Outstanding

\_\_\_\_\_ b. Excellent

\_\_\_\_\_ c. Good

\_\_\_\_\_ d. Satisfactorily

\_\_\_\_\_ e. Unsatisfactorily

## **APPENDIX D**

### DEMOGRAPHIC INFORMATION

Please check the appropriate box for each of the following items.

1. Age:

18 - 29     30 - 39     40 - 49     50 - 59  
 Over 60

2. Gender:

Female     Male

3. Professional occupation (skill, trade):

4. Education (highest level schooling):

Vocational Training     Associate Degree  
 Master's Degree     Doctorate Degree  
 Diploma     Bachelor's Degree  
 Other (Please specify).

5. How long have you worked as a Irrigation professional?

Less than 1 year     1 - 4 years     5 - 9 years  
 10 - 19 years     20 -29 years     30 or more years.

6. How long have you worked for the National Irrigation Commission Limited?

Less than 1 year     1 - 4 years     5 - 9 years  
 10 - 19 years     20 -29 years     30 or more years

7. How long have you worked in your present job classification?

Less than 1 year     1 - 4 years     5 - 9 years  
 10 - 19 years     20 -29 years     30 or more years

8. What is the functional area of your present position?

Staff employee     Supervisor     Director / Manager  
 Other (Please specify).

9. Employment status:

Full Time     Part Time

10. Primary work shift:

Day     Evening     Night.

**Once again, thank you for your participation.**



1. Remember that you must not discuss your answers with anyone
2. Hand your completed questionnaire ONLY to the person who delivered it to you.

HAVE A GOOD DAY

## **APPENDIX E**

Table 1

## Employee Demographic Survey – Instrument Responses

FREQUENCY DISTRIBUTION	COUNT	CUMULATIVE COUNT	PERCENT	CUMULATIVE PERCENT	VALID
<b>AGE GROUP</b>					
18 – 29	17	17	16.3	16.3	1
30 – 39	39	56	37.5	53.8	2
40 – 49	26	82	25.0	78.8	3
50 – 59	21	103	10.2	99.0	4
over 60	1	104	1.0	100	5
<b>GENDER</b>					
Female	48	48	46.2	46.2	1
Male	56	104	53.4	100	2
<b>PROFESSION</b>					
<b>EDUCATION</b>					
Vocational Training	33	33	31.7	31.7	1
Associate Degree	4	37	3.8	35.6	2
Diploma	29	66	27.9	63.5	3
Master's Degree	1	67	1.0	64.4	4
Doctorate Degree	0	67	0	64.4	5
Bachelor's Degree	9	76	8.7	73.1	6
Other	28	104	26.9	100	7
<b>YEARS IN PROFESSION</b>					
< 1 Year	2	2	1.9	1.9	1
1 – 4 Years	23	25	22.1	24.0	2
5 – 9 Years	34	59	32.7	56.7	3
10 – 19 Years	32	91	30.8	87.5	4
20 – 29 Years	6	97	5.8	93.3	5
30 or more Years	7	104	6.7	100	6
<b>YEARS IN ORGANIZATION</b>					
< 1 Year	5	5	4.8	4.8	1
1 – 4 Years	18	23	17.3	22.1	2
5 – 9 Years	35	58	33.7	55.8	3
10 – 19 Years	42	100	40.4	96.2	4
20 – 29 Years	2	102	1.9	98.1	5
30 or more Years	2	104	1.9	100	6
<b>YEARS IN JOB CLASSIF.</b>					
< 1 Year	14	14	13.5	13.5	1
1 – 4 Years	42	56	40.4	53.8	2
5 – 9 Years	30	86	28.8	82.7	3
10 – 19 Years	16	102	15.4	98.1	4
20 – 29 Years	1	103	1.0	99.0	5
30 or more Years	1	104	1.0	100	6
<b>JOB TITLE / POSITION</b>					
Staff Employee	72	72	69.2	69.2	1
Supervisor	20	92	19.2	88.5	2
Director / Manager	7	99	6.7	95.2	3
Other	5	104	4.8	100	4
<b>EMPLOYMENT STATUS</b>					
Full Time	99	99	95.2	95.2	1
Part Time	5	104	4.8	100	2
<b>PRIMARY SHIFT</b>					
Day	103	103	99.0	99.0	1
Night	1	104	1.0	100	2
<b>TASK AUTONOMY</b>					
Very Little	8	8	7.7	7.7	1
Little	20	28	19.2	26.9	2

Moderately Little	1	29	1.0	27.9	3
Moderate Autonomy	10	39	9.6	37.5	4
Moderately Much	24	63	23.1	60.6	5
Much	34	96	31.7	92.3	6
Very Much	8	104	7.7	100	7
TASK IDENTITY					
Very Little	5	5	4.8	4.8	1
Little	14	19	13.5	18.3	2
Moderately Little	9	28	8.7	26.9	3
Moderately – Size ‘Chunk’	17	45	16.3	43.3	4
Moderately Much	29	74	27.9	71.2	5
Much	17	91	16.3	87.5	6
Very Much	13	104	12.5	100	7
TASK SKILL / VARIETY					
Very Little	6	6	5.8	5.8	1
Little	9	15	8.7	14.4	2
Moderately Little	12	27	11.5	26.0	3
Moderate	15	42	14.4	40.4	4
Moderately Much	13	55	12.5	52.9	5
Much	30	85	28.8	81.7	6
Very Much	19	104	18.3	100	7
TASK SIGNIFICANT					
Very Little	5	5	4.8	4.8	1
Moderately Little	4	9	3.8	8.7	2
Moderate	2	11	1.9	10.6	3
Moderately Much	9	20	8.7	19.2	4
Much	16	36	15.4	34.6	5
Very Much	23	59	22.1	56.7	6
	45	104	43.3	100	7
FEED BACK / JOB					
Very Little	2	2	1.9	1.9	1
Little	5	7	4.8	6.7	2
Moderately Little	6	13	5.8	12.5	3
Moderate	11	24	10.6	23.1	4
Moderately Much	15	39	14.4	37.5	5
Much	37	76	56.6	73.1	6
Very Much	28	104	26.9	100	7
FEED BACK / AGENTS					
Little	5	5	4.8	4.8	1
Moderately Little	3	8	2.9	7.7	2
Moderate	12	20	11.5	19.2	3
Moderately Much	16	36	15.4	34.6	4
Much	26	62	25.0	59.6	5
Very Much	32	94	30.8	90.4	6
	10	100	9.6	100	7
SATISFIED WITH JOB SECURITY					
Extremely Dissatisfied	5	5	4.8	4.8	1
Dissatisfied	8	13	7.7	12.5	2
Slightly Dissatisfied	6	19	5.8	18.3	3
Neutral	28	47	26.9	45.2	4
Slightly Satisfied	8	55	7.7	52.9	5
Satisfied	39	94	37.5	90.4	6
Extremely Satisfied	10	104	9.6	100	7
SATISFIED WITH COMPENSATION					
Extremely Dissatisfied	9	9	8.7	8.7	1
Dissatisfied	13	22	12.5	21.2	2

Slightly Dissatisfied	13	35	12.5	33.7	3
Neutral	10	45	9.6	43.3	4
Slightly Satisfied	28	73	26.9	70.2	5
Satisfied	29	102	27.9	98.1	6
Extremely Satisfied	2	104	1.9	100	7
<b>SATISFIED WITH PERSONAL GROWTH</b>					
Extremely Dissatisfied	5	5	4.8	4.8	1
Dissatisfied	13	18	12.5	17.3	2
Slightly Dissatisfied	5	23	4.8	22.1	3
Neutral	24	47	23.1	45.2	4
Slightly Satisfied	12	59	11.5	56.7	5
Satisfied	34	93	32.7	89.4	6
Extremely Satisfied	11	104	10.6	100	7
<b>SATISFIED WITH CO-WORKERS</b>					
Extremely Dissatisfied	0	0	0	0	1
Dissatisfied	1	1	1.0	1	2
Slightly Dissatisfied	5	6	4.8	5.8	3
Neutral	23	29	22.1	27.9	4
Slightly Satisfied	15	44	14.4	42.3	5
Satisfied	50	94	48.1	90.4	6
Extremely Satisfied	10	104	9.6	100	7
<b>SATISFIED WITH EQUAL OPPORTUNITY</b>					
Extremely Dissatisfied	2	1	1.9	1.9	1
Dissatisfied	6	8	5.8	7.7	2
Slightly Dissatisfied	5	13	4.8	12.5	3
Neutral	6	19	5.8	18.3	4
Slightly Satisfied	12	31	11.5	29.8	5
Satisfied	51	82	49.0	78.8	6
Extremely Satisfied	22	104	21.2	100	7
<b>SATISFIED WITH ACCOMPLISHMENT</b>					
Extremely Dissatisfied	0	0	0	0	1
Dissatisfied	3	3	2.9	2.9	2
Slightly Dissatisfied	6	9	5.8	8.7	3
Neutral	9	18	8.7	17.3	4
Slightly Satisfied	4	22	3.8	21.2	5
Satisfied	51	73	49.0	70.2	6
Extremely Satisfied	31	104	29.8	100	7
<b>SATISFIED WITH SOCIALIZING</b>					
Extremely Dissatisfied	0	0	0	0	1
Dissatisfied	4	4	3.8	3.8	2
Slightly Dissatisfied	0	4	0	3.8	3
Neutral	20	25	19.2	23.1	4
Slightly Satisfied	4	28	3.8	26.9	5
Satisfied	51	79	49.0	76.0	6
Extremely Satisfied	25	104	24.0	100	7
<b>SATISFIED WITH LEADERSHIP RECEIVED</b>					
Extremely Dissatisfied	1	1	1.0	1.0	1
Dissatisfied	3	4	2.9	3.8	2
Slightly Dissatisfied	1	5	1.0	4.8	3
Neutral	16	21	15.4	20.2	4
Slightly Satisfied	12	33	11.5	31.7	5
Satisfied	44	77	42.3	74.0	6
Extremely Satisfied	27	104	26.0	100	7

<b>SATISFIED WITH RECOGNITION RECEIVED</b>					
Extremely Dissatisfied	7	7	6.7	6.7	1
Dissatisfied	12	19	11.5	18.3	2
Slightly Dissatisfied	16	35	15.4	33.7	3
Neutral	8	43	7.7	41.3	4
Slightly Satisfied	22	65	21.2	62.5	5
Satisfied	31	96	29.8	92.3	6
Extremely Satisfied	8	104	7.7	100	7
<b>SATISFIED WITH INDEPENDENCE EXERCISED</b>					
Extremely Dissatisfied	0	0	0	0	1
Dissatisfied	5	5	4.8	4.8	2
Slightly Dissatisfied	5	10	4.8	9.6	3
Neutral	18	28	17.3	26.9	4
Slightly Satisfied	10	38	9.6	36.5	5
Satisfied	62	100	59.6	96.2	6
Extremely Satisfied	4	104	3.8	100	7
<b>SATISFIED WITH ORGANIZATIONAL DEPTBY.</b>					
Extremely Dissatisfied	7	7	6.7	6.7	1
Dissatisfied	4	11	3.8	10.6	2
Slightly Dissatisfied	0	11	0	10.6	3
Neutral	46	57	44.2	54.8	4
Slightly Satisfied	13	70	12.5	67.3	5
Satisfied	26	96	25.0	92.3	6
Extremely Satisfied	8	104	7.7	100	7
<b>SATISFIED WITH WORKGROUP COHESION</b>					
Extremely Dissatisfied	0	0	0	0	1
Dissatisfied	3	3	2.9	2.9	2
Slightly Dissatisfied	5	8	4.8	7.7	3
Neutral	16	24	15.4	23.1	4
Slightly Satisfied	13	37	12.5	35.6	5
Satisfied	40	77	38.5	74.0	6
Extremely Satisfied	27	104	25.0	100	7
<b>SATISFIED WITH CHALLENGING WORK</b>					
Extremely Dissatisfied	0	0	0	0	1
Dissatisfied	6	5	5.8	5.8	2
Slightly Dissatisfied	4	10	3.8	9.6	3
Neutral	22	32	21.2	30.8	4
Slightly Satisfied	21	53	20.2	51.0	5
Satisfied	38	91	36.5	87.5	6
Extremely Satisfied	13	104	12.5	100	7
<b>SATISFIED WITH SUPERVISION RECEIVED</b>					
Extremely Dissatisfied	1	1	1.0	1.0	1
Dissatisfied	6	7	5.8	6.7	2
Slightly Dissatisfied	8	15	7.7	14.4	3
Neutral	16	31	15.4	29.8	4
Slightly Satisfied	13	44	12.5	42.3	5
Satisfied	43	87	41.3	83.7	6
Extremely Satisfied	17	104	16.3	100	7
<b>WILLING TO PUT OUT EXTRA EFFORT</b>					
Strongly Disagree	1	1	1.0	1.0	1
Moderately Disagree	2	3	1.9	2.9	2

Slightly Disagree	1	4	1.0	3.8	3
Neither Disagree or Agree	1	5	1.0	4.8	4
Slightly Agree	4	9	3.8	8.7	5
Moderately Agree	17	26	16.3	25.0	6
Strongly Agree	78	104	75.0	100	7
<b>TALK UP ORGANIZATION</b>					
Strongly Disagree	3	3	2.9	2.9	1
Moderately Disagree	0	3	0	2.9	2
Slightly Disagree	2	5	1.9	4.8	3
Neither Disagree or Agree	9	14	8.7	13.5	4
Slightly Agree	13	27	12.5	26.0	5
Moderately Agree	38	65	36.5	62.5	6
Strongly Agree	39	104	37.5	100	7
<b>FEEL VERY LITTLE LOYALTY TO ORGANIZ.</b>					
Strongly Disagree	57	57	54.8	54.8	1
Moderately Disagree	10	67	9.6	64.4	2
Slightly Disagree	5	72	4.8	69.2	3
Neither disagree or Agree	7	79	6.7	76.0	4
Slightly Agree	3	82	2.9	78.8	5
Moderately Agree	16	98	15.4	94.2	6
Strongly Agree	6	104	5.8	100	7
<b>ACCEPT ANY JOB TO REMAIN WITH ORGANIZ.</b>					
Strongly Disagree	32	32	30.8	30.8	1
Moderately Disagree	10	42	9.6	40.4	2
Slightly Disagree	2	44	1.9	42.3	3
Neither Disagree or Agree	12	56	11.5	53.8	4
Slightly Agree	16	72	15.4	69.2	5
Moderately Agree	14	86	13.5	82.7	6
Strongly Agree	18	104	17.3	100	7
<b>FIND VALUES &amp; ORGANIZ. VALES ARE SIMILAR</b>					
Strongly Disagree	13	13	12.5	12.5	1
Moderately Disagree	3	16	2.9	15.4	2
Slightly Disagree	3	19	2.9	18.3	3
Neither Disagree or Agree	16	35	15.4	33.7	4
Slightly Agree	19	54	18.3	51.9	5
Moderately Agree	27	81	26.0	77.9	6
Strongly Agree	23	104	22.1	100	7
<b>PROUD TO BE PART OF ORGANIZATION</b>					
Strongly Disagree	0	0	0	0	1
Moderately Disagree	3	3	2.9	2.9	2
Slightly Disagree	0	3	0	2.9	3
Neither Disagree or Agree	4	7	3.8	6.7	4
Slightly Agree	5	12	4.8	11.5	5
Moderately Agree	21	33	20.2	31.7	6
Strongly Agree	71	104	68.3	100	7
<b>COULD WORK AT DIFFEREN ORGANIZATION IN SIMILAR WORK</b>					
Strongly Disagree	35	35	33.7	33.7	1
Moderately Disagree	18	53	17.3	51.0	2
Slightly Disagree	8	61	7.7	58.7	3
Neither Disagree or Agree	11	72	10.6	69.2	4
Slightly Agree	9	81	8.7	77.9	5
Moderately Agree	13	94	12.5	90.4	6
Strongly Agree	10	104	9.6	100	7

ORGANIZATION INSPIRE MY PERFORMANCE					
Strongly Disagree	4	3	3.8	3.8	1
Moderately Disagree	7	11	6.7	10.6	2
Slightly Disagree	3	14	2.9	13.5	3
Neither Disagree or Agree	10	24	9.6	23.1	4
Slightly Agree	9	33	8.7	31.7	5
Moderately Agree	30	63	28.8	60.6	6
Strongly Agree	41	104	39.4	100	7
WOULD TAKE VERY LITTLE TO CAUSE ME TO LEAVE ORGANIZATION					
Strongly Disagree	24	24	23.1	23.1	1
Moderately Disagree	14	38	13.5	36.5	2
Slightly Disagree	7	45	6.7	43.3	3
Neither Disagree or Agree	13	68	12.5	55.8	4
Slightly Agree	14	82	13.5	69.2	5
Moderately Agree	12	94	11.5	80.8	6
Strongly Agree	20	104	19.2	100	7
GLAD TO CHOOSE THIS ORGANIZATION					
Strongly Disagree	8	8	7.7	7.7	1
Moderately Disagree	3	11	2.9	10.6	2
Slightly Disagree	4	15	3.8	14.4	3
Neither Disagree or Agree	20	35	19.2	33.7	4
Slightly Agree	11	46	10.6	44.2	5
Moderately Agree	14	60	13.5	57.7	6
Strongly Agree	44	104	42.3	100	7
NOT MUCH ADVANCEMENT AT THIS ORGANIZATION					
Strongly Disagree	38	38	36.5	36.5	1
Moderately Disagree	12	50	11.5	48.1	2
Slightly Disagree	10	60	9.6	57.7	3
Neither Disagree or Agree	16	76	15.4	73.1	4
Slightly Agree	10	86	9.6	82.7	5
Moderately Agree	10	96	9.6	92.3	6
Strongly Agree	8	104	7.7	100	7
FIND IT DIFFICULT TO AGREE WITH ORGANIZ. POLICY					
Strongly Disagree	29	29	27.9	27.9	1
Moderately Disagree	11	40	10.6	38.5	2
Slightly Disagree	10	50	9.6	48.1	3
Neither Disagree or Agree	13	63	12.5	60.6	4
Slightly Agree	13	76	12.5	73.1	5
Moderately Agree	10	86	9.6	82.7	6
Strongly Agree	18	104	17.3	100	7
CARE ABOUT THE FATE OF THE ORGANIZATION					
Strongly Disagree	2	2	1.9	1.9	1
Moderately Disagree	2	4	1.9	3.8	2
Slightly Disagree	0	4	0	3.8	3
Neither Disagree or Agree	7	11	6.7	10.6	4
Slightly Agree	2	13	1.9	12.5	5
Moderately Agree	26	39	25.0	37.5	6
Strongly Agree	65	104	62.5	100	7
GREAT ORGANIZATION					
Strongly Disagree	12	12	11.5	11.5	1
Moderately Disagree	2	14	1.9	13.3	2



Slightly Disagree	8	22	7.7	21.2	3
Neither Disagree or Agree	24	46	23.1	44.2	4
Slightly Agree	7	53	6.7	51.0	5
Moderately Agree	22	75	21.2	72.1	6
Strongly Agree	29	104	27.9	100	7
<b>DECISION TO WORK FOR ORGANIZATION WAS A MISTAKE</b>					
Strongly Disagree	70	70	67.3	67.3	1
Moderately Disagree	14	84	13.5	80.8	2
Slightly Disagree	6	90	5.8	86.5	3
Neither Disagree or Agree	8	98	7.7	94.2	4
Slightly Agree	3	101	2.9	97.1	5
Moderately Agree	2	103	1.9	99.0	6
Strongly Agree	1	104	1.0	100	7
<b>ABSENT FROM WORK</b>					
Very Frequent	4	5	3.9	4.8	1
Frequent	17	21	16.3	20.2	2
Sometimes	52	73	50.0	70.2	3
Almost Never	28	101	26.9	97.1	4
Never	3	104	2.9	100	5
<b>TARDINESS AT WORK</b>					
Very Frequent	1	1	1.0	1.0	1
Frequent	11	12	10.6	11.5	2
Sometimes	57	69	54.8	66.3	3
Almost Never	18	87	17.3	83.7	4
Never	17	104	16.3	100	5
<b>RETENTION</b>					
Definitely Will Leave	19	19	18.3	18.3	1
Probably Will Leave	28	47	26.9	45.2	2
Uncertain	31	78	29.8	75.0	3
Probably Will Not Leave	17	95	16.3	91.3	4
Definitely Will Not Leave	9	104	8.7	100	5
<b>JOB PERFORMANCE</b>					
Dissatisfied	17	17	16.0	16.0	1
Slightly Dissatisfied	28	45	27.0	43.0	2
Neutral	31	76	30.0	73.0	3
Slightly Satisfied	18	94	17.0	90.0	4
Satisfied	5	99	5.0	95.0	5
Extremely Satisfied	5	104	5.0	100	6
<b>QUALITY OF WORK</b>					
Extremely Dissatisfied	0	0	0	0	1
Dissatisfied	0	0	0	0	2
Slightly Dissatisfied	1	1	1.0	1.0	3
Neutral	5	6	4.8	5.8	4
Slightly Satisfied	3	9	2.9	8.7	5
Satisfied	64	73	61.5	70.2	6
Extremely Satisfied	31	104	29.8	100	7
<b>QUANTITY OF WORK</b>					
Extremely Dissatisfied	0	0	0	0	1
Dissatisfied	2	2	1.9	1.9	2
Slightly Dissatisfied	9	11	8.7	10.6	3
Neutral	10	21	9.6	20.2	4
Slightly Satisfied	8	29	7.7	27.9	5
Satisfied	57	86	54.8	82.7	6
Extremely Satisfied	18	104	17.3	100	7
<b>ADVANCEMENT READINESS</b>					
Extremely Dissatisfied	3	3	2.9	2.9	1

Dissatisfied	10	13	9.6	12.5	2
Slightly Dissatisfied	10	23	9.6	22.1	3
Neutral	10	33	9.6	31.7	4
Slightly Satisfied	10	43	9.6	41.3	5
Satisfied	44	87	42.3	83.7	6
Extremely Satisfied	17	104	16.3	100	7
<b>OVERALL JOB RATING</b>					
Outstanding	26	26	25.0	25.0	1
Excellent	68	84	55.8	80.8	2
Good	15	99	14.4	95.2	3
Satisfactorily	4	103	3.9	99.1	4
Unsatisfactorily	1	104	1.0	100	5

## **APPENDIX F**

## Correlation Between Organizational Commitment &amp; Basic Motivators

Correlations		SKILLVAR	TASKSIGN	TASKID	FEEDBACK	TASKAUTO	ACCOMPL	PAID	JOBCHAL	DEVEL
EXPECT	Pearson Correlation	-0.04	0.06	-0.10	0.01	-0.06	0.46	0.15	0.24	0.35
	Sig. (2-tailed)	0.69	0.58	0.32	0.95	0.55	0.00	0.12	0.01	0.00
	Sum of Squares and Cross-products	-8.15	10.38	-18.92	1.15	-12.38	66.31	30.69	35.38	66.92
	Covariance	-0.08	0.10	-0.18	0.01	-0.12	0.64	0.30	0.34	0.65
	N	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00
TALKUP	Pearson Correlation	-0.18	-0.11	-0.37	-0.01	-0.22	0.34	0.17	0.26	0.17
	Sig. (2-tailed)	0.07	0.26	0.00	0.92	0.02	0.00	0.09	0.01	0.09
	Sum of Squares and Cross-products	-44.75	-25.50	-84.75	-2.13	-55.88	59.38	39.88	47.00	39.38
	Covariance	-0.43	-0.25	-0.82	-0.02	-0.54	0.58	0.39	0.46	0.38
	N	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00
LOYALTY	Pearson Correlation	-0.07	-0.12	-0.16	0.02	-0.29	-0.04	0.01	0.03	-0.05
	Sig. (2-tailed)	0.48	0.23	0.10	0.82	0.00	0.67	0.95	0.78	0.58
	Sum of Squares and Cross-products	-28.25	-44.50	-61.25	7.63	-120.63	-11.88	2.62	8.00	-20.88
	Covariance	-0.27	-0.43	-0.59	0.07	-1.17	-0.12	0.03	0.08	-0.20
	N	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00
ANYKIND	Pearson Correlation	0.24	0.03	0.12	0.15	0.02	0.24	0.39	0.16	0.13
	Sig. (2-tailed)	0.02	0.76	0.21	0.12	0.87	0.01	0.00	0.10	0.20
	Sum of Squares and Cross-products	102.77	12.08	50.62	56.73	7.42	74.96	164.04	52.08	52.88
	Covariance	1.00	0.12	0.49	0.55	0.07	0.73	1.59	0.51	0.51
	N	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00
MYVALUE	Pearson Correlation	-0.21	-0.15	-0.14	0.13	-0.11	0.28	0.28	0.14	0.31
	Sig. (2-tailed)	0.04	0.14	0.17	0.19	0.25	0.00	0.00	0.15	0.00
	Sum of Squares and Cross-products	-74.12	-48.46	-46.19	39.37	-42.29	71.98	98.52	37.54	105.44
	Covariance	-0.72	-0.47	-0.45	0.38	-0.41	0.70	0.96	0.36	1.02
	N	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00
PROUDITE	Pearson Correlation	-0.30	0.00	-0.13	0.46	-0.05	0.09	0.43	-0.03	0.24
	Sig. (2-tailed)	0.00	0.96	0.18	0.00	0.64	0.35	0.00	0.78	0.02
	Sum of Squares and Cross-products	-60.27	0.92	-25.12	77.52	-9.67	13.29	84.21	-4.08	45.37
	Covariance	-0.59	0.01	-0.24	0.75	-0.09	0.13	0.82	-0.04	0.44
	N	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00
SIMILAR	Pearson Correlation	0.10	0.04	0.04	-0.06	0.13	0.24	-0.20	0.14	0.03
	Sig. (2-tailed)	0.30	0.71	0.68	0.58	0.20	0.01	0.04	0.15	0.73
	Sum of Squares and Cross-products	41.23	13.92	15.38	-18.73	52.58	68.04	-80.04	41.92	13.12
	Covariance	0.40	0.14	0.15	-0.18	0.51	0.66	-0.78	0.41	0.13
	N	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00
INSPIRES	Pearson Correlation	-0.01	-0.23	-0.27	0.35	-0.10	0.24	0.52	0.26	0.33
	Sig. (2-tailed)	0.91	0.02	0.00	0.00	0.33	0.01	0.00	0.01	0.00
	Sum of Squares and Cross-products	-3.52	-69.58	-83.37	95.64	-31.80	54.91	165.34	60.92	100.99
	Covariance	-0.03	-0.68	-0.81	0.93	-0.31	0.53	1.61	0.59	0.98
	N	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00
LCHANGE	Pearson Correlation	0.04	0.12	-0.14	-0.13	-0.15	0.13	0.01	0.22	0.17
	Sig. (2-tailed)	0.70	0.23	0.15	0.19	0.12	0.20	0.88	0.03	0.08
	Sum of Squares and Cross-products	16.10	45.88	-56.67	-45.47	-66.76	37.18	6.07	66.38	67.80
	Covariance	0.16	0.45	-0.55	-0.44	-0.65	0.36	0.06	0.64	0.66
	N	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00
GLAD	Pearson Correlation	0.08	-0.05	0.01	0.03	-0.19	0.19	0.10	0.19	0.16
	Sig. (2-tailed)	0.39	0.61	0.90	0.75	0.06	0.05	0.29	0.05	0.11
	Sum of Squares and Cross-products	29.98	-16.58	4.13	9.39	-68.55	47.66	36.09	49.92	53.74
	Covariance	0.29	-0.16	0.04	0.09	-0.67	0.46	0.35	0.48	0.52
	N	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00
STICKING	Pearson Correlation	0.02	0.00	0.17	-0.20	0.09	-0.12	-0.20	-0.26	-0.34
	Sig. (2-tailed)	0.85	0.99	0.08	0.04	0.34	0.23	0.04	0.01	0.00
	Sum of Squares and Cross-products	7.12	-0.54	63.19	-66.37	37.29	-31.98	-75.52	-71.54	-125.44

	products									
	Covariance	0.07	-0.01	0.61	-0.64	0.36	-0.31	-0.73	-0.69	-1.22
	N	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00
POLICIES	Pearson Correlation	0.16	0.10	0.01	-0.09	0.16	-0.09	-0.09	0.08	-0.29
	Sig. (2-tailed)	0.11	0.30	0.89	0.39	0.09	0.39	0.34	0.41	0.00
	Sum of Squares and Cross-products	66.23	39.92	5.38	-30.23	71.08	-25.46	-38.54	24.92	-116.38
	Covariance	0.64	0.39	0.05	-0.29	0.69	-0.25	-0.37	0.24	-1.13
	N	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00
CARE	Pearson Correlation	-0.03	-0.14	-0.12	0.05	-0.10	0.38	0.04	0.16	0.33
	Sig. (2-tailed)	0.75	0.15	0.21	0.61	0.29	0.00	0.70	0.11	0.00
	Sum of Squares and Cross-products	-7.44	-31.27	-27.90	10.07	-25.61	63.26	8.99	27.23	75.03
	Covariance	-0.07	-0.30	-0.27	0.10	-0.25	0.61	0.09	0.26	0.73
	N	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00
BEST	Pearson Correlation	-0.19	-0.04	-0.24	0.14	-0.14	0.11	0.29	0.14	0.18
	Sig. (2-tailed)	0.06	0.68	0.01	0.15	0.15	0.27	0.00	0.16	0.07
	Sum of Squares and Cross-products	-68.96	-13.85	-84.27	44.71	-53.40	28.17	105.33	37.15	62.02
	Covariance	-0.67	-0.13	-0.82	0.43	-0.52	0.27	1.02	0.36	0.60
	N	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00
MISTAKE	Pearson Correlation	0.05	-0.05	-0.01	-0.20	-0.08	-0.06	-0.15	-0.12	-0.20
	Sig. (2-tailed)	0.62	0.60	0.88	0.04	0.39	0.56	0.13	0.22	0.04
	Sum of Squares and Cross-products	12.50	-12.00	-3.50	-42.25	-21.75	-10.25	-36.25	-22.00	-48.25
	Covariance	0.12	-0.12	-0.03	-0.41	-0.21	-0.10	-0.35	-0.21	-0.47
	N	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00

## **APPENDIX G**

Dr. Brown, G. Ph. D.

C/O The National Irrigation Commission Limited

191 Old Hope Road

Kingston 6.

Dear Dr. Brown

You are already aware that I will be completing my studies toward a Doctor of Business Administration Degree at NOVA Southeastern University, Fort Lauderdale, Florida. Since we last spoke, I have joined with a fellow student (Mrs. Sonia Heywood); we will be working together, but on different areas of the same database answering different research questions. My area will be "Job Satisfaction and Organizational Commitment"; Mrs. Heywood will be examining "Job-fit". We are therefore seeking your permission to use the employees of the National Irrigation Commission as our survey sample.

We are at the "Concept Paper Proposal" stage of our dissertation process and therefore, the grating of your permission to use the employees of the NIC, as our sample survey is critical. We would appreciate receiving this permission in writing and any requests or instructions and/or requirements you may have regarding this request. Also, any further information you may have regarding the propose sample would be most helpful and appreciative.

As you know, in an era of increasing competition and scarce resources, maximizing employees' productivity, job satisfaction, and commitment to the organization is a critical issue for administrators and managers, especially in developing countries such as ours. According to research, employees who are experiencing job satisfaction and organizations practicing job-fit are more likely to be productive. Finding ways of motivating employees and practicing job-fit are major issues with which "progressive" organizations and their management must contend with today.

The issue of globalization and rising costs make administrators/managers focus on improving employee performance, which has become a major productive issue among local and international organizations/companies. Furthermore, the possibility of increase activity in staff compliment downsizing, forces businesses not only to implement imaginative strategies for attracting personnel but to make more

effective use of existing employees and attempt to promote job satisfaction and job-fit.

It could be very useful to know the nature and magnitude of the relationship between job satisfaction and organizational commitment; and to what extent could job-fit be practice at the NIC. Responses from the surveys could help administrators to: (1) develop solutions to current company productivity, morale, and staffing challenges, (2) enable managers to promote job satisfaction and job-fit, (3) reduce sporadic/unexpected work disruptions of rightsizing and costly turnover among workers (professionals).

If your approval is granted, we would like to begin our preparation process as soon after we have selected our committees. With your approval, we will work with the General Manager and the Director of Administration to develop a list of approximately 160 workers (representing all category of staff) and self-administer our questionnaire at a time mutually agreed on. We will provide for you samples of the survey instruments as soon as we have receive permission from the developers.

All responses within categories will be anonymous, voluntary and confidential and the individuals and or company will not be identified. All findings will be aggregated. However, if you wish to receive a summary of the completed studies, as well as a compilation of the data, we will be happy to provide this information.

We thank you for your time and considering this request. We look forward to hearing from you at your earliest convenience.

Sincerely

Solvalyn Eccles

8108 NW 75 Ave

Tamarac, Fl., 33321



## **APPENDIX H**

Solvalyn Eccles  
C/O NOVA Southeastern University  
Fort Lauderdale, Florida.

Dear Colleague:

I am currently a student at NOVA Southeastern University, completing my studies toward a Doctor of Business Administration Degree. My dissertation involves looking at the relationships between job satisfaction and organizational commitment. I will be surveying all categories of staff at the NIC, to which you have been randomly selected.

Will you assist me by completing the enclosed survey instruments and returning them to me during this session? You may have notice a code number on each questionnaire; this is for follow-up purposes and will act as a security feature for the protection of the identities of each respondent during coding. Should you decide to complete these questionnaires; all your responses will be anonymous, voluntary and confidential. No individual employee will be identified in the study, the only persons having access to the master list will be myself; all findings and results will be aggregated. I will be happy to share the findings with you if you so desire.

If you would like to receive a summary of the results, please return this letter with the completed survey instruments.

Thank you for your participation.

Sincerely,  
Solvalyn Eccles

---

\_\_\_\_\_ YES, I would like to receive the result of this doctoral study.

---

Code No.

# APPENDIX I

Monday, October 8th. , 2001

J. Richard Hackman, Ph. D.  
Shannon Hall 6  
Harvard University  
Cambridge, MA 02138

Dear Dr. Hackman

We are Business Administration doctoral students at Nova Southeastern University, Fort Lauderdale, Florida; currently, we are in the dissertation phase of our program. Our dissertations will focus on the Job Dimensions Models by Hackman & Oldham and Herzberg and the Organizational Commitment Model by Mowday, Steers, and Porter.

As part of our studies, we would like your permission to use the Job Diagnostic Survey. The instrument will be administered to employees of a National Irrigation Company and will be used for educational purposes only.

Your permission to use this instrument is critical to our studies. We would appreciate receiving a blank copy of the instrument and any instructions and/or requirement you may have regarding its administration. Also, any further information you may have regarding the instrument's validity and reliability would be most helpful and appreciative.

We thank you for your time. We look forward to hearing from you at your earliest convenience.

Sincerely

Solvalyn Eccles  
8104 NW 75 Ave  
Tamarac, Fl. 33321  
E-Mail: seccles99@email.msn.com  
Ph. (954) 718 8616

Sonia Heywood  
8540 NW 53 Ct.  
Lauderhill Fl., 33351

## **APPENDIX J**

Monday, October 8<sup>th</sup> , 2001

Richard, T. Mowday, Ph. D.  
University of Oregon  
Eugene OR 97403 - 1208

Dear Dr. Mowday

We are Business Administration doctoral students at Nova Southeastern University, Fort Lauderdale, Florida; currently, we are in the dissertation phase of our program. Our dissertations will focus on the Job Dimensions Models by Hackman & Oldham and Herzberg and the Organizational Commitment Model by Mowday, Steers, and Porter.

As part of our studies, we would like your permission to use the Organizational Commitment Survey. The instrument will be administered to employees of a National Irrigation Company and will be used for educational purposes only.

Your permission to use this instrument is critical to our studies. We would appreciate receiving a blank copy of the instrument and any instructions and/or requirement you may have regarding its administration. Also, any further information you may have regarding the instrument's validity and reliability would be most helpful and appreciative.

We thank you for your time. We look forward to hearing from you at your earliest convenience.

Sincerely

Solvalyn Eccles  
8104 NW &5 Ave  
Tamarac, Fl. 33321  
E-Mail: seccles99@email.msn.com  
Ph. (954) 718 8616

Sonia Heywood  
8540 NW 53 Ct.  
Lauderhill Fl., 33351

## REFERENCES

- Agho, A. O., Mueller, C.W., & Price, J. L. (1993). Detriments of employee job satisfaction: An empirical test of a casual model. Human relations, 46 (8), 1007-1027.
- Agho, A. O., Price, J. L., & Mueller, C. W. (1992). Discriminant validity of measures of job satisfaction, positive effective and negative effective. Journal of occupational and Organizational Psychology, 65, 185-196.
- Alderfer, C. P. (1992). Existence, relatedness and growth. New York: Free Press.
- Allison, P. D. (1984). Events history analysis: Regression for longitudinal event data. Newbury Park, CA: Sage.
- Alutto, J. A., Hrebiniak, L. G., & Alonso, R. C. (1973). On operationalizing the concept of commitment. Social Forces, 51, 448-454.
- Anderson, P. K. (1982). Testing goodness of fit of Cox's regression and life model. Biometrics, 39: 67-77.
- Angle, H. L., & Perry, J. L. (1981). An empirical assessment of organizational commitment and organizational effectiveness. Administrative science quarterly, 26, 1-14.
- Argyris, C. (1957). Personality and organization. New York: Harper.
- Argyris, C. (1964). Integrating the individual and the organization. New York: John Wiley & Sons
- Atkinson, J. W. (1974): An introduction to motivation. Princeton, NJ: Van Nostrand.
- Bain, D. (1982). The productivity prescription. New York: McGraw-Hill.
- Bannister, B. D., & Griffeth, R. W. (1986). Applying a casual analytic framework to the Mobley, Horner, and Hollingsworth (1978) turnover model: A useful reexamination. Journal of Management, 12, 433-443.
- Bateman, T. S., & Strasser, S. (1984). A longitudinal analysis of the antecedents of organizational commitment. Academy of Management Journal, 27, 95-112.
- Bedeian, A. G., & Armenakis, A. A. (1981). A path-analytic study of the consequences of role conflict and ambiguity. Academy of Management Journal, 24, 417-424.
- Behrend, H., (1953). Absence and labor turnover in a changing economic climate. Journal of Occupation Psychology, 27, 69-79.
- Berry, L. L., Parasyraman, A., & Zeitbaml, V.A. (1990). Five imperatives for improving service quality. Sloan's Management Review, 31, 29-38.

- Birnbaum, D., & Somers, M. J. (1993). Fitting job performance into turnover models: An examination of the form of the job performance-turnover relationship and a path model. Journal of Management, 19, 1-11.
- Blau, G. J., & Boal, K. B. (1987). Conceptualizing how job involvement and organizational commitment affect turnover and absenteeism. Academy of Management Review, 12 (2), 289-301.
- Blegen, M. A. (1993). Nurses' job satisfaction: A meta-analysis of related variables. Nursing Research, 42 (1), 36-41.
- Brayfield, A. H., & Crockett, W. H. (1955) Employee attitudes and employee performance. Psychological Bulletin, 49, 195-298.
- Bretz, R. D., Boudreau, J. W., & Judge, T. A. (1994). Job search behavior of employed managers. Personnel Psychology, 47, 275-301.
- Brief, A. P., & Aldag, R. J. (1977). Antecedents of organizational commitment among hospital nurses. Working paper, University of Iowa.
- Buchanan, B. (1974). Building organizational commitment: The socialization of managers in work organizations. Administrative Science Quarterly, 19, 533-546.
- Buchko, A. A. (1993). The effect of employee ownership on employee attitudes: An integrated casual model and path analysis. Journal of Management Studies, 30(4), 633-657.
- Burton, R. M. (1994). How can I motivate you to do it my way? Physician Executive, 20(11), 19-21.
- Campion, M. A. (1991). Meaning and measurement of turnover: Comparison and alternative measures and recommendations for research. Journal of Applied Psychology, 76, 199-212.
- Campion, M. A., Campion, J. E., & Hudson, J. P. (1994). Structured interviewing: A note on incremental variability and alternative question types. Journal of Applied Psychology, 79, 998-1002.
- Carsten, J. M., & Spector, P. E. (1987). Unemployment, job satisfaction, and, employee turnover: A meta-analytic test of the Muchinsky model. Journal of Applied Psychology, 72, 374-381.
- Cattell, R. B. (1966). The Scree test for the number of factors. Multivariate Behavioral Research, 1, 245-276.
- Cofer, C. N., & Appley, M. H. (1964). Motivation: Theory and research. New York: Wiley.



- Cohen, A. (1993). Work commitment in relation to withdrawal intentions and union effectiveness. Journal of Business Research, 26, 75-90.
- Conlin, M., Coy, P., Palmer, A. T., & Saveri, G. (1999). The wild new workforce. Business Week, December 6, 38-45.
- Cronbach, L.J. (1951). Coefficient alpha and the internal structure of tests. Psychometrika, 16, 297-334.
- Curry, J. P., Wakefield, D. S., Price, J. L., & Mueller, C. W. (1986). On the casual ordering of job satisfaction and organizational commitment. Academy of Management Journal, 29, 847-850.
- Decottis, T. A., & Summers, T. P. (1987). A path analysis of a model of the antecedents and consequences of organizational commitment. Human Relations, 40(7), 445-471.
- Dewar, R., & Werber, J. (1979). Universalistic and contingency predictions of employee satisfaction and conflict. Administrative Science Quarterly, 24, 426-446.
- Dickter, D. N., Roznowski, M., & Harrison, D. A. (1996). Temporal temporing: An event history analysis of the process of voluntary turnovers. Journal of Applied Psychology, 81, 705-716.
- Dublin, R., Champoux, J. E., & Porter, L. W. (1975). Central life interest and organizational commitment of blue-collar and clerical workmen. Administrative Science Quarterly, 20, 411-421.
- Fried, Y. (1991). Meta-analytic comparison of the job Diagnostic Survey and Job Characteristics Inventory as correlates of work satisfaction and performance. Journal of Applied Psychology, 76, 690-697.
- Frings, C. (1993). Setting a climate for motivating your staff. Medical Laboratory Observer, 25(10), 47-49.
- Gee, J., & Kilpatrick (2000) The Relationship Between Job Satisfaction and Organizational Commitment as Perceived by Healthcare Professionals in an Acute Care Military Hospital. Unpublished doctoral dissertation, Nova Southeastern University, Fort Lauderdale, Fl.
- Gerhart, B. H. (1987). How important are dispositional factors as determinants of job satisfaction? Implications for jobdesign and other personal programs. Journal of Applied Psychology, 72, 366-373.
- Gibson J., Ivancevich, J., & Donnelly, J. (1991). Organizations: Behavior, structures, processes. Homewood, IL: Irwin.

- Gladstein, D. (1984). Groups in context: A model of task group effectiveness. Administrative Science Quarterly, 29, 499-517.
- Glick, W., Jenkins, D., & Gupta, N. (1986). Method versus substance: How strong are underlying relationships between job characteristics and attitudinal outcomes? Academy of Management, 29, 441-464.
- Griffeth, R. W., & Hom, P. W. (1995). The employee turnover process. Research in Personnel and Human Resources Management, 13, 245-293.
- Hackman, J. R., & Lawler, E. E., III (1971). Employee reaction to job characteristics. Journal of Applied Psychology, 55, 259-286.
- Hackman, J. R., & Oldham G. R. (1975). Development of the job diagnostic survey. Journal of Applied Psychology, 50, 159-170.
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. Organizational Behavior and Human Performance, 16, 250-279.
- Hackman, J. R., & Oldham, G.R. (1980). Work redesign. Reading, MA: Addison-Wesley.
- Hall, D. T., & Schneider, B. (1972). Correlates of organizational identification as a function of career pattern and organizational type. Administrative Science Quarterly, 17, 340-350.
- Haynes, K. (1979). Job satisfaction of mid-management social workers. Administration in Social Works, 3, 207-217.
- Hersey, P., & Blanchard, K. (1993). Management of Organizational Behavior. Englewood Cliffs, NJ: Prentice-Hall.
- Herzberg, F. (1966). Work and the nature of man. Cleveland, OH: World.
- Herzberg, F. (1987). One more time: How do you motivate your employees? Harvard Business Review, 65(5), 113-118.
- Herzberg, F., Mausner, B., & Snyderman, B. B. (1959). The motivation to work. New York: John Wiley & Sons.
- Higgins, J. M. (1991). The management challenge: An introduction to management. New York: Macmillan.
- Hobson, R. (1991). Workplace behaviors. Work and Occupation, 18, 271-290.
- Holt, D. H. (1990). Principles and practices. Eaglewood Cliffs, NJ: Prentice Hall.
- Horn, P. W., & Griffeth, R. W. (1995). Employee turnover. Cincinnati: South/Western.

- Hoppock, R. (1935). Job satisfaction. New York: Arno Press.
- Hrebiniak, L. C., & Alluto, J. A. (1972). Personal and role-related factors in the development of organizational commitment. Administrative Science Quarterly, 17, 555-572.
- Hyde, A. C. (1972). The proverbs of total quality management: Recharging the path to quality improvement in the public sector. Management Review, 26, 25-37
- Ivancevich, J., & Matterson, M. (1990). Organizational behavior and management. Homewood, IL: Irwin.
- Jayarante, S., & Chess, W. A. (1984). Job satisfaction, burnout, and turnover: A national survey. Social Work, 29, 448-453.
- Judge, T. A. (1993). Does affective disposition moderate the relationship between job satisfaction and voluntary turnover? Journal of Applied Psychology, 78(3), 395-401..
- Kennish, J. (1994). Motivating with a voluntary participatory policy. Security Management, 38(8), 22-23.
- Knoop, R. (1995). Relationships among job involvement, job satisfaction and organizational commitment for nurses. Journal of Psychology, 129(6), 643-649.
- Koch, J. L., & Steers, R. M. (1998). Job attachment, satisfaction and turnover among public sector employees. Journal of Vocational behavior.
- Kornhauser, A., & Greenberg, D. (1932). Employee attitudes: Suggestions from a study in a factory. Personnel Journal, 10, 393-401.
- Lacey, M. (1994). Rewards cost nothing? Yes they can ... really! Journal for Quality and Participation, 17(3), 6-8.
- Lautenschlager, G. J. (1989). A comparison of alternatives to conducting Monte Carlo analyses for determining parallel analysis criteria. Multivariate Behavioral Research, 24(3), 365-395.
- Lee, T. W., Ashford, S. J., Walsh, J. P., & Mowday, R. T. (1992). Commitment propensity, organizational commitment, and voluntary turnover: A longitudinal study of organizational entry process. Journal of Management, 18(1), 15-32.
- Lee, T. W., & Mitchell, T. R. (1994). An alternative approach: The unfolding model of voluntary employee turnover. Academy of Management Review, 19, 51-89.
- Lee, T. W., Mitchell, T. R., Holtom, B. C., Mc Daniel, L. S., & Hill, J. W. (1999). The unfolding model of voluntary turnover: A replication and extension. Academy of Management Journal, 42, 450-462.

- Lee, T. W., & Mowday, R. T. (1987). Voluntary leaving an organization: An empirical investigation of Steers and Mowday's Model of Turnover. Academy of Management Journal, 58, 113-120.
- Lee, T. W., & Mowday, R. T. (1992). An empirical investigation of Steers and Mowday's Model of Turnover. Academy of Management Journal, 30, 721-743.
- Lee, T. L., Mitchell, T. R., Wise, L., & Fireman, S. (1996). An unfolding model of voluntary employee turnover. Academy of management Journal, 39, 5-36.
- Locke, E. A., & Wood, R. E. (1981). Goal setting and task performance: 1969-1980. Psychological Bulletin, 90, 125-152.
- Lodahl, T. M., & Kejner, M. (1965). The definition and measurement of job involvement. Journal of Applied Psychology, 49, 24-33.
- Loher, B. T., Noe, R. A., Moeller, N. L., & Fitzgerald, M. P. (1985). A meta-analysis of the relationship of job characteristics to job satisfaction. Journal of Applied Psychology, 70, 280-289.
- Lucas, R. E. (1977). Hedonic wage equations and psychic wages in the return to schooling. American Economic Review, 67, 549-558.
- Marsh, R. M., & Mannari, H. (1977). Organizational commitment and turnover: A predictor study. Administrative Science Quarterly, 22, 57-75.
- Maslow, A. H. (1954). Motivation and personality. New York: Harper and Row
- Maslow, A. H. (1968). Toward a psychology of being. New York: Van Nostrand Reinhold.
- Mathieu, J. E., Zajac, D. M. (1990). A Review and Meta-Analysis of the Antecedents, Correlations and Consequences of Organizational Commitment; Psychological Bulletin, Washington, 108(2), 171.
- Mayer, R. C., & Schoorman, F. D. (1992). Predicting participation and production outcomes through a two-dimensional model of organizational commitment. Academy of Management Journal, 35(3), 671-684.
- Mayo, E. (1945). The social problems of an industrial civilization. Boston: Harvard University, Graduate School of Business Administration.
- McClelland, D. C. (1965). Achievement motivation can be developed. Harvard Business Review, 43, 6-24, 178.
- McClelland, G. H., & Judd, C. M. (1993). Statistical difficulties of detecting interactions and moderator effects. Psychological Bulletin, 114, 376-389.

- McFee, B., Quarstein, V., & Ardalan, A. (1995). The effect of discretion, outcome feedback, and process feedback on employee job satisfaction. Industrial Management and Data Systems, *5*(5), 7-12.
- McGee, G. W., & Ford, R. (1987). Two (or more?) dimensions of organizational commitment: Re-examination of the affective and continuance commitment scales. Journal of Applied Psychology, *72*, 638-642.
- McGregor, D. M. (1960). The human side of enterprise. New York: McGraw-Hill.
- McNeely, R. (1984). Occupation, gender, and work satisfaction in a comprehensive Human Services Department. Administration in Social Work, *8*, 35-47.
- McNeese-Smith, D. (1996). Increasing employee productivity, job satisfaction and organizational commitment. Hospital and Health Services Administration, *41*(2), 160-175.
- Meyer, J. P., Bobocel, D. R., & Allen, N. J. (1991). Development of organizational commitment during the first years of employment: A longitudinal study of pre-and-post-entry influences. Journal of Management, *17*(4), 717-733.
- Michaels, C.E., & Spector, P. E. (1991). Causes of employee turnover: A test of the Mobley, Griffith, Hand and Meglino Model. Journal of Applied Psychology, *67*, 53-59.
- Miller, J. G., & Wheeler, K. G. (1992). Unraveling the mysteries of gender differences in intention to leave the organization. Journal of Organizational Behavior, *13*, 465-478.
- Mobley, W. H., Horner, S. O., & Hollingsworth, A. T. (1978). An evaluation of precursors of hospital employee turnover. Journal of Organizational Behavior, *13*, 408-414.
- Morita, J. G., Lee, T. W., & Mowday, R. T. (1993). The regression-analog to survival analysis: A selected approach to turnover research. Academy of Management Journal, *36*, 1430-1463.
- Morris, J. H., & Sherman, J. D. (1981). Generalizability of an organizational commitment model. Academy of Management Journal, *24*, 512-526.
- Mowday, R. T., Porter, L. W., & Dubin, R. (1974). Unit performance, situational factors, and employee attitudes in spatially separated work units. Organizational Behavior and Human Performance, *12*, 231-248.
- Mowday, R. T., Porter, W. L., & Steers, R. (1982). Organizational Linkages: The psychology of commitment, absenteeism, and turnover. New York: Academic Press.
- Mowday, R. T., Steers, R. M., & Porter, L. M. (1979). The measurement of organizational commitment. Journal of Vocational Behavior, *14*, 224-247.

- Mueller, C. W., & Price, J. L. (1990). Economic, psychological and sociological determinants of voluntary turnover. Journal of Behavioral Economics, 19, 321-335.
- Murray, H. (1938). Explorations in personality. New York: Oxford University Press
- Nicholson, N., Brown, C. A. & Chadwick-Jones, J. K. (1985). Absence from work and job satisfaction. Journal of Applied Psychology, 61, 241-253.
- O'Reilly, C. A., & Caldwell, D. F. (1981). The commitment and job tenure of new employees: Some evidence of postdecisional justification. Administrative Science Quarterly, 26, 597-616.
- O'Reilly, C. A., & Chatman, J. (1986). Organizational commitment and psychological attachment: The effects of compliance, identification and internalization on prosocial behavior. Journal of Applied Psychology, 71, 492-499.
- Pearson, C. A. L. (1991). An assessment of extrinsic feedback on participation, role perception, motivation, and job satisfaction in a self-managed system. Human Relations, 44(5), 517-537.
- Peters, T. (1987). Thriving on chaos. New York: Harper and Row.
- Peters, T. (1988). Facing up to the need for a management revolution. California Management Review, 30(2), 7-38.
- Peters, T. (1992). Liberation management. New York: Alfred A. Knopf.
- Porter, L.W., & Steers, R. M. (1973). Organizational, work, and personal factors in employee turnover and absenteeism. Psychological Bulletin, 80(2), 151-176.
- Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. ((1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. Journal of Applied Psychology, 59, 603-609.
- Price, J. L. (1989). The study of turnover (1<sup>st</sup> ed.). Ames: Iowa State University Press.
- Price, J. S. & Mueller, C. W. (1981). Professional turnover: The case of nurses. Bridgeport, CT: Luce
- Price, J. S., & Mueller, C. W. (1986) Absenteeism and turnover among hospital employees, Greenwich, CT, JAI Press.
- Rakich, J., Longest, B., & Darr, K. (1992). Managing Health Service organizations. Baltimore, MD: Health Professional Press.
- Reichers, A. E. (1985). A review and reconceptualization of organizational commitment. Academy of Management Review, 10, 465-476.

- Robbins, S. P. (1993). Organizational behavior concepts controversies, and applications. Englewood Cliffs, NJ: Prentice-Hall.
- Roethlisberger, F., & Dickson, W. (1939). Management and the worker. Cambridge, MA: Harvard University Press.
- Rousseau, D. M. (1977). Technological differences in job characteristics, employee satisfaction, and motivation: A synthesis of job design research and sociological systems theory. Organizational Behavior and Human Performance, 19, 18-42.
- Rousseau, D. M. (1970). Characteristics of departments, positions, and individuals: Contexts for attitudes and behavior. Administrative Science Quarterly, 23, 521-540.
- Salancik, G. R. (1977). Commitment and the control of organizational behavior and belief. In B. M. Staw, & G. R. Salancik (Eds.). New directions in organizational behavior (pp.1-54). Chicago: St. Clair Press.
- Schelenker, J. A., & Gutek, B. A. (1987). Effects of role loss on work-related attitudes. Journal of Applied psychology, 72, 287-293.
- Shore, L. M., & Wayne, S. J. (1993). Commitment and employee behavior: Comparison of effective commitment and continuance commitment with perceived organizational support. Journal of Applied Psychology, 78(5), 774-780.
- Smith, P. C., Kendall, L. M., & Hulin, C. L. (1969). The measurement of satisfaction in work and retirement. Chicago: Rand McNally.
- Straw, B. M., Bell, N. E., & Clausen, J. A. (1986). The dispositional approach to job attitudes: A lifetime longitudinal test. Administrative Science Quarterly, 31, 56.
- Straw, B. M., & Ross, J. (1985). Stability in the midst of change: A dispositional approach to job attitudes. Journal of Applied Psychology, 70, 469-480.
- Steers, R. M. (1977). Antecedents and outcomes of organizational commitment. Administrative Science Quarterly, 22, 46-56.
- Steers, R. M., & Braunstein, D. N. (1976). A behaviorally-based measure of manifest needs in work settings. Journal of Vocational Behavior, 9, 251-266.
- Steers, R. M., & Mowday, R. T. (1981). Employee turnover and post-decision accommodation processes. Research in Organizational Behavior, 3, 235-281.
- Steers, R. M., & Porter, L. W. (Eds.). (1979). Motivation and work behavior (2<sup>nd</sup> ed.). New York: McGraw-Hill.
- Steers, R. M., & Rhodes, S. R. (1978). Major influences on employee attendance: A process model. Journal of Applied Psychology, 63, 391-407.

- Stone, E. E., & Porter, L. W. (1975). Job characteristics and job attitudes: A multivariate study. Journal of Applied Psychology, 60, 57-64.
- Suttermeister, R. (Ed.). (1976). People and productivity (3<sup>rd</sup> ed.). New York: McGraw-Hill.
- Swiss, J. E. (1992). Adopting total quality management to government. Public Administration Review, 52, 356-362.
- Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analysis based on meta-analytic findings. Personnel Psychology, 46,(2), 259-293.
- Trevor, C. O., Gerhart, B., & Boudreau, J. W. (1997). Voluntary turnover and job performance: Curvilinearity and moderating influences of salary growth and promotions. Journal of Applied Psychology, 82, 44-61.
- U. S. Department of Labor. (1993). Selected characteristics of occupations defined in the revised Dictionary of Occupational Titles. Washington, DC: National Academy Press.
- Vandenberg, R. J., & Lance, C. E. (1992). Examining the casual order of job satisfaction and organizational commitment. Journal of Management, 18(1), 153-167.
- Wanous, J. P., Reichers, A. E., & Hudy, M. J. (1997). Overall job satisfaction: How good are single-item measures? Journal of Applied Psychology, 82, 247-252.
- Weiss, D. J., Dawis, R. V., England, G. V., & Lofquist, L. H. (1967). Manual for the Minnesota Satisfaction Questionnaire. Minneapolis, MN: University of Minnesota, Industrial Relations Center.
- Williams, L.J., & Hazer, J. T. (1986). Antecedents and consequences of satisfaction and commitment in turnover models: A reanalysis using latent variable structural equation methods. Journal of Applied Psychology, 71, 219- 231.



## BIBLIOGRAPHY

- Abdel-Halim, A. H. (1981). Effects of Role stress-job design-technology interaction on employee work satisfaction. Academy of Management Journal, 24, 260-273.
- Agho, A. O., Mueller, C.W., & Price, J. L. (1993). Detriments of employee job satisfaction: An Empirical test of a casual model. Human Relations, 46 (8), 1007-1027.
- Agho, A. O., Price, J. L., & Mueller, C. W. (1992). Discriminant validity of measures of job satisfaction, positive effective and negative effective. Journal of Occupational and Organizational Psychology, 65, 185-196.
- Alderfer, C. P. (1992). Existence, relatedness and growth. New York: Free Press.
- Allison, P. D. (1984). Events history analysis: Regression for longitudinal event data. Newbury Park, CA: Sage.
- Alutto, J. A., Hrebiniak, L. G., & Alonso, R. C. (1973). On operationalizing the concept of commitment. Social Forces, 51, 448-454.
- Anderson, P. K. (1982). Testing goodness of fit of Cox's regression and life model. Biometrics, 39: 67-77.
- Angle, H. L., & Perry, J. L. (1981). An empirical assessment of organizational commitment and organizational effectiveness. Administrative science quarterly, 26, 1-14.
- Argyris, C. (1957). Personality and organization. New York: Harper.
- Argyris, C. (1964). Integrating the individual and the organization. New York: John Wiley & Sons
- Atkinson, J. W. (1974): An introduction to motivation. Princeton, NJ: Van Nostrand.
- Bain, D. (1982). The productivity prescription. New York: McGraw-Hill.
- Bannister, B. D., & Griffeth, R. W. (1986). Applying a casual analytic framework to the Mobley, Horner, and Hollingsworth (1978) turnover model: A useful reexamination. Journal of Management, 12, 433-443.
- Bateman, T. S., & Organ, D.W. (1983). Job satisfaction and the good soldier: The relationship between affect and employee 'citizenship.' Academy of Management, 26, 587-595
- Bateman, T. S., & Strasser, S. (1984). A longitudinal analysis of the antecedents of organizational commitment. Academy of Management Journal, 27, 95-112.
- Bedeian, A. G., & Armenakis, A. A. (1981). A path-analytic study of the consequences of role conflict and ambiguity. Academy of Management Journal, 24, 417-424.

- Behrend, H. (1953). Absence and labor turnover in a changing economic climate. Journal of Occupation Psychology, 27, 69-79.
- Berry, L. L., Parasyraman, A., & Zeitbaml, V.A. (1990). Five imperatives for improving service quality. Sloan's Management Review, 31, 29-38.
- Birnbaum, D., & Somers, M. J. (1993). Fitting job performance into turnover models: An examination of the form of the job performance-turnover relationship and a path model. Journal of Management, 19, 1-11.
- Blau, G. J., & Boal, K. B. (1987). Conceptualizing how job involvement and organizational commitment affect turnover and absenteeism. Academy of Management Review, 12 (2), 289-301.
- Blegen, M. A. (1993). Nurses' job satisfaction: A meta-analysis of related variables. Nursing Research, 42 (1), 36-41.
- Brass, J. D. (1981). Structural relationships, job characteristics, and worker satisfaction and performance. Administrative Science Quarterly, 26, 331-348
- Brayfield, A. H., & Crockett, W. H. (1955) Employee attitudes and employee performance. Psychological Bulletin, 49, 195-298.
- Bretz, R. D., Boudreau, J. W., & Judge, T. A. (1994). Job search behavior of employed managers. Personnel Psychology, 47, 275-301.
- Brooke, P. P., & Price, J. L. (1989). The determinants of employee absenteeism: An empirical test of a casual model. Journal of Occupational Psychology, 62, 1-19.
- Brooke, P. P., Russell, D., & Price, J. L. (1988). Discriminant validation of measures of job satisfaction, job involvement, and organizational commitment. Journal of Applied Psychology, 73(2), 139-145.
- Buchanan, B. (1974). Building organizational commitment: The socialization of managers in work organizations. Administrative Science Quarterly, 19, 533-546.
- Buchanan, B. (1975). To walk an extra mile: The what's, whens, and whys of organizational commitment. Organizational Dynamics, 3(4), 68-79.
- Buchko, A. A. (1993). The effect of employee ownership on employee attitudes: An integrated casual model and path analysis. Journal of Management Studies, 30(4), 633-657.
- Burton, R. M. (1994). How can I motivate you to do it my way? Physician Executive, 20(11), 19-21.
- Butler, G., & Vodanovich, S. J. (1992). The relationship between work values and normative and instructional commitment. The Journal of Psychology, 126(2), 139-146.

- Campion, M. A. (1991). Meaning and measurement of turnover: Comparison and alternative measures and recommendations for research. Journal of Applied Psychology, *76*, 199-212.
- Campion, M. A., Campion, J. E., & Hudson, J. P. (1994). Structured interviewing: A note on incremental variability and alternative question types. Journal of Applied Psychology, *79*, 998-1002.
- Carsten, J. M., & Spector, P. E. (1987). Unemployment, job satisfaction, and employee turnover: A meta-analytic test of the Muchinsky model. Journal of Applied Psychology, *72*, 374-381.
- Cattell, R. B. (1966). The Scree test for the number of factors. Multivariate Behavioral Research, *1*, 245-276.
- Cofer, C. N., & Appley, M. H. (1964). Motivation: Theory and research. New York: Wiley.
- Cohen, A. (1993). Work commitment in relation to withdrawal intentions and union effectiveness. Journal of Business Research, *26*, 75-90.
- Conlin, M., Coy, P., Palmer, A. T., & Saveri, G. (1999). The wild new workforce. Business Week, December 6, 38-45.
- Cronbach, L.J. (1951). Coefficient alpha and the internal structure of tests. Psychometrika, *16*, 297-334.
- Curry, J. P., Wakefield, D. S., Price, J. L., & Mueller, C. W. (1986). On the casual ordering of job satisfaction and organizational commitment. Academy of Management Journal, *29*, 847-850.
- Decottis, T. A., & Summers, T. P. (1987). A path analysis of a model of the antecedents and consequences of organizational commitment. Human Relations, *40*(7), 445-471.
- Dewar, R., & Werber, J. (1979). Universalistic and contingency predictions of employee satisfaction and conflict. Administrative Science Quarterly, *24*, 426-446.
- Dickter, D. N., Roznowski, M., & Harrison, D. A. (1996). Temporal temporing: An event history analysis of the process of voluntary turnovers. Journal of Applied Psychology, *81*, 705-716.
- Dublin, R., Champoux, J. E., & Porter, L. W. (1975). Central life interest and organizational commitment of blue-collar and clerical workmen. Administrative Science Quarterly, *20*, 411-421.
- Finch, W. A. (1978). Administrative priorities: The impact of employee perceptions on agency functioning and worker satisfaction. Administration in Social Work, *2*, 391-399.

- Fried, Y. (1991). Meta-analytic comparison of the job Diagnostic Survey and Job Characteristics Inventory as correlates of work satisfaction and performance. Journal of Applied Psychology, 76, 690-697.
- Gee, J., & Kilpatrick, A.O.(2000). The Relationship Between Job Satisfaction and Organizational Commitment as perceived by Healthcare Professionals in an Acute Care Military Hospital. Unpublished doctoral dissertation, Nova Southeastern University, Fort Lauderdale, Fl.
- Gerhart, B. H. (1987). How important are dispositional factors as determinants of job satisfaction? Implications for jobdesign and other personal programs. Journal of Applied Psychology, 72, 366-373.
- Ghiselli, E. E., Campbell, J. P. & Zedeck, S. (1981). Measurement theory for the behavioral sciences. San Francisco: W. H. Freeman.
- Gibson J., Ivancevich, J., & Donnelly, J. (1991). Organizations: Behavior, structures, processes. Homewood, IL: Irwin.
- Gladstein, D. (1984). Groups in context: A model of task group effectiveness. Administrative Science Quarterly, 29, 499-517.
- Glick, W., Jenkins, D., & Gupta, N. (1986). Method versus substance: How strong are underlying relationships between job characteristics and attitudinal outcomes? Academy of Management, 29, 441-464.
- Griffeth, R. W., & Hom, P. W. (1995). The employee turnover process. Research in Personnel and Human Resources Management, 13, 245-293.
- Hackman, J. R., & Lawler, E. E., III (1971). Employee reaction to job characteristics. Journal of Applied Psychology, 55, 259-286.
- Hackman, J. R., & Oldham G. R. (1975). Development of the job diagnostic survey. Journal of Applied Psychology, 50, 159-170.
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. Organizational Behavior and Human Performance, 16, 250-279.
- Hackman, J. R., & Oldham, G.R. (1980). Work redesign. Reading, MA: Addison-Wesley.
- Hall, D. T., & Schneider, B. (1972). Correlates of organizational identification as a function of career pattern and organizational type. Administrative Science Quarterly, 17, 340-350.
- Haynes, K. (1979). Job satisfaction of mid-management social workers. Administration in Social Works, 3, 207-217.

- Herman, J. B., Dunham, R. B. & Hulin, C. L. (1975). Organizational Structure, demographic characteristics, and employee responses. Organizational Behavior and Human Performance, 13, 206-232.
- Herman, J. B. & Hulin, C. L. (1972) Studying organizational attitudes from individuals and organizational frames of reference. Organizational Behavior and Human Performance, 8, 84-108.
- Hersey, P., & Blanchard, K. (1993). Management of Organizational Behavior. Englewood Cliffs, NJ: Prentice-Hall.
- Herzberg, F. (1966). Work and the nature of man. Cleveland, OH: World.
- Herzberg, F. (1987). One more time: How do you motivate your employees? Harvard Business Review, 65(5), 113-118.
- Herzberg, F., Mausner, B., Peterson, R.O., Capwell, d. f. (1957) Job attitudes: Review of research and opinion. Pittsburgh, PA: Psychological Service of Pittsburgh.
- Herzberg, F., Mausner, B., & Snyderman, B. B. (1959). The motivation to work. New York: John Wiley & Sons.
- Higgins, J. M. (1991). The management challenge: An introduction to management. New York: Macmillan.
- Hobson, R. (1991). Workplace behaviors. Work and Occupation, 18, 271-290.
- Holt, D. H. (1990). Principles and practices. Eaglewood Cliffs, NJ: Prentice Hall.
- Horn, P. W., & Griffeth, R. W. (1995). Employee turnover. Cincinnati: South/Western.
- Hoppock, R. (1935). Job satisfaction. New York: Arno Press.
- House, R. J., & Filley, A. C. (1971). Relation of leader consideration and initiating structure to R and D subordinates satisfaction. Administrative Science Quarterly, 16, 19-30.
- Hrebiniak, L. C., & Alluto, J. A. (1972). Personal and role-related factors in the development of organizational commitment. Administrative Science Quarterly, 17, 555-572.
- Hyde, A. C. (1972). The proverbs of total quality management: Recharging the path to quality improvement in the public sector. Management Review, 26, 25-37
- Ivancevich, J., & Matterson, M. (1990). Organizational behavior and management. Homewood, IL: Irwin.
- James, R. L., & Tetrick, L. E. (1985). Confirmatory analytic tests of three casual models relating job perceptions to job satisfaction. Journal of Applied Psychology, 71, 77-82.

- Jayarante, S., & Chess, W. A. (1984). Job satisfaction, burnout, and turnover: A national survey. Social Work, 29, 448-453.
- Judge, T. A. (1993). Does affective disposition moderate the relationship between job satisfaction and voluntary turnover? Journal of Applied Psychology, 78(3), 395-401..
- Kennish, J. (1994). Motivating with a voluntary participatory policy. Security Management, 38(8), 22-23.
- Knoop, R. (1995). Relationships among job involvement, job satisfaction and organizational commitment for nurses. Journal of Psychology, 129(6), 643-649.
- Koch, J. L., & Steers, R. M. (1998). Job attachment, satisfaction and turnover among public sector employees. Journal of Vocational behavior.
- Kornhauser, A., & Greenberg, D. (1932). Employee attitudes: Suggestions from a study in a factory. Personnel Journal, 10, 393-401.
- Kouzes, J. W., & Posner, B. Z. (1988). The leadership challenge. San Francisco: Jossey-Bass.
- Lacey, M. (1994). Rewards cost nothing? Yes they can ... really! Journal for Quality and Participation, 17(3), 6-8.
- Lautenschlager, G. J. (1989). A comparison of alternatives to conducting Monte Carlo analyses for determining parallel analysis criteria. Multivariate Behavioral Research, 24(3), 365-395.
- Lee, T. W., Ashford, S. J., Walsh, J. P., & Mowday, R. T. (1992). Commitment propensity, organizational commitment, and voluntary turnover: A longitudinal study of organizational entry process. Journal of Management, 18(1), 15-32.
- Lee, T. W., & Mitchell, T. R. (1994). An alternative approach: The unfolding model of voluntary employee turnover. Academy of Management Review, 19, 51-89.
- Lee, T. W., Mitchell, T. R., Holtom, B. C., Mc Daniel, L. S., & Hill, J. W. (1999). The unfolding model of voluntary turnover: A replication and extension. Academy of Management Journal, 42, 450-462.
- Lee, T. W., & Mowday, R. T. (1987). Voluntary leaving an organization: An empirical investigation of Steers and Mowday's Model of Turnover. Academy of Management Journal, 58, 113-120.
- Lee, T. W., & Mowday, R. T. (1992). An empirical investigation of Steers and Mowday's Model of Turnover. Academy of Management Journal, 30, 721-743.
- Lee, T. L., Mitchell, T. R., Wise, L., & Fireman, S. (1996). An unfolding model of voluntary employee turnover. Academy of management Journal, 39, 5-36.

- Likert, R. (1961). New patterns of management. New York: McGraw-Hill.
- Likert, R. (1967). The human organization: It's management and values. New York: McGraw.
- likert, R., & Katz, D. (1979). Supervisory practices and organizational structures as they affect employees productivity and morale. In S. P. Robbins (Ed.), Organizational behavior (pp. 56-57). Englewood Cliffs, NJ: Prentice-Hall.
- Locke, E. A., & Wood, R. E. (1981). Goal setting and task performance: 1969-1980. Psychological Bulletin, 90, 125-152.
- Lodahl, T. M., & Kejner, M. (1965). The definition and measurement of job involvement. Journal of Applied Psychology, 49, 24-33.
- Loher, B. T., Noe, R. A., Moeller, N. L., & Fitzgerald, M. P. (1985). A meta-analysis of the relationship of job characteristics to job satisfaction. Journal of Applied Psychology, 70, 280-289.
- Lopez, E. M. (1982). A test of the self-consistency theory of job performance, jof satisfaction relationship. Academy of Management Journal, 25, 335-348.
- Lucas, R. E. (1977). Hedonic wage equations and psychic wages in the return ti schooling. American Economic Review, 67, 549-558.
- Marsh, R. M., & Mannari, H. (1977). Organizational commitment and turnover: A predictor study. Administrative Science Quarterly, 22, 57-75.
- Maslow, A. H. (1954). Motivation and personality. New York: Harper and Row
- Maslow, A. H. (1968). Toward a psychology of being. New York: Van Nostrand Reinhold.
- Mathieu, J. E., & Zajac, D. M. A Review and Meta-Analysis of the Antecedents, Correlations, and consequences of Organizational Commitment. Psychological Bulletin, Washington, 108(2), 171.
- Mayer, R. C., & Schoorman, F. D. (1992). Predicting participation and production outcomes through a two-dimensional model of organizational commitment. Academy of Management Journal, 35(3), 671-684.
- Mayo, E. (1945). The social problems of an industrial civilization. Boston: Harvard University, Graduate School of Business Administration.
- McClelland, D. C. (1965). Achievement motivation can be developed. Harvard Business Review, 43, 6-24, 178.
- McClelland, G. H., & Judd, C. M. (1993). Statistical difficulties of detecting interactions and moderator effects. Psychological Bulletin, 114, 376-389.

- McFee, B., Quarstein, V., & Ardalan, A. (1995). The effect of discretion, outcome feedback, and process feedback on employee job satisfaction. Industrial Management and Data Systems, *5*(5), 7-12.
- McGee, G. W., & Ford, R. (1987). Two (or more?) dimensions of organizational commitment: Re-examination of the affective and continuance commitment scales. Journal of Applied Psychology, *72*, 638-642.
- McGregor, D. M. (1960). The human side of enterprise. New York: McGraw-Hill.
- McNeely, R. (1984). Occupation, gender, and work satisfaction in a comprehensive Human Services Department. Administration in Social Work, *8*, 35-47.
- McNeese-Smith, D. (1996). Increasing employee productivity, job satisfaction and organizational commitment. Hospital and Health Services Administration, *41*(2), 160-175.
- Meyer, J. P., Bobocel, D. R., & Allen, N. J. (1991). Development of organizational commitment during the first years of employment: A longitudinal study of pre-and-post-entry influences. Journal of Management, *17*(4), 717-733.
- Michaels, C.E., & Spector, P. E. (1991). Causes of employee turnover: A test of the Mobley, Griffith, Hand and Meglino Model. Journal of Applied Psychology, *67*, 53-59.
- Miller, J. G., & Wheeler, K. G. (1992). Unraveling the mysteries of gender differences in intention to leave the organization. Journal of Organizational Behavior, *13*, 465-478.
- Mobley, W. H., Horner, S. O., & Hollingsworth, A. T. (1978). An evaluation of precursors of hospital employee turnover. Journal of Organizational Behavior, *13*, 408-414.
- Morita, J. G., Lee, T. W., & Mowday, R. T. (1993). The regression-analog to survival analysis: A selected approach to turnover research. Academy of Management Journal, *36*, 1430-1463.
- Morris, J. H., & Sherman, J. D. (1981). Generalizability of an organizational commitment model. Academy of Management Journal, *24*, 512-526.
- Mowday, R. T., Porter, L. W., & Dubin, R. (1974). Unit performance, situational factors, and employee attitudes in spatially separated work units. Organizational Behavior and Human Performance, *12*, 231-248.
- Mowday, R. T., Porter, W. L., & Steers, R. (1982). Organizational Linkages: The psychology of commitment, absenteeism, and turnover. New York: Academic Press.
- Mowday, R. T., Steers, R. M., & Porter, L. M. (1979). The measurement of organizational commitment. Journal of Vocational Behavior, *14*, 224-247.



- Mueller, C. W., & Price, J. L. (1990). Economic, psychological and sociological determinants of voluntary turnover. Journal of Behavioral Economics, 19, 321-335.
- Murray, H. (1938). Explorations in personality. New York: Oxford University Press
- Nicholson, N., Brown, C. A. & Chadwick-Jones, J. K. (1985). Absence from work and job satisfaction. Journal of Applied Psychology, 61, 241-253.
- O'Rilley, C. A., & Caldwell, D. F. (1979). Informational influence as a determinant of perceived task characteristics and job satisfaction. Journal of Applied Psychology, 71, 492-499.
- O'Reilly, C. A., & Caldwell, D. F. (1981). The commitment and job tenure of new employees: Some evidence of postdecisional justification. Administrative Science Quarterly, 26, 597-616.
- O'Reilly, C. A., & Chatman, J. (1986). Organizational commitment and psychological attachment: The effects of compliance, identification and internalization on prosocial behavior. Journal of Applied Psychology, 71, 492-499.
- Ouchi, W. G. (1981). Theory Z. Reading, MA: Addison-Wesley.
- Pearson, C. A. L. (1991). An assessment of extrinsic feedback on participation, role perception, motivation, and job satisfaction in a self-managed system. Human Relations, 44(5), 517-537.
- Peters, T. (1987). Thriving on chaos. New York: Harper and Row.
- Peters, T. (1988). Facing up to the need for a management revolution. California Management Review, 30(2), 7-38.
- Peters, T. (1992). Liberation management. New York: Alfred A. Knopf.
- Porter, L.W., & Steers, R. M. (1973). Organizational, work, and personal factors in employee turnover and absenteeism. Psychological Bulletin, 80(2), 151-176.
- Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. ((1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. Journal of Applied Psychology, 59, 603-609.
- Podsakoff, P. M., Todor, W. D., & Skov, R. (1982). Effects of leader contingent and noncontingent reward and punishment behaviors and subordinate performance and satisfaction. Academy of Management Journal, 24, 810-821.
- Price, J. L. (1989). The study of turnover (1<sup>st</sup> ed.). Ames: Iowa State University Press.
- Price, J. S. & Mueller, C. W. (1981). Professional turnover: The case of nurses. Bridgeport, CT: Luce

- Price, J. S., & Mueller, C. W. (1986). Absenteeism and turnover among hospital employees. Greenwich, CT, JAI Press.
- Rakich, J., Longest, B., & Darr, K. (1992). Managing Health Service organizations. Baltimore, MD: Health Professional Press.
- Reichers, A. E. (1985). A review and reconceptualization of organizational commitment. Academy of Management Review, 10, 465-476.
- Robbins, S. P. (1993). Organizational behavior concepts controversies, and applications. Englewood Cliffs, NJ: Prentice-Hall.
- Roberts, K. H., & Glick, W. (1981). The job characteristics approach to task design: A critical review. Journal of applied Psychology, 66, 192-217.
- Roethlisberger, F., & Dickson, W. (1939). Management and the worker. Cambridge, MA: Harvard University Press.
- Rousseau, D. M. (1977). Technological differences in job characteristics, employee satisfaction, and motivation: A synthesis of job design research and sociological systems theory. Organizational Behavior and Human Performance, 19, 18-42.
- Rousseau, D. M. (1970). Characteristics of departments, positions, and individuals: Contexts for attitudes and behavior. Administrative Science Quarterly, 23, 521-540.
- Salancik, G. R. (1977). Commitment and the control of organizational behavior and belief. In B. M. Staw, & G. R. Salancik (Eds.). New directions in organizational behavior (pp.1-54). Chicago: St. Clair Press.
- Schelenker, J. A., & Gutek, B. A. (1987). Effects of role loss on work-related attitudes. Journal of Applied psychology, 72, 287-293.
- Shore, L. M., & Wayne, S. J. (1993). Commitment and employee behavior: Comparison of effective commitment and continuance commitment with perceived organizational support. Journal of Applied Psychology, 78(5), 774-780.
- Smith, P. C., Kendall, L. M., & Hulin, C. L. (1969). The measurement of satisfaction in work and retirement. Chicago: Rand McNally.
- Solomon, E. E. (1986). Private and public sector managers: An empirical investigation of job characteristics and organizational climate. Journal of applied Psychology, 71, 247-259.
- Straw, B. M., Bell, N. E., & Clausen, J. A. (1986). The dispositional approach to job attitudes: A lifetime longitudinal test. Administrative Science Quarterly, 31, 56.
- Straw, B. M., & Ross, J. (1985). Stability in the midst of change: A dispositional approach to job attitudes. Journal of Applied Psychology, 70, 469-480.

- Steers, R. M. (1977). Antecedents and outcomes of organizational commitment. Administrative Science Quarterly, 22, 46-56.
- Steers, R. M., & Braunstein, D. N. (1976). A behaviorally-based measure of manifest needs in work settings. Journal of Vocational Behavior, 9, 251-266.
- Steers, R. M., & Mowday, R. T. (1981). Employee turnover and post-decision accommodation processes. Research in Organizational Behavior, 3, 235-281.
- Steers, R. M., & Porter, L. W. (Eds.). (1979). Motivation and work behavior (2<sup>nd</sup> ed.). New York: McGraw-Hill.
- Steers, R. M., & Rhodes, S. R. (1978). Major influences on employee attendance: A process model. Journal of Applied Psychology, 63, 391-407.
- Stevens, J. M., Beyer, J. M., & Trice, H. M. (1978). Assessing personal, role and organizational predictors of management commitment. Academy of Management Journal, 21, 380-396.
- Stone, E. E., & Porter, L. W. (1975). Job characteristics and job attitudes: A multivariate study. Journal of Applied Psychology, 60, 57-64.
- Suttermeister, R. (Ed.). (1976). People and productivity (3<sup>rd</sup> ed.). New York: McGraw-Hill.
- Swiss, J. E. (1992). Adopting total quality management to government. Public Administration Review, 52, 356-362.
- Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analysis based on meta-analytic findings. Personnel Psychology, 46,(2), 259-293.
- Trevor, C. O., Gerhart, B., & Boudreau, J. W. (1997). Voluntary turnover and job performance: Curvilinearity and moderating influences of salary growth and promotions. Journal of Applied Psychology, 82, 44-61.
- U. S. Department of Labor. (1993). Selected characteristics of occupations defined in the revised Dictionary of Occupational Titles. Washington, DC: National Academy Press.
- Vandenberg, R. J., & Lance, C. E. (1992). Examining the casual order of job satisfaction and organizational commitment. Journal of Management, 18(1), 153-167.
- Wanous, J. P., Reichers, A. E., & Hudy, M. J. (1997). Overall job satisfaction: How good are single-item measures? Journal of Applied Psychology, 82, 247-252.
- Weiss, D. J., Dawis, R. V., England, G. V., & Lofquist, L. H. (1967). Manual for the Minnesota Satisfaction Questionnaire. Minneapolis, MN: University of Minnesota, Industrial Relations Center.

Williams, L.J., & Hazer, J. T. (1986). Antecedents and consequences of satisfaction and commitment in turnover models: A reanalysis using latent variable structural equation methods. Journal of Applied Psychology, 71, 219- 231.