

## **INFORMATION TO USERS**

**This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.**

**The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.**

**In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.**

**Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.**

**Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.**

# **U·M·I**

University Microfilms International  
A Bell & Howell Information Company  
300 North Zeeb Road Ann Arbor MI 48106-1346 USA  
313 761-4700 800 521-0600



**Order Number 9125201**

**Reconceptualizing personality in worker-workgroup fit: An investigation into the influence of gender identity on job satisfaction and organizational citizenship behavior**

**Doran, Lucinda I., Ph.D.**

**New York University, Graduate School of Business Administration, 1991**

**Copyright ©1991 by Doran, Lucinda I. All rights reserved.**

**U·M·I**  
300 N. Zeeb Rd.  
Ann Arbor, MI 48106



**NOTE TO USERS**

**THE ORIGINAL DOCUMENT RECEIVED BY U.M.I. CONTAINED PAGES  
WITH POOR PRINT. PAGES WERE FILMED AS RECEIVED.**

**THIS REPRODUCTION IS THE BEST AVAILABLE COPY.**



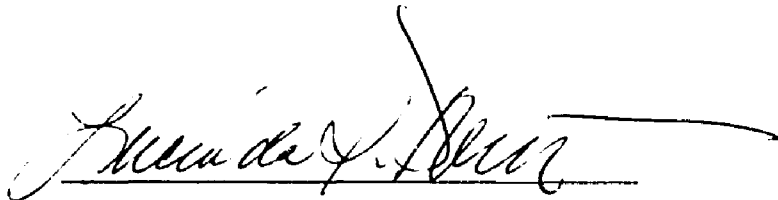
RECONCEPTUALIZING PERSONALITY IN WORKER-WORKGROUP FIT:  
AN INVESTIGATION INTO THE INFLUENCE OF GENDER IDENTITY  
ON JOB SATISFACTION AND  
ORGANIZATIONAL CITIZENSHIP BEHAVIOR

Lucinda I. Doran

A dissertation presented to the Faculty of the Stern School of Business,  
New York University, in partial fulfillment of the requirements for the  
degree of Doctor of Philosophy.

1991

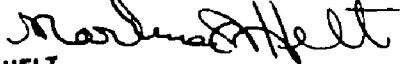
I, LUCINDA I. DORAN,  
hereby swear and affirm that no part of the dissertation  
which I have submitted for publication has been heretofore  
published, and/or copyrighted in the United States of  
America, except in the case of passages quoted from other  
published sources; that I am the sole author and  
proprietor of said dissertation; that the dissertation  
contains no matter which, if published, will be libelous  
or otherwise injurious, or infringe in any way, the  
copyright of any other party; and that I will defend,  
indemnify and hold harmless New York University against  
all suits and proceedings which may be brought, and  
against all claims which may be made against New York  
University by reason of the publication of said  
dissertation.



Sworn and subscribed to before me this 29  
Day of March 1991

SIGNED AND SEALED BEFORE ME

DATE 3-29-91

NOTARY   
MARLENE A. HELT  
My Commission Expires  
11-13-92



COPYRIGHT BY  
LUCINDA I. DORAN  
1991

## PREFACE

Using an interactional framework supported by person-environment fit theories, this research seeks to enhance our understanding of the role of personality on salient job attitudes and behaviors. It integrates two substantial bodies of literature in personality and organizational psychology by construing both the person and environment, or workgroup, in terms of gender identity. In this investigation gender identity, or perceived masculinity (i.e., instrumentality/assertiveness) and femininity (i.e., expressiveness/nurturance), is viewed as two independent continua. The items used to tap this central and relatively stable aspect of an individual's personality also are used by organizational researchers to characterize the comparatively enduring social context of the work environment, or climate. This comparison supports the notion that workgroup environments, or climates, can be construed in terms of gender identity, a potentially important yet unexplored dimension.

Specifically, this thesis posits that to the extent that the gender identity of the individual and the gender identity of the workgroup (climate) are congruent (fit), the individual will be more satisfied on the job and thereby will exhibit more organizational citizenship behaviors (OCB's) and will be less absent and less tardy from work than when the person and climate are incongruent. These behavioral consequences are considered because they are consistent with the theoretical assertion that individuals proactively adjust to the work environment as a result of fit. That is, these behaviors represent

voluntary and deliberate modes of involvement with or withdrawal from work. In addition, OCB's are considered necessary for effective organizational functioning, yet extend beyond role-prescribed performance measures. Finally, person-environment fit theories assert that job satisfaction is the principal intervening variable between behavioral modes of adjustment and fit.

The hypothesized model is tested through path and regression analysis using three operationalizations of fit. The longitudinal study used data acquired from survey responses, supervisor ratings of employee behaviors, and company records. The results and limitations of the study are discussed in terms of implications and future research.

The process of writing this thesis, in a broad sense, also was about understanding the role of personality and self-concept in the workplace. Its impetus lay in my experiences in management. I expect that it will provide a foundation for my choices in academe. It has been a journey of discovery and development, personally and professionally.

There are several people I wish to acknowledge for their contribution to the completion of this work. First, I would like to thank the site organization. In particular, thanks go to Walt Stuhlemmer for his initial support of the project in the organization before it was acquired and Edna Morris for her allowing me to finish after the acquisition.

As members of my dissertation proposal committee, Janet Dukerich, Frances Milliken and Loriann Roberson each provided substantially to the conceptualization and development of this thesis. In addition, important contributions were made by Mike Burke, particularly during the

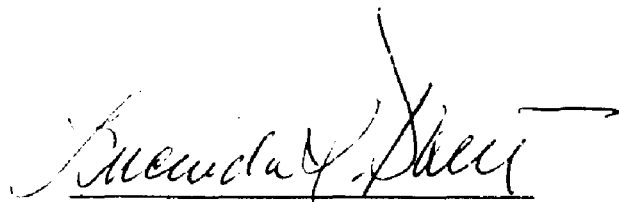
data analysis stage and Joan Brett and Jane Webster during the early writing stages. I am very grateful to all of these individuals for their consideration, time, and encouragement.

I am deeply indebted to Steve Stumpf, chair of the committee, for graciously stepping in towards the end and for giving of his time and fresh insights. He made the completion of a trying process tolerable. It is next to impossible to express my appreciation to Art Brief and Kay Deaux, who have been associated with this project from the beginning. Art, who began as mentor and ended as friend, unselfishly invested extraordinary amounts of time not only on the dissertation but also on my training. He challenged me, encouraged me, and often made me crazy. I have learned so much from him. I approached Kay to serve on my committee out of my respect for her outstanding contribution to my field of inquiry. Due to her busy schedule, I never expected a positive answer from her. I received so much more than content: she inspired and reinforced my interest in the field; her thoughtfulness, consideration and interest were calming in an often stormy sea. I feel honored and privileged to have worked with these people. They were a blessing.

On a personal note, I would like to extend my appreciation to a number of other deserving people. First, thanks go to my father, Harry S. Irvine, and my family for their love and pride in me. Second, I would like to thank my friends and colleagues. Their belief in me was unfailing, even when mine was failing. Third, I would like to thank Robert M. Pirsig, whose writing has helped me comprehend the meaning of the past several years.

Finally I would like to thank my mother, Maryjane Smith Irvine,

and my grandmother, Mabel Preston Veatch Smith. These exceptional, spirited and accomplished women lay the foundation for who I am. Without this foundation and their love, encouragement and confidence in me in earlier years, I doubt this effort would have been undertaken. I wish they were here to see its completion. It is to their memories that this work is dedicated.

A handwritten signature in cursive script, reading "Lucinda I. Doran", with a horizontal line underneath. The signature is written in dark ink on a white background.

Lucinda I. Doran

March, 1991

TABLE OF CONTENTS

I. Introduction and Theoretical Rationale

- A. Overview.....2
- B. The Criterion Variables: Person and Environment
  - 1. Conceptualizing the Environment.....5
    - a. Environment as Personality.....5
    - b. Environment as Workgroup Personality.....6
  - 2. Conceptualizing Personality.....7
    - a. Gender Identity.....8
    - b. Group Gender Identity.....13
- C. The Meaning of Fit.....19
- D. Consequences of Fit.....23
  - 1. Organizational Citizenship Behavior.....24
    - a. Absence/Attendance.....28
    - b. Lateness/Tardiness.....31
- E. Intervening Variables: Job Satisfaction.....32
- F. Summary .....34

II. Method

- A. Overview .....36
- B. Statistical Power and Sample Size.....37
- C. Sample.....38
- D. Measures
  - 1. Independent Variables
    - a. Gender Identity.....40

b. Group Gender Identity.....	43
(1) Pilot Study.....	43
(2) Calculation and Aggregation of Group Variables.....	45
2. Fit.....	47
a. Statistical Interaction Model.....	49
b. Profile Similarity Index.....	52
c. Computability-Differentiation Index.....	54
3. Intervening Variables: Job Satisfaction....	59
4. Dependent Variables	
a. Organizational Citizenship Behavior.....	62
b. Absence.....	64
c. Tardiness.....	65
E. Data Analysis.....	65
 III. Results	
A. Introduction.....	68
B. Pilot Study.....	68
1. Description and Variability of Climate Perceptions.....	69
2. Perceptions of Individual vs. Group Gender Identity.....	71
3. Order Effects.....	72
4. Qualitative Evaluation: Validity.....	74
C. Confirmatory Factor Analysis.....	75
D. Descriptive Statistics.....	78

E. Hypothesis Testing.....	80
1. Hypothesis 1	
a. Regression Analysis.....	81
b. Path Analysis.....	84
2. Hypothesis 2.....	86
3. Hypothesis 3.....	86
F. Model Testing and Modification	
1. Test of the Models.....	87
2. Model Modifications.....	87
G. Summary.....	90
IV. Discussion	
A. Introduction.....	95
B. Masculine and Feminine Climates.....	95
C. Tests of Hypotheses	
1. Hypothesis 1.....	100
2. Hypothesis 2.....	104
3. Hypothesis 3.....	109
4. Modified Models.....	110
D. Potentially Salient and Influential Data Patterns	
1. Sex-related Influences on Perceptions of Individual and Group Gender Identity...116	
2. Workshift and Age Influences.....	119
E. Study Issues and Limitations.....	121
1. Measurement Issues.....	122
a. Measuring the Person.....	124
b. Measuring the Environment.....	125



2. Design/Operationalization Issues	
a. Investigating Reciprocal Relationships.....	127
b. Operationalization of Fit.....	128
c. Operationalization of Outcome Variables.....	131
d. Operationalization of Workgroups.....	131
3. Validity/Control Issues.....	132
F. Conclusions and Recommendations.....	134
V. References.....	139
VI. Footnotes.....	175
VII. Tables.....	176
VIII. Figures and Illustrations.....	200
IX. Appendices.....	208

## CHAPTER I. INTRODUCTION AND THEORETICAL RATIONALE

### Overview

Imagine, for a moment, working in an organization known to be aggressive, individualistic, active, competitive, decision-oriented, and high risk. Now imagine working in an organization that can be described as helpful, kind, warm, secure, supportive and emotional. Which organization would you prefer? What would be the consequences of your working in the organization that you preferred versus the one you did not?

This thesis is about the influence of person-environment fit at work. It seeks to address the above questions by integrating two substantial bodies of literature in organizational and personality psychology. Specifically, the above organizational descriptors are utilized by organizational climate researchers (e.g., Campbell, Dunnette, Lawler & Weick, 1970; Gavin, 1975; Jones & James, 1979; Litwin & Stringer, 1968; Pritchard & Karasick, 1973; Schneider & Bartlett, 1968; 1970) to characterize the comparatively enduring social context of a work environment in which members of a group must function. They are also specific items used to tap a central and relatively stable aspect of a person's masculinity and femininity (Bem, 1974; Spence & Helmreich, 1978; Spence, Helmreich & Stapp, 1974, 1975), or gender identity. This comparison supports the notion that work environments, or climates, can be construed in terms of personality (e.g., Gellerman, 1959; Schneider, 1987a) on a potentially important yet unexplored dimension (gender identity).

In this investigation, fit will be defined as the similarity between the gender identity of the individual and the gender identity of the workgroup. Specifically, this thesis will examine the proposition that to the extent that a work environment (workgroup) is congruent (fits) with important aspects of an individual's personality (gender identity), the individual will be more satisfied on the job, and thereby will be more involved and less withdrawn from work. Theoretical support for this proposition is drawn from the interactionist tradition in psychology in general (e.g., Bowers, 1973; Ekehammar, 1974; Kantor, 1924, 1925; Lewin, 1935; Magnusson & Endler, 1977; Pervin & Lewis, 1978), its extension into organizational psychology (Schneider, 1983; Terborg, 1981) and the I/O and vocational psychology tradition of person-environment fit in particular (e.g., Dawis, England & Lofquist, 1964, 1984; French, Rodgers, & Cobb, 1974; Holland, 1959, 1966, 1973, 1984; Super, 1957). These traditions posit that both situational factors and characteristics of the individual combine to determine behavior.

Most pertinent to the present study are Holland's (1966) theory of vocational choice and Dawis et al's (1964, 1984) theory of work adjustment. These theories assert that the congruence, or fit, between the individual and setting lead to happier, better adjusted, more productive, and longer-retained workers. For instance, person-environment fit (P-E fit) has been found to be a significant predictor of job satisfaction (e.g., Dawis, 1987; Pervin, 1968), which is a primary antecedent to important organizational outcomes that represent

an individual's level of involvement with or withdrawal from work. These include turnover (e.g., Mobley, Griffith, Hand & Meglino, 1979), absence/attendance and commitment (Mowday, Porter & Steers, 1982), job involvement (Rabinowitz & Hall, 1977), lateness/punctuality (Clegg, 1983) and prosocial, or citizenship, behaviors (Brief & Motowidlo, 1986; Organ, 1988). The present study focuses on the last of these outcomes, prosocial/citizenship behaviors, and their related outcomes, absence and lateness (Organ, 1988).

The above overview has been presented in order to provide a sense of the present research, its theoretical support, and its intended contribution to the organizational behavior literature. The remainder of the chapter will detail the components of the current investigation suggested by the above proposition and provide theoretical and empirical support for their inclusion. The first section focuses on the criterion variables. This section will provide rationale for construing work environments in terms of personality, provide support for defining the environment at the level of the workgroup, and address why gender identity is an important personality construct to consider at both the individual and workgroup level. The second section examines the meaning of person-environment fit and its application to the present framework. The third section attends to the behavioral consequences of person-environment fit. It addresses the theoretical notion of an individual's proactive adjustment to the work environment through organizational citizenship behavior. The fourth section positions job satisfaction as the principle intervening variable between fit and individual modes of

work adjustment. The chapter closes with an integrative model and hypotheses drawn from the discussion sections and consistent with the model.

### The Criterion Variables: Person and Environment

#### Conceptualizing the Environment

According to person-environment fit theories (e.g., Dawis & Lofquist, 1984; Holland, 1966) the environment can be viewed as both a source of demands on the individual and a source of rewards or reinforcements that fulfill the needs of the individual. These theories share the operational necessity of assessing characteristics of the person and the environment along commensurate lines so that person-environment comparisons can be drawn (Spokane, 1985). As will be clarified in the remainder of this section, the proposition set forth at the onset of this paper incorporates both the property of commensurate measurement and the notion of reward source by defining both the person and environment in terms of one personality construct (gender identity) and specifying the environment at the level of the workgroup.

Environment as personality. Holland's (1959, 1966, 1973, 1984) theory of vocational choice posits that "vocational satisfaction, stability and achievement depend on the congruence between one's personality and the environment in which one works" (Holland, 1973, cited in Spokane, 1985, p.307). In his theory, both individuals and environments are represented by means of six personality types. He argues that "the character of an environment emanates from the types [of

people] which dominate that environment" (Holland, 1976, p. 534, cited in Schneider, 1987a). An extensive evidential base, reviewed elsewhere (e.g., Schneider, 1987a; Spokane, 1985) supports Holland's idea that individuals' career environments are similar to the people who join them and that individuals in congruent environments will be more reinforced, more satisfied, and less likely to change environments than will those in incongruent environments.

In addition to Holland's depiction of the environment in terms of personality, Schneider (1987a, 1987b) also asserts that personality and interest measures can be useful in understanding organizations, subunits and workgroups. Support for his assertion can be found in the literature on interpersonal attraction (Festinger, 1954), organizational choice (e.g. Tom, 1971; Vroom, 1966) and climate (e.g., Gellerman, 1959; James & Jones, 1974, 1976; Jones & James, 1979; Schneider, 1975). For instance, departing from the emphasis on structure and process, an early idea in climate research was that an organization has a definable personality (Gellerman, 1959). In general the supporting literature suggests that environments (occupations, groups, organizations and subunits) can be viewed in terms of personality and that an individual prefers and remains in environments that have the same "personality" profile as the individual (Schneider, 1987a, 1987b).

Environment as workgroup personality. The group literature (e.g., Hackman, 1976; Shaw, 1981) indicates that groups can have significant impact on the attitudes and behaviors of their members. Groups can formally or informally reward, support or set expectations for

individuals attitudes and behaviors (e.g., Schneider, Parkington & Buxton, 1980; Schneider & Reichers, 1983) that are in line with group norms. The formal and informal social context in which members of a group must function is often referred to as "climate" (e.g., Jones & James, 1979; Schneider, 1985). It is argued that climate is a major determinant of group cooperativeness and performance (e.g., Boss, 1983; Hackman, 1983; Pearce & David, 1983). Schneider (1987a) asserts that it is the attributes of the individuals involved that comprise both the group (personality) and the context (climate). He makes the case for group personality by asserting that these formal and informal interactions between the individual and the group ultimately result in group members being similar in personality, values, interests, etc.

Based on the above discussion, the specification of the environment at the level of the workgroup is consistent with the person-environment fit notion of the environment as a source of rewards and demands on the individual as well as consistent with the conceptualization of the environment in terms of personality. But which personality constructs are important to consider? By shifting to the individual level, the following sections provide support for one construct that is posited to be potentially important in understanding the impact of fit between an individual and his or her workgroup.

### Conceptualizing Personality

Where an aspect of an individual's personality is central, important, and clear to a person's definition of him or herself, the aspect is presumed to powerfully affect an individual's attitudes,

behavior, and information processing (e.g., Markus, Smith & Moreland, 1985; Markus & Wurf, 1987; Rosenberg, 1984; Secord & Backman, 1961, 1965; Swann & Ely, 1984; Swann & Hill, 1982; Swann & Read, 1981). Consistent with other personality theories and research, those theories supporting the present framework (Holland, 1966; Dawis et al, 1964) also argue that an individual seeks to maintain balance or consistency with his or her self-evaluations. One central aspect of a person's personality that is presumed to be inherently important to preserve is an individual's envisionment of his or her own masculinity or femininity (Spence, 1985).

Gender identity. The existential sense of one's own maleness or femaleness has been termed gender identity (Spence, 1985; Spence & Sawin, 1985). The potential importance of the gender identity construct to the study of person-environment fit can be found in both the psychological and organizational literature. Quite apart from the influence of sex as a variable, the construct, typically measured as gender (role) identity has been shown to have potent effects on many different types of behavior (e.g., Bem, 1977; Bem & Lenney, 1976; Bem, Martyna & Watson, 1976; Spence & Helmreich, 1978), normative expectations and gender-related rules about social interactions (Spence, Deaux & Helmreich, 1985), values and ideology (Feather, 1984; Frable, 1989), perceptions and schematic processing (Frable & Bem, 1985; Markus, Crane, Bernstein & Siladi, 1982; Markus, Smith & Moreland, 1985), dyadic involvement and satisfaction with that involvement (Ickes, 1981), career or job preferences (e.g., Darrow & Brief, unpublished; Harren,



Kass, Tinsley & Moreland, 1978, 1979), attribution patterns (Alagna, 1982), and work aspirations and goals (Adams, 1984) which may influence both vocational choice and job-related behaviors and attitudes.

The study of gender identity has been approached through a number of theoretical perspectives. For instance, the Freudian psychoanalytic perspective and its extensions (e.g., Erickson, 1950) argue that masculinity and femininity are biologically determined, while social learning and object relations theorists (e.g., Chodorow, 1978; Mischel, 1966; Perry & Bussey, 1979) argue that gender identity is a result of reinforced and observational learning from a same sex parent. Somewhat tied to the psychoanalytic viewpoint in its conceptualization of gender identity as invariant is cognitive-developmental theory (Gilligan, 1982; Kohlberg, 1966). In spite of the differences in the espoused processes leading to an identity with one's gender, all viewpoints posit that a child develops and sustains a relatively stable sense of his or her gender identity at an early age (Deaux, 1987).

The terms "masculinity" and "femininity" associated with gender identity, however, are abstract, complex, and difficult to articulate (Constantinople, 1973; Deaux, 1985, 1987; Feather, 1984; Spence, 1985; Spence, Deaux & Helmreich, 1985; Spence & Sawin, 1985). Although it is beyond the scope of this paper to evaluate the theoretical and psychometric disputes that are being confronted in the psychological literature, it is useful and necessary to point out some of them. Of paramount importance is the notion that masculinity and femininity, while being dimensions "of reality important for many people"

(Constantinople, 1973, p. 390), seem to defy definition and clear criteria for measurement. The terms are viewed as bipolar opposites, where what is masculine is not feminine and vice versa (Deaux, 1987), as well as independent (Bem, 1974, 1977, 1981; Spence & Helmreich, 1978; Spence, Helmreich & Stapp, 1974, 1975). Where they are viewed as bipolar opposites, the terms with few exceptions parallel biological sex (Spence, 1985). This view implies that only males can be masculine and only females can be feminine. Alternately, where they are viewed as independent, there is considerable overlap between the sexes (Deaux, 1987; Spence & Helmreich, 1978). That is, males and females vary in levels of both the masculine and feminine traits they possess.

Within the latter framework, masculinity and femininity have been shown to have effects on the many types of behaviors and attitudes summarized at the onset of this section, especially those associated with assertiveness or nurturance (Deaux, 1985). Hansen and O'Leary (1985) suggest from Alagna's (1982) work that in previous studies not assessing masculinity and femininity, "gender [identity] effects (given the distribution of masculinity and femininity across the sexes) may have been mistaken for sex effects" (p.82, parentheses included, brackets not included). Although most investigators now opt for the separate and orthogonal nature of the two dimensions, it also is recognized that measurements tapping either the one- or two-dimensions do not truly capture the multi-dimensionality of the concepts (Deaux, 1985; Lubinski, Tellegen & Butcher, 1983; Spence, 1983; Tellegen & Lubinski, 1983). An attempt to reconcile some of the confusion is

provided by Spence (1985; Spence & Sawin, 1985) in her suggestion that men and women generally define themselves as being either masculine or feminine, but that the internal calculus of these terms is idiosyncratic to the individual, with special weight being given to individually valued attributes.

Under the two-dimensional rubric, the two most systematic programs of research on gender identification have been developed by Bem (e.g., Bem, 1974, 1977, 1981, 1985) and Spence and Helmreich (1978) and their associates (e.g., Helmreich, Spence & Holahan, 1979; Spence, Helmreich & Holahan, 1979; Spence, Helmreich & Stapp, 1974, 1975). Cook (1985) summarizes the differences between Bem's and Spence & Helmreich's theory, instruments and research in terms of expansiveness vs. precision (p.33). That is, Bem's work appears to focus on sex-related role behaviors, gender belief systems and cognitive schemata as well as attitudes and preferences that result from "the dichotomy between men and women [which have] intensive relevance to virtually every aspect of life" (Bem, 1981, p. 362, brackets not included). Like that of other role theorists (e.g., Sarbin & Allen, 1968), Bem's position emphasizes the importance of role commitment and behavior relative to sex, or the "normative expectations about the division of labor between the sexes and ...gender-related rules about social interactions that exist within a particular cultural-historical context" (Spence, Deaux & Helmreich, 1985, p.150). In this sense, Bem favors the situational point of view of information processing self-concept researchers (e.g., Markus, 1977; Markus, Crane, Bernstein, & Siladi, 1982).

Alternately, Spence & Helmreich focus almost exclusively on the correlates and consequences of two personality traits (instrumentality vs. expressiveness) associated with sex differences (Spence, Deaux & Helmreich, 1985). These traits may be equated to the agency (a sense of self) and communion (a sense of selflessness) terms proposed by Bakan (1966). Mischel (1970) defines a trait as "an abstraction invoked to explain enduring behavioral consistencies and differences among individuals" (p.11). Spence and Helmreich, as well as others who use trait approaches, generally assume that the traits in question are stable and enduring behavioral predispositions of an individual (Cook, 1985). Although longitudinal data are not yet available to assess the stability of self-conceptions of an individual's instrumentality and expressiveness, preliminary investigations suggest that those modifications that may result from changes in role responsibilities and other age-related factors within sex are relatively small in magnitude from adolescence through late middle age (Spence, Deaux & Helmreich, 1985).

The measures of gender (role) identification developed under the two predominant lines of investigation are the Bem Sex Role Inventory (BSRI) (Bem, 1974) and the Personal Attributes Questionnaire (PAQ) (Spence, Helmreich & Stapp, 1974). In these scales, individuals are assessed in one of two manners: (1) the masculinity and femininity scales are retained as continuous dimensions, or (2) individuals are classified into one of four categories. Although a variety of scoring procedures exist for the second method, generally those scoring above

the median on masculinity (M) but below the median on femininity (F) would be classified as masculine; those scoring above the median on F but below on M would be feminine. Those scoring low on both would be undifferentiated (U), while those high on both would be androgynous (A). Sex-typed persons, approximately one-third of the sampled population (Spence & Helmreich, 1978), are those men or women who are classified as masculine or feminine, respectively. Alternately, those classified as feminine men or masculine women are termed cross-sexed. This categorization scheme is useful in the present framework because it is similar to the "typing" utilized by Holland (1966). Holland argues that the cleanest test of fit is likely to be between purer "types", where the preferred set of attributes are relatively easily distinguished.

Group gender identity. In specifying the environment in terms of the gender identity of the workgroup the present study extends the notion of personality and self-concept to the group level. Thus, in the same sense that gender identity for the individual may be defined as the degree to which an individual sees him or herself as masculine or feminine (Spence & Helmreich, 1978; Spence, Helmreich & Stapp, 1974, 1975), gender identity of the workgroup may be defined as the degree to which the group sees itself as masculine or feminine. Utilization of the group's self-perceptions over the individual's perceptions of the group is consistent with the self-concept literature and is based on the theoretical assertion that fit is comprised of the match between the person and the objective environment (e.g., Caplan, 1985; Holland, 1966; Dawis & Lofquist, 1984). While disputes exist over what entails

"objective" environment (e.g., Dawis, 1987), the literature supporting both the theory of work adjustment and the theory of vocational choice generally construe objective environment as perceived environmental characteristics ascertained independent of the person (e.g., Caplan, 1985; Dawis & Lofquist, 1984; Holland, 1966; Rounds, Dawis & Lofquist, 1987; Spokane, 1987). Additional rationale for defining the workgroup in this manner can be drawn from the organizational behavior and group literature on climate, discussed below.

The two principal perceptual approaches to conceptualizing climate (James & Jones, 1976), describe climate as a set of summary perceptions held by members of an organization (group, subunit) about the environment and what it rewards, supports, and expects (e.g., Campbell et al, 1970; Pritchard & Karasick, 1973; Schneider & Bowen, 1985; Schneider & Hall, 1972). These two approaches differ in whether perceived climate is viewed as a situational attribute that affects individuals (e.g. Friedlander & Margulis, 1969; Pritchard & Karasick, 1973) or as an individual attribute resulting from the interaction between the actual situation and characteristics of the perceiver (e.g. Schneider & Hall, 1972).

Both of the above approaches may be grouped under the term psychological climate. Previous reviews and research (e.g., James & Jones, 1974, 1976; Payne & Pugh, 1976; Schneider, 1975) suggest a variety of relevant domains for these perceptions, including workgroup and social environment characteristics. Furthermore, current thinking supports the notion that "work settings have numerous climates and that

these climates are for something" (Schneider & Reichers, 1983, p.21). That is, climates are specific. Examples of specific climates include the service climate (Schneider, Parkington & Buxton, 1980), safety climate (Zohar, 1980), an individual differences climate (Schneider & Bartlett, 1970), and a creativity climate (Taylor, 1970). Support for aggregating individual perceptions to describe these larger units (e.g., workgroup) that can be distinguished from descriptions of other units is provided by Jones and James (1979), under the proviso that these larger units are homogeneous in context and structure.

Of significance in the present study is the suggestion that group gender identity is a potentially important construal of a specific psychological climate. This suggestion is based on three assumptions: (1) that individuals can discern situations in terms of personality, specifically gender identity; (2) that these perceptions, like climate perceptions, can influence attitudes and behaviors; and (3) that gender identity is important to both the individual and the workgroup.

There is reason to believe the above assumptions are valid. First, the literature on climate research suggests that environments (occupations, groups, organizations and subunits) can be viewed in terms of personality (cf. Schneider, 1987a, 1978b). In addition, Cantor, Mischel and Schwartz (1982) found that individuals share relatively orderly and easily retrievable prototypes of situations and that these prototypes appear to be "defined and characterized in terms of the kinds of people (personalities) who typically inhabit, select, and/or function well in that situation" (p.68, parentheses added). The present

study will ascertain whether this holds true for gender identity.

The second assumption relates to the influence of perceptions on attitudes and behaviors. Cantor et al (1982) also found that an individual's knowledge about situations involved beliefs about behaviors and feelings associated with these situations. Their findings are consistent with those of other investigators (e.g., Schank & Abelson, 1977) that suggest that individuals enter social interactions with a substantial and easily tapped knowledge base that can be translated into behavioral guidelines.

The final assumption addresses the importance of gender identity to the individual and the workgroup. The previous section discussed the presumed importance of gender identity to the individual. For the group, gender identity may be more useful as a term to subsume the instrumentality/agency and expressiveness/nurturance traits inherent to the gender identity construct. Thus, gender identity may be viewed as a specific climate for instrumentality/assertiveness and expressiveness/nurturance. As will be detailed below, these traits are conceptually similar to aspects of climate that are valued by individuals, groups and organizations and along which groups and organizations can be characterized (e.g., Campbell et al, 1970; Jones & James, 1979). Furthermore, these traits are intuitively appealing as valued dimensions of organizations and groups given executives' descriptions in the business press regarding their organizations (e.g., "We're an aggressive company" or "We take care of our own").

Given these assumptions, there are four reasons to believe that



gender identity is a potentially important alternate construal of climate:

First, the gender identity construct taps presumably important, discernable, and commensurate aspects of personality that individuals and groups of individuals may espouse. This is consistent with the notion that climate (workgroup personality) is comprised of the attributes of the individuals involved (Schneider, 1987a) and that these attributes are discernable.

Second, the gender identity construct extends the notion of personality and self-concept to the group level in a manner consistent with the arguments regarding group norms (e.g., Hackman, 1976). That is, like individuals, where the group personality (gender identity) is important and clear, the group may seek to confirm its personality (gender identity) by establishing norms and rewarding attitudes and behaviors that are consistent with the group evaluation. This view of the environment is similar to Pritchard and Karasick's (1973) definition of climate as a situational attribute that affects individuals. It is also consistent with the supporting theories in the present study and with the climate literature which suggest that the environment (climate) is a source of rewards for the individual.

Third, the gender identity construct taps presumably important aspects of the self that individuals seek to confirm. This is consistent with the theoretical assertion that "the process of vocational development is essentially that of developing and implementing a self-concept (Super, 1953, cited in Dawis et al, 1964, p.

19) and that individuals prefer and remain in environments (climates) with the same personality profile (Holland, 1966; Schneider, 1987a).

Fourth, as mentioned above, some of the dimensions argued to comprise psychological climate correspond to the instrumentality/agency and expressiveness/nurturance dimensions inherent to the measures of gender identity. Thus, the gender identity construct integrates into extant climate research. For instance, two of the four climate dimensions identified by Campbell et al (i.e., individual autonomy and consideration, warmth and support [1970]) appear conceptually similar to the masculinity and femininity constructs. On a more micro level, the items contained in measures of gender identity also appear consistent with other climate descriptors. Examples of masculine climate descriptors include "achievement emphasis" and "risk" while examples of feminine descriptors include "security" and "openness" (e.g., Pritchard & Karasick, 1973). Commensurate gender identity items (Spence & Helmreich, 1978) include "independent", "competitive", and "aggressive" for masculinity and "need for security", "warm in relations", "emotional", and "helpful" for femininity.

It should be noted here that a group's estimation of its masculinity and femininity may be influenced by the sex composition of the group. Sufficient evidence suggests that group composition affects perceptions of the group and behavior of its members (cf. Dion, 1985; Eagly, 1987; Wood, 1987). This, however, connotes the bi-polar interpretation of masculinity and femininity which parallels biological sex. The degree to which group composition affects perceptions of

instrumental or expressive traits is an empirical question into which this study will seek to lend further insight. The issue of group composition will be addressed again in the next section.

In sum, the above discussion provides evidence that both the individual and the workgroup can be viewed in terms of personality and that the match between an individual's personality and that of the environment is an important predictor of job-related behaviors and attitudes. The integration of the group climate literature from organizational psychology and the gender identity literature from personality psychology suggests that gender identity may be particularly important and useful in understanding the notion of fit between an individual and his or her workgroup. This suggestion is consistent with both theory and research indicating the environment to be a source of reinforcement and reward for the individual. The next sections discuss the meaning of fit and its consequences.

#### The Meaning of Fit

Like others in the interactionist tradition of psychology, the person-environment fit theories supporting the present investigation (Dawis et al, 1964; Dawis & Lofquist, 1984; Holland, 1966) are rooted in Lewin's (1935) axiom which specifies that behavior is a function of both the person and environment, or  $B=f(P,E)$ . The basic tenets ascribed to by interactional psychologists have received empirical support (for reviews see Endler & Magnusson, 1976; Pervin & Lewis, 1978). However, because person-environment interaction is often difficult to observe,

person-environment fit has been used as a surrogate for interaction in making predictions (Dawis, 1987). By sharing the property of assessing characteristics of both the person and environment along commensurate lines, person-environment fit theories enable the researcher to define congruence, or fit, as the arithmetic discrepancy between the person and environment (Spokane, 1985).

Person-environment fit theories make a distinction between two types of fit: abilities vs. environmental demands (e.g., work requirements), and needs/values/preferences vs. environmental supplies (e.g. reinforcers). In these theories, needs, values and preferences reflect an individual's personality. For instance, the theory of work adjustment (Dawis et al, 1964) construes fit as the relationship in which the individual and the environment are mutually responsive. Their theory suggests that fit at work can be described by means of two models: (1) where the individual fulfills the requirements of the work environment resulting in satisfactoriness (performance), and (2) where the work environment (reinforcers) fulfill the requirements (personality/needs) of the individual resulting in satisfaction (attitude). In this latter model, fit can occur when the strength of the reinforcers available in the environment is equal to or greater than the strength of the individual's needs (Rounds et al, 1987). Together, these two models predict a variety of organizational outcomes, including those set forth at the onset of this paper, with tenure the measure of long term stability in the fit between the person and environment (Dawis & Lofquist, 1984). Empirical support for the propositions in this and

other person-environment fit theories is reviewed elsewhere (cf. Caplan, 1987; Dawis & Lofquist, 1984; Holland, 1984; Spokane, 1985).

The present investigation defines fit as the similarity between the gender identity of the individual and the gender identity of the workgroup. Assuming that gender identity is important to both the individual and the workgroup, the theories suggest that individuals who fit on this dimension will be more satisfied, better performing and longer retained than those who do not fit.

But, what happens when individuals do not fit? Although theory and research (e.g., Dawis et al, 1964; Dawis & Lofquist, 1984; Holland, 1966, 1976; Schneider, 1987a, 1987b) suggest that individuals are more likely to be attracted to, selected into and remain in environments with similar personality profiles, a great deal of evidence indicates that in reality individuals can make mistakes or be mismatched on attained jobs, yet remain in incongruent environments (Melamed & Meir, 1981). Person-environment fit theories suggest that a minimal level of congruence is needed for an individual to remain in a work environment. They also assert that a basic motive of individual behavior is seeking to maintain harmony with the work environment.

One means by which an incongruent individual can seek to achieve or maintain harmony is through reducing discorrespondence by acting to change the environment or to change the expression of his or her needs. In the language of Dawis et al (1964) the process by which individuals seek to achieve and maintain correspondence with the work environment is called work adjustment. Recent research (Helmreich, Sawin & Carsrud,

1986; Kanfer, Crosby & Brandt, 1988) suggests that the manner in which adjustment takes place may change over time. Their findings indicate that early in an individual's tenure on the job an individual seeks to discern requirements of the new job and acts in a similar manner to those with longer tenure. Alternately, later in an individual's tenure, a socialization process may operate to establish "acceptable" norms of behavior which also reflect the congruence between personal characteristics and the work environment (Helmreich et al, 1986). It appears to be during a "mid-tenure" condition that personal characteristics and motivation become important factors in work behavior. This suggests that tenure may set boundary conditions on the theories being investigated. Because this line of investigation is in its early stages, no hypotheses regarding tenure will be offered in the present study. The present study will, however, seek to lend insight into this issue.

The above discussion implies that it is the individual who accommodates to the environment (workgroup climate). While it is not a focus of this thesis, it should be recognized that it is plausible that the environment (workgroup) also accommodates to the individual. One means by which this could occur is through the sex composition of the work group (e.g., Dion, 1985; Eagly, 1987; Wood, 1987).

The next section attends to the consequences of fit for the individual. It addresses the notion of an individual's proactive adjustment to the work environment through organizational citizenship behavior.

### Consequences of Fit

One of the fundamental notions in organizational behavior that reflects the interactionist psychology perspective is the idea that individuals are viewed as intentional, active agents in the interaction process (Terborg, 1981). Specifically, both the theory of vocational choice (Holland, 1966) and the theory of work adjustment (Dawis et al., 1964) assert that an individual purposefully seeks to modify or accommodate to his or her work environment before leaving it. One means of making such adjustments is through ongoing exchanges with the environment (e.g., Pervin, 1987) where organizational outcomes are the medium (Organ, 1977). That is, an individual may seek to integrate potentially conflicting aspects of his/her work and non-work life by adjusting work attitudes and behaviors (Staw & Oldham, 1978). These aspects include work requirements, the economic necessity of remaining on the job (e.g., Brief & Aldag, 1989), and facilitation of non-work interests or internal (psychological) needs (e.g., George & Brief, in press; Staines, Pottick, & Fudge, 1986).

Among the attitudes and behaviors that have been argued to be adjustment or exchange modes are those variables that represent the degree an individual is involved with or withdrawn from work. One indicator that reflects both an individual's involvement with or withdrawal from work is organizational citizenship behavior (OCB). OCB has been selected to investigate over other potential outcomes (e.g., performance) because it is thought to represent a deliberate, intentional and controlled mode of behavior (Organ, 1988; Organ &

Konovsky, 1989) that is not affected by other constraints on work behavior, such as ability (Vroom, 1966). Thus, it is consistent with the theoretical assertion that individuals are active, intentional agents in the adjustment process. As will be detailed next, OCB is a term that subsumes different types of work behavior whose presence or absence is considered necessary for the effective functioning of organizations but which are often not included in formal performance measures.

#### Organizational Citizenship Behavior

Katz and Kahn (1966) argue that for an organization to function well, individuals (employees) must do three things: enter and remain in the organization; produce; and participate in extra-role behaviors. Organizational citizenship behavior, in part, addresses the last component. As mentioned above, organizational citizenship behavior is an important outcome to consider because it is necessary for effective organizational functioning, extends beyond role-prescribed performance measures (Organ, 1977), and is thought to be utilized by individuals in a deliberate, controlled manner (Organ & Konovsky, 1989).

Citizenship behavior (e.g., Organ, 1988) is conceptually similar to the social psychology construct, prosocial behavior. However, the two terms have a variety of definitions. For instance, Brief and Motowidlo (1986) view prosocial behavior as "behavior which the actor expects will benefit the person or persons to whom it is directed" (p.711). Their definition suggests that prosocial behavior can be directed at an individual, a group, or an entire population (Staw, 1983,



1984). In addition, prosocial behavior in an organization can be either role-prescribed or extra-role (Katz, 1964) as well as functional or dysfunctional, as long as it is expected to benefit the person, group or organization to whom it is directed. Brief and Motowidlo (1986) discuss thirteen types of prosocial organizational behaviors (POB) which can be distinguished by their target (person vs. organization).

Alternately, Organ (1988) defines organizational citizenship behavior (OCB) as "individual behavior that is discretionary, not explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization" (p.4). This definition allows for a distinction between prosocial organizational behavior and organizational citizenship behavior, where the latter term appears to be a subset of the former. That is, organizational citizenship behavior (OCB) focuses on extra-role behavior whose presence or absence benefits the organization and which is aimed at a specific target (person or formal system) (Brief & Motowidlo, 1986; Organ, 1988). While there are some discrepancies between these sets of definitions, at their cores are the ideas that in an organization prosocial/citizenship behavior is not an enforceable or explicitly compensated requirement of the job description and that the positive aspects of these behaviors are performed with at least the expectation of positive outcomes.

In their analysis of prosocial models, Smith, Organ and Near (1983) arrived at two factors which can be used to differentiate prosocial/citizenship acts, primarily in terms of the consequences of

behavior: "altruism" and "compliance". Although other research (e.g., Dalton & Cosier, 1988; Konovsky, 1986, 1987; Williams, Podsakoff, & Huber, 1986) has revealed additional factors, altruism and compliance appear to be relatively stable factor descriptors across studies. Altruism is "often carried out in the absence of immediate reward and sometimes at some cost" (Rushton, 1980, p.10). In an organization, altruistic behaviors include helping other employees with their work when they have been absent, helping others with work overloads until they get over hurdles, or orienting new employees to the job outside of role responsibilities (Smith et al, 1983). Compliance (or conscientiousness, [Organ, 1988]) appears to be a form of ultraconscientiousness about roles, punctuality, attendance and comportment beyond minimum required levels (Organ, 1988). Smith et al (1983) suggest that the compliance factor is similar to Bateman and Organ's (1983) "good soldier", and is directly influenced by both leader support and the need for approval.

Three other components of OCB suggested by Organ (1988) have not received sufficient empirical attention to include as separate dimensions in this study. They are "sportsmanship", "courtesy", and "civic virtue". The sportsmanship dimension, resulted from reanalysis of the data collected by Bateman & Organ (1983). This component is indicated by individuals who avoid complaining, petty grievances, making threats, etc. (Organ, 1988). Courtesy behaviors include passing along information, advance notice, reminders, consultation, and briefing. Organ argues that courtesy can be distinguished from altruism in that

the former term (courtesy) reflects behaviors individuals engage in to prevent a problem from arising, whereas altruism involves helping a specific person with a problem that exists. Civic virtue reflects responsible involvement in the organization's political life, such as answering the phone, returning calls, attending meetings and voting on organizational issues when asked. Similar to the argument presented by Ajzen (1987), this discussion suggests that one of the advantages of investigating organizational citizenship behavior is that it is comprised of multi-item aggregates of related behavioral responses. Multi-item aggregates of related behavioral responses have been found to be more consistent when making predictions related to personality effects (Ajzen, 1987).

Much of the prosocial and citizenship literature has been tied to personal norms of behavior (Schwartz, 1973), societal norms of reciprocity (Blau, 1968; Gouldner, 1960; Homans, 1961; Lerner, 1975) and theories of justice (cf. Organ, 1988) which suggest that an individual seeks balance by helping those who have helped him or her. Reciprocation can be specific or non-specific, in that reciprocation can be given to the original help giver or to anyone in need (Berkowitz & Daniels, 1963). In addition, different norms seem to apply to close relationships, where there is an expectation of future interaction, more than to non-close relationships. Where there are close relationships, these norms are influenced further by similarity between the participants (Deaux & Wrightsman, 1988). Organ (1977) suggests that, in an organization, social exchange (e.g., prosocial/citizenship behavior)

may be a means of reciprocating that is often not accounted for in performance measures and is a more personal means of reciprocation than performance. Finally, under a Skinnerian framework (Skinner, 1978), prosocial/citizenship behavior has also been shown to be influenced by positive reinforcement of these behaviors (Moss & Page, 1972).

Within the context of the present framework, it is expected that fit between the worker and the workgroup will lead to the two factors of prosocial/citizenship behavior revealed by Smith et al (1983) and Organ (1988). This argument is consistent with findings demonstrating that positive mood facilitates prosocial behavior (Aderman, 1972; Isen, Clark & Schwartz, 1976; Isen & Levin, 1972). Alternately, it is more difficult to predict lack of fit, due to the discrepant findings on the effect of negative mood states on prosocial behaviors (e.g., Clark & Isen, 1982). That is, sometimes it appears that negative mood will increase these behaviors in order for individuals to feel better, and sometimes these behaviors appear discouraged. The present research will hopefully shed some light on this issue.

Two compliance behaviors, attendance and punctuality, have a strong history of research in organizational behavior when viewed in their negative terms, absenteeism and tardiness. Because absenteeism and tardiness have potentially important consequences (both negative and positive) to individuals, workgroups and organizations (e.g., Mowday, Porter & Steers, 1982) these two behaviors will be attended to separately.

Absence/attendance. Absence is a form of temporary physical

withdrawal from the workplace. In their process model of employee absence, Steers and Rhodes (1978) posit that absence is largely a function of two variables: (1) an employee's motivation to attend (leading to voluntary absence), and (2) an employee's ability to attend (leading to involuntary absence). Through factor analysis of intercorrelations among absence measures, Hackett and Guion (1985) found that these two types of absence can be distinguished. The present study will focus on voluntary absence.

Much of the literature on voluntary absence is consistent with the notion of exchange (e.g., Chadwick-Jones, Brown & Nicholson, 1973) which underlies the present investigative framework. For instance, Johns and Nicholson (1982) hypothesize that absence may be a way of adjusting the problem of time shortness in one's life and that absence is a mechanism of control and a coin of exchange. Johns and Nicholson's assertions are supported by Staw and Oldham's (1978) finding that when a job is incompatible (i.e., where the person-environment do not fit) absence appears functional by having a positive relationship with performance. In addition, Morgan and Herman (1976) found using interviews that individuals who were frequently absent felt that absenteeism was justifiable and likely due to other motivating consequences such as a break from the job routine or increased leisure time. Finally, Clegg (1983) found that absence led to satisfaction, while satisfaction did not lead to greater attendance.

While Hackett and Guion's (1985) meta-analysis indicates that the link between satisfaction and absence may be tenuous (i.e., accounting

for only about 4% of variance in absence), the above studies seem to indicate that absence may at least serve as one of a number of means of behavioral adjustment to incongruent individuals who remain on the job. This idea is further supported by other research examining the relationships between absence and other variables (for reviews see Mowday, Porter & Steers, 1982; Steers & Rhodes, 1978). For instance, several studies suggest the importance of role stress and conflict as a potential major cause of absenteeism. Dawis and Lofquist (1984) argue that stress may be viewed as a lack of a homeostatic condition that results when an individual and environment do not correspond. This argument is also consistent with Holland's (1973) assertion that dissonance is created when the person and environment are incongruent and that individuals seek to relieve the associated tension.

The match between employee values and met values on the job also appears to influence attendance (or absence). Within Schneider's (1987a, 1987b) attraction-selection-attrition (ASA) framework, an individual who is attracted to and remains in a particular job (environment) does so because his or her personality, values and goals are similar to those of other individuals in the same environment. Prior to the decision to leave a particular environment, an individual may use attendance as a means to adjust to value dissimilarity (e.g., Dawis et al, 1964). In addition, while little evidence exists of a strong association between the nature of co-worker relations and absenteeism, these relations have been found to be quite strongly related to job satisfaction which is significantly related to employee attendance (Mowday et al, 1982; Rhodes

& Steers, 1978; Vroom, 1964). The relationship between job satisfaction and the outcome variables, including absence, will be addressed later in this chapter.

Lateness/tardiness. Lateness often has been viewed as a withdrawal behavior that precedes or is a different level from absence (cf. Adler & Golan, 1981; Beehr & Gupta, 1978; Clegg, 1983; Rusbult, Farrell, Rogers & Mainous, 1988). Recent empirical analyses (Hackett & Guion, 1985; Leigh & Lust, 1988), however, suggest that not only are absence and lateness empirically distinguishable concepts but also that those who are absent may not be the same as those who are tardy.

To explain these recent findings, Leigh and Lust (1988) used a tardiness-as-leisure model. They hypothesized that if workers do not lose wages or do not suffer ire from employers as a result of being tardy, they will be tardy more often than not. Alternately, absences exceeding the number of allowed sick, vacation or personal days present a potential cost for leisure to the employee. They received partial support for their model, in that they found a significant positive relationship between tardiness and professionals or managers, but a non-significant negative relationship between tardiness and low-skilled workers such as laborers and service workers, while controlling for overtime. These findings make sense in that white-collar workers typically do not have a time clock to punch.

The above research does not indicate whether incongruent non-managers will compensate by selecting one alternative (absence or tardiness) over the other, except where tardiness is more costly than

absence. However, under the functional exchange rubric, it could be expected that within certain parameters tardiness is acceptable, particularly if it were to be found that where the job is incompatible, tardiness and performance are positively related. While the present study does not examine this hypothesis, it is conceivable that this relationship could occur, as it did in the Staw and Oldham (1978) absence study. Thus, the present research may help to clarify whether individuals prefer one alternative over the other.

### Intervening Variables

#### Job Satisfaction

The theory of work adjustment (Dawis et al, 1964; Dawis & Lofquist, 1984) asserts that the principal intervening variable between individual modes of work adjustment and person-environment fit is job satisfaction. This assertion suggests that it is important to consider job satisfaction in relation to both the predictor variable (fit) and the outcome variables (citizenship behavior).

First, the potential importance of the relationship between person-environment fit and job satisfaction can be seen in both the conceptualization of job satisfaction and the empirical work of a number of researchers. For instance, Schaffer (1953) viewed job satisfaction as related to need satisfaction, after Murray (1938). Porter (1961, 1962) defines job satisfaction in terms of need fulfillment. Katzell (1964) predicted job satisfaction from interactions between job characteristics and personal values, while Locke (1976) identifies the



congruence of values and needs as an important assumption in job satisfaction's conceptualization. Finally, both the theory of vocational choice (Holland, 1966) and the theory of work adjustment (Davis et al, 1964) and their supporting evidence emphasize satisfaction as a result of objective P-E fit. Second, as mentioned at the onset of this chapter, job satisfaction has been found to significantly affect many important organizational outcomes, including turnover, absence, commitment, job involvement, tardiness, error rates and prosocial/citizenship behavior.

Job satisfaction has been defined in a number of ways (e.g., Hoppock, 1935; Locke, 1976; Schaffer, 1953; Vroom, 1964). In the present framework, job satisfaction is viewed as the affective response resulting from an individual's evaluation of the way in which the experienced job environment meets the individual's needs and values which are part of his or her personality (e.g., Davis & Lofquist, 1984). Confirmatory analyses (James & Tetrick, 1986) support the causal relationship between job cognitions (perceptions/evaluations) and job affect (satisfaction). Recent research (Organ & Konovsky, 1989) suggests the importance of the cognitive element in job satisfaction over transient mood states in determining citizenship behavior.

The conceptualizations job satisfaction used by researchers discussed above incorporate the notion that the causes of satisfaction are attributes of the job or work conditions that meet (are congruent with) an individual's important needs, values or interests. Among the work conditions most relevant to the present study and summarized by

Locke (1976) as most conducive to job satisfaction are (1) rewards for performance which are in line with individuals' personal aspirations; (2) verbal recognition that supports a positive self-concept; and (3) agents in the workplace (e.g. supervisors, co-workers) who help the employee to attain important job values and whose basic values are similar to his or her own. These conditions are similar to those which contribute to individual perceptions of work climate (e.g. Campbell et al, 1970; Pritchard & Karasick, 1973; Schneider, 1987a). It is expected that facets of job satisfaction that tap the above conditions will be most predictive of citizenship behavior due to the potential for personal reciprocation inherent in the conditions.

#### Summary

Using an interactional framework supported by person-environment fit theories, the preceding sections set forth parameters and supporting literature for investigating and understanding the role personality plays on an individual's important work-related behavior and attitudes. The present study integrates two bodies of literature from organizational and personality psychology by examining both the person and the environment in terms of a central and presumably important aspect of an individual's personality, gender identity. In specifying the environment at the level of the workgroup, workgroup gender identity serves as an alternate expression of workgroup climate. Finally, the study extends the notion of work adjustment as intentional, deliberate exchange by examining a crucial component of effective organizational functioning, organizational citizenship behavior.

The model for the present study, outlined in Figure 1, indicates that fit, or congruence, is the result of the interaction (similarity) between the gender identity of the individual and the gender identity of the workgroup.

-----  
Insert Figure 1 About Here  
-----

The model suggests that when the gender identity of the person and the gender identity of the workgroup are congruent (fit), the individual will be more satisfied, and thereby will exhibit more citizenship behaviors, and be less absent and less tardy than when the person and environment are incongruent. Specifically, the model and preceding discussion suggest the following hypotheses:

- 1) Individuals in congruent environments will demonstrate greater job satisfaction than those who are in incongruent environments.
- 2) Job satisfaction will positively affect altruism and compliance behaviors, with the exception of absence and tardiness.
  - a) Job satisfaction will negatively affect absence and tardiness.

## CHAPTER II. METHOD

### Overview

The study was conducted in 38 company-owned outlets of a national fast food chain. All units were located in the northeastern United States. Chain outlets were selected as a context for study in order to control for variance attributable to potentially salient variables not included in the present study (e.g., pay, job characteristics, company policies and practices, technology). Thus, consistent with the focus of this study, the remaining variance should have been largely a function of the members of workgroups and their supervisors. As indicated below, the sample consisted of hourly employees (counter persons, operations and housekeeping personnel) who each completed a questionnaire that included measures of the independent variables, job satisfaction and biographical items. Questionnaire completion took approximately three quarters of an hour. Subjects were punched in on the clock and paid for the time it took them to complete the questionnaires.

Employees were asked to identify themselves on the questionnaires so that their responses could be matched with the responses of others in their work groups. Additional data was provided by company records and managers of the respondents. Both employees and managers were guaranteed of the confidentiality of their responses. Path analysis (Cohen & Cohen, 1983; Heise, 1975; Kenny, 1979; Pedhazur, 1983) was used to test the model in Figure 1.

### Statistical Power and Sample Size

The path model presented in Chapter I indicates that fit is hypothesized to affect each component of the dependent variable, organizational citizenship behavior, through job satisfaction. As will be detailed later in this chapter, fit was calculated in three ways. One of these methods necessitated regarding fit as six variables. Taking this into consideration, a power analysis (Cohen, 1977) indicated that a sample size of 191 was needed in order to detect an effect size of  $R = .27$  with .80 power at the .05 probability level with 7 (i.e.,  $u-1$  [Cohen, 1977]) independent variables. Allowing for a potential 20% attrition rate, a sample size of 238 was dictated.

While Bateman and Organ (1983) provide support for the appropriateness of a medium effect size ( $R=.36$ ) in their finding of a .41 correlation between job satisfaction and citizenship behavior, the proposed effect size is based on the results of Smith et al (1983). These authors found a correlation of .27 between job satisfaction and altruism. Calculation of the sample size using the more conservative effect size was adopted should it have been difficult to obtain 238 respondents or should the attrition rate have been higher than 20%. For instance, as will be detailed next, the conditions for inclusion of a respondent in the study suggested the possibility of a greater than 20% attrition rate. Under these conditions, the sample size indicated above with a posited medium effect size ( $R=.36$  rather than  $R=.27$ ) and a higher attrition rate still would have provided sufficient power. That is, a medium effect size with seven independent variables and an attrition

rate of 40% rather than 20% dictated a sample size of 174 for .80 power at .05 probability.

### Sample

The initial sample consisted of 278 hourly fast food employees from the 38 company-owned units indicated above. Each subject was assigned to one of three possible workgroups per unit based on shift, that is, based on where the majority of the employee's hours on duty fell on the first day of data collection. Workshifts were morning (5 a.m. - noon), midday (noon - 5 p.m.), and evening (after 4 p.m.).

Since the sample restaurants employ 2 to 3 shifts per day, depending on business hours, and are open 7 days per week, a workgroup operationally was defined as all individuals reporting to the same supervisor (i.e. store manager on duty) on at least three days of the week and who had been working in the store unit for at least one week. These parameters were set under the following assumptions: (1) that most individuals, particularly those working full-time, would be influenced most strongly by the supervisor and workgroup with whom they worked the majority of the time (three of five days); (2) that individuals, particularly those working full-time, would have relatively stable work schedules; and, (3) that individuals would be able to formulate attitudes towards their environments within a relatively short time.

In the initial selection procedure, managers were asked to make available individuals who had worked on the job at least one week. The employment parameter was to be confirmed quantitatively at the end of the study. This requirement was set so that possible effects of tenure

(see Helmreich et al, 1986; Kanfer et al, 1988) could also be investigated. For inclusion in the study, a workgroup needed to meet the additional criteria that the manager of the workgroup had a minimum tenure of 60 days at the same location.

The selection procedure resulted in a sample of 73 workgroups which were comprised of 224 (81m, 143f) hourly employees from 36 units. Due to missing data, the sample sizes for comparisons between any two variables or scales ranged from 193 to 224, and for the path analyses from 186 to 196. Age range for the respondents was 14-77 (M=28.09; S.D.=14.63); 58% (n=130) were employed full-time. Principal ethnic distribution included 51% white (n=112), 24% black (n=52), and 16% hispanic (n=35). Consistent with the above selection parameters, all retained employees worked for their evaluating manager at least 3 days a week (M=4.31, S.D.=1.15) and presumably had been on the job for at least one week. It should be noted that, prior to data collection, it had been agreed that the site organization would supply hire and, if applicable, termination dates as part of the company record data. During the course of the data collection, the data sites were acquired by another organization. Because employee start and end dates were not provided by the acquiring organization, the second selection parameter (employee tenure on the job) was unable to be confirmed quantitatively at the study's conclusion.

At each location, the questionnaires were administered to 1 - 3 individuals at a time from each shift. To determine if an individual's responses were influenced by what was heard from others who completed

the questionnaire, each respondent was asked toward the end of the questionnaire to indicate whether he or she had heard anything specific about the questionnaire (cf. Atieh, 1987). If the answer was "yes", the respondent was asked what he/she heard and what he/she thought the study was about. In addition, because it was expected that those working on later shifts would be most subject to the influence of prior information, all respondents were asked to evaluate their groups (i.e., "the best workgroup at this store"). Differences between shifts on this question could indicate such potential response bias on the group gender identity measure (e.g., systematically higher item scores) due to within store intergroup competition resulting from the data collection procedure. Relatively few subjects (n=20) received prior information about the questionnaire. Qualitative review of respondents' answers and results of the t-test ( $t=-.33$ , n.s.) and correlation analysis ( $r=-.02$ , n.s.) on Table 1 indicate that prior information was not problematic

-----  
Insert Table 1 About Here  
-----

to the study nor did prior information appear to lead a respondent to evaluate competitively his/her workgroup with other workgroups.

#### Measures

##### Independent Variables

##### Gender Identity

The short form of the Bem Sex Role Inventory (BSRI [Bem, 1981a])



(Appendix A) was used to measure an individual's self-reported gender identity. The BSRI is a paper-and-pencil self-report instrument that asks the respondent to indicate on a 7-point scale how well each item describes him or herself. The short form of the BSRI consists of 30 "personality characteristics" (Bem, 1978), including 10 filler items and 20 items which tap cultural definitions of socially desirable masculine and feminine (10 items each) behaviors and attributes. The scale yields one score for masculinity and another for femininity. The BSRI is among the most widely used instruments for measuring masculinity and femininity as independent dimensions (e.g., Bem, Martyna & Watson, 1976; Deaux, Kite & Lewis, 1985; Frable, 1989; Hall & Taylor, 1985; Lubinski, Tellegen & Butcher, 1983; Markus, Crane, Bernstein & Siladi, 1982; Motowidlo, 1981, 1982).

Factor analysis and item-total correlations (cf. Bem, 1981a) were used to determine the feminine and masculine items in the BSRI short form from the original BSRI. The items were selected to maximize both the internal consistency of the femininity and masculinity subscales and the orthogonality between them. Specifically, the results yielded twenty-five items (10 masculine, 11 feminine) that constituted the item pool for the short form. In order to create two 10-item scales, one of the feminine characteristics was omitted. The two feminine characteristics with the lowest item-total correlations were "loves children" and "cheerful". Bem (1981a) reports that despite the slightly lower item-total correlation of "loves children", this item was chosen over "cheerful" "because of its greater applicability in the real lives

of adult women and men" (p.13). Due to the nature of the present study, "cheerful" was resubstituted into the short form in lieu of "loves children". However, the psychometric data, below, reports statistics for the original short form.

The scoring procedure for the BSRI entailed calculating the mean of the ratings for each dimension and converting the raw scores into standard scores (Bem, 1981a). The standard scores were adjusted so that females and males were equally represented.

Psychometric analyses conducted on two undergraduate samples in 1973 and 1978 (Bem, 1981a) reveal that the short form of the BSRI demonstrates high internal consistency, high test-retest reliability, and low social desirability. Specifically, to determine internal consistency, coefficient alphas were computed separately for females and males in each sample for the Masculinity dimension, the Femininity dimension, and the Feminine-Masculine dimension. Coefficient alphas were high on each dimension, with ranges as follows: Feminine (.84-.87), Masculine (.84-.86), Feminine-Masculine (.85-.90). In addition, the BSRI short form has shown to be more internally consistent than the Original BSRI (ranges=.75-.87).

Test-retest reliability and the effects of social desirability also were ascertained separately for males and females on a sub-sample in 1973. Test-retest reliability after four weeks ranged as follows, with female scores listed first: Feminine (.85-.91), Masculine (.91-.76), and Feminine-Masculine (.88-.85). The lowest test-retest reliability (.76) occurred for males describing themselves on the

masculine items. Social desirability was analyzed by correlating BSRI scores and the Marlowe-Crown Social Desirability scale. Again, with female scores listed first, the correlations were as follows: Femininity (.24-.08), Masculine (.14 - -.08), Femininity-Masculinity (.02-.13). These scores demonstrate that the BSRI does not measure a general tendency to describe oneself in a socially desirable manner. Rather, Bem (1981a) asserts that "what is perceived as the socially desirable response on the BSRI is itself a function of an individual's sex role (gender identity)"(p. 15, parentheses added). The short form of the BSRI also has shown to be highly correlated with the Original BSRI (1978,  $r = .87 - .94$ ).

#### Group Gender Identity

Group gender identity was measured using a modified short form of the BSRI (Appendix B). The only difference between the measure used to determine an individual's gender identity versus the one used to determine group gender identity was in the instruction set. That is, rather than asking the respondent to indicate how well each characteristic describes him or herself, the respondent was asked how well each characteristic describes his or her workgroup. Specifically, a workgroup was defined for respondents as "the people with whom you work most often on your job..." (Appendix B).

Pilot study. Prior to data collection, a pilot study of the two gender identity measures was conducted (a) to examine if individuals could distinguish between their own gender identity and that of their workgroup, (b) to examine the adequacy of the variability in climate

perceptions, and (c) to ascertain potential order effects from the placement of the individual and group measures of gender identity in the questionnaire.

The pilot study respondents consisted of a convenience sample of 64 (25m, 39f) hourly fast food employees in 16 units from a variety (n=7) of fast food chains. Age range for the respondents was 15-48 (M = 21.75; S.D. = 8.09); 67% (n=41) were employed full-time. Due to the cooperation of two franchisees after the pilot study data collection began, 77% (n=49) of the pilot sample came from the same chain. The subsample consisted of 24 males and 25 females who ranged in age from 15-48 (M=21.35; S.D. =8.24); 61% (n=30) of the subsample worked full-time. There were no major qualitative differences between respondents from the one chain versus those from the other six chains.

Two versions of the pilot questionnaire, which contained the two gender identity measures and a short biographical section, were randomly distributed to respondents. The cover sheets for the gender identity measures are contained in Appendix C1 and Appendix C2. In condition 1 (Appendix C1) the measure of workgroup (climate) perceptions was administered first; in condition 2 (Appendix C2) the measure of self-perceptions was administered first. Following questionnaire completion, respondents were debriefed during which a majority (n<sub>tot</sub>=57; n<sub>sub</sub>=43) were asked questions to ascertain qualitatively the validity of the workgroup measure (Appendix C3)<sup>1</sup>. Due to the curious appearance of the pilot study results, to be discussed in the next chapter, two versions of the questionnaire were retained for use in the primary study to

reduce potential order effects.

Calculation and aggregation of group variables. To calculate group gender identity, individual scores on the modified BSRI were aggregated at the workgroup level. As in determining an individual's gender identity, the aggregated scores resulted in a group's standing on two dimensions, masculinity and femininity. Support for aggregating individual perceptions to describe larger (workgroup) conditions that can be distinguished from the conditions of other units is provided by Jones and James (1979), under the proviso that these larger units are homogeneous in context and structure.

Table 2 presents both the estimates of within-group interrater reliability provided by James, Demaree, and Wolf (1984) and the index of

-----  
Insert Table 2 About Here  
-----

interrater agreement provided by Schmidt and Hunter (1989) that were used to evaluate whether aggregation at the group level was justifiable. In the first analyses the mean estimates of within-group interrater reliability for both the masculinity and femininity dimensions were well above the .7 cut score recommended by James (1987, cited in George, 1989, 1990) for a "good" amount of agreement. More specifically, the average interrater reliabilities for group masculinity and femininity were .96 and .93, respectively. Only 2 groups would not have been within acceptable limits on the group femininity measure, and only 1 group on the masculinity measure.

Alternately, Schmidt and Hunter (1989) assert that interrater reliability coefficients, such as those used by James et al (1984) are inconsistent with standard measurement theory. Their proposed index of interrater agreement, a 95% confidence interval for the mean, is based on the standard deviation of ratings across raters and the standard error of the mean rating. In this study, confidence intervals were relatively small; the average confidence interval for the mean was the mean plus or minus 6.08 and 4.67 for group femininity and group masculinity, respectively (Table 2). Following Schmidt and Hunter's (1989) argument, the relative size of the confidence intervals suggests that interrater agreement was acceptable.

Since the aggregate scores on the masculinity and femininity dimensions include an individual respondent's perceptions, individual scores on these variables were not included in the aggregate score when using the aggregate to calculate a particular individual's person-environment fit or to predict that individual's job satisfaction and citizenship behavior. For example, calculation of the predictor on the group masculinity dimension for an individual was as follows:

$$M_{\text{group predictor}} = \frac{\sum M_{e(1 \rightarrow n)} + M_{e(p)}}{n - 1} \quad (1)$$

where

$M_{\text{group predictor}}$  = the predictor group (environment) masculinity score for a particular individual;

$M_{e(1..>n)}$ —the masculinity scores on the group (environment) for all (n) individuals in the group;

$M_{e(p)}$ —the masculinity score on the group (environment) for the particular individual.

A similar calculation was used for an individual's group predictor on the femininity dimension.

It should be noted here that group gender identity can be assessed in two ways: (1) perceptions of group gender identity, or (2) actual group gender identity; that is, the average of individual scores on the masculinity and femininity dimensions. As discussed in the preceding chapter, the perceptual assessment has been chosen for theoretical reasons. It is an empirical question whether perceptions of group gender identity can be equated to actual gender identity. The present study explored this question as well as the influence of (perceived) sex composition on perceptions of group gender identity. Perceived sex composition of the workgroup was selected over actual workgroup sex composition since those who comprised workgroups (i.e., "the people with whom you work most often") were idiosyncratic to the individual respondents. Perceived sex composition of the group was operationalized by asking respondents the names of individuals they thought of when asked to evaluate their groups. The sex of each named individual was confirmed with the relevant store manager.

### Fit

Among the assumptions on which most calculations of person-environment fit rest are (1) the same (commensurate) dimensions and

units of measurement are used to assess both the person and the environment; (2) level of measurement for the person and environment should be at least interval; and (3) measurement of the person should be independent of the measurement of the environment (Rounds et al, 1987). While the most frequently proposed measure of commensurate person-environment fit has been the difference score (e.g., French, Caplan & Harrison, 1982; Moos, 1974; Pervin, 1967; Rice, McFarlin, Hunt & Near, 1985) or variations of the difference score, like  $D^2$  (i.e., the sum of the squared differences between profile elements [Cronbach & Gleser, 1953]), many other means of assessing fit have been set forth and consistently used in the literature (cf Holland, 1976; Iachan, 1984; Joyce, Slocum & Von Glinow, 1982; Kulka, 1979; Rounds et al, 1987; Spokane, 1985). However, all of these forms have been criticized extensively on either empirical or theoretical grounds (e.g., Cronbach & Furby, 1970; Johns, 1981; Nunnally, 1978; Rounds et al, 1987; Werts & Lynn, 1973).

Due to the ambiguity in the field of research on person-environment fit on empirically acceptable means of calculating fit, the discussion to follow sets forth three methods of calculating fit. Each of these methods has been employed in a variety of studies investigating person-environment fit (e.g., Caplan, 1985; Dawis & Lofquist, 1984; Joyce, Slocum & Von Glinow, 1982; Kulka, 1979; Rounds, Dawis & Lofquist, 1987; Spokane, 1985). In the present study, each was used to test predictions in the path analysis and was compared for their predictive ability. The following discussion focuses on the theoretical relevance,



empirical advantages and disadvantages, and use in research for each of the three forms.

Statistical interaction model. Two of the five meanings of person/environment interaction offered by interaction theorists (e.g., Pervin & Lewis, 1978) refer to the additive (main effects) and statistical interaction terms found in the analysis of variance or multiple regression. In particular, the statistical interaction effect implies a lack of significant additive effects and depends on the heterogeneity of both the person factor and the situation factor (Schneider, 1983; Terborg, 1981). However, according to the regression model discussed by Cohen and Cohen (1975), Cohen (1978), and others, the significance of main effects is inconsequential as long as the  $R^2$  of the interaction term is significant after the components of the product have been partialled out.

The equation below is after Butler (1983) who used regression to predict job satisfaction. The advantage to this formula is that it avoids the empirical problems inherent to difference scores (e.g., Cronbach & Furby, 1970; Johns, 1981), and that it involves the use of comprehensive measures of both the person and the environment (i.e. all combinations of the person and environment) to construct an index of fit. In the present study, the regression equation for predicting job satisfaction is:

$$S = b_0 + b_1P_1 + b_jE_j + b_{1j}P_1E_j \quad (2)$$

where "S" is the satisfaction score, "P" is the person score, "E" is the environment (workgroup) score, and "PE" is the person-environment interaction. Including all combinations of variables necessitates expanding the equation to incorporate the masculinity dimension (M), the femininity dimension (F) and the six interaction terms for both the person and environment, with each entered as a set (Cohen & Cohen, 1975). This results in the following formula:

$$S = b_0 + b_i(M_p, F_p) + b_j(M_e, F_e) + b_{ij}(M_p \times e, F_p \times e, M_p F_e, F_p M_e, P_m \times f, E_m \times f) \quad (3)$$

where

$M_p$ -value on masculinity scale of the person;

$F_p$ -value on femininity scale of the person;

$M_e$ -value on masculinity scale of the environment (workgroup climate);

$F_e$ -value on femininity scale of the environment (workgroup climate).

$M_p \times e$ -value of the person x environment interaction on the masculinity dimensions;

$F_p \times e$ -value of the person x environment interaction on the femininity dimensions;

$M_p F_e$ -value on the interaction between the person's masculinity and the environment's femininity;

$F_p M_e$ -value on the interaction between the person's femininity and the environment's masculinity;

$P_m \times f$ -value on the within-person interaction between masculinity and femininity;

$E_m \times f$ -value on the within-environment interaction between masculinity and femininity.

In the regression analysis, "P", "E" and "PE" were entered hierarchically in that order. The two-way within gender interaction terms between the person and environment were entered as a set, followed by the between-gender person x environment interaction term set, and concluding with the within-person and within-environment interaction terms. The change in  $R^2$  as a function of the first two-way interaction set was tested to determine if the statistical person-workgroup (climate) interaction was significant. This study also explored the three- and four-way interactions. While there was less power in the exploration of the interactions entered after the within-gender person x environment set, there was also less theoretical and empirical justification for their inclusion (e.g., Feather, 1984; Hall & Taylor, 1985; Taylor & Hall, 1982). Since the regression equation assumes that job satisfaction is a linear combination of the variables in question, the analysis also included tests for curvilinearity.

The justifiability of the above method for calculating fit is strongest on empirical grounds but weakest on theoretical grounds, except in the broad sense of the interactionist perspective. That is, this method of calculating fit does not take into account the notion of profile similarity, or goodness of fit, between the characteristics of

the person and the environment that has been central to much of the theory and research on person-environment fit. The following methods address these considerations.

Profile similarity index. Among the most common means of calculating fit in the theory of work adjustment (e.g., Dawis & Lofquist, 1984; Rounds et al, 1987) is the profile similarity index, or  $D^2$  (Cronbach & Gleser, 1953).  $D^2$ , the sum of the squared differences between profile elements, was first proposed as an index of need-reinforcer correspondence in the theory of work adjustment by Gay, Weiss, Hendel, Dawis and Lofquist (1971). In the present application,  $D^2$  is the sum of the square of the difference between the masculinity scores for the individual and workgroup plus the square of the difference between the two femininity scores. The larger the sum, the less similar are the two profiles.

$$D^2 = [(M_e - M_p)^2 + (F_e - F_p)^2] \quad (4)$$

where

$M_e$ -value on masculinity scale of the workgroup (climate)

$M_p$ -value on masculinity scale of the person

$F_e$ -value on femininity scale of the workgroup (climate)

$F_p$ -value on femininity scale of the person

As opposed to the regression equation presented above, the profile similarity index addresses the notion of goodness of fit. As described by Cronbach and Gleser (1953),  $D^2$  reflects the degree to which two profiles (i.e., the individual and the workgroup) are similar in elevation (mean of scores that comprise an individual's profile),

scatter (amount of dispersion among scores comprising an individual's profile), and shape (residual information in the profile after elevation and scatter have been accounted for [Motowidlo, 1981]). This method has been used with the the BSRI to investigate the impact of profile similarity on behavior in work settings (Motowidlo, 1981, 1982).

In addition to criticisms regarding unreliability in the use of difference scores,  $D^2$  also has been criticized (e.g. Johns, 1981; Rounds et al, 1987) because it incorporates neither the direction of fit (i.e., environment  $\geq$  person) nor the importance individuals place on scale dimensions. For example, Rounds et al (1987) assert that "where the need (personality aspect) is unimportant or less salient for the individual, even large differences between needs and reinforcers may be tolerated" (p.303). This argument is consistent with other personality researchers (e.g., Markus & Wurf, 1987; Rosenberg, 1984; Secord & Backman, 1961) who argue that where an aspect of an individual's personality is central, important, and clear to a person's definition of him or herself, the aspect is presumed to powerfully affect an individual's attitudes and behavior.

To accommodate to these concerns, Rounds et al (1987) modified the  $D^2$  index to account for directionality and importance. To compute directionality, two sets of  $D^2$  scores were calculated: one for the condition where the environment  $>$  person, and one for the condition where the environment  $<$  person. Weighting of the  $D^2$  index by importance was accomplished by multiplying the square of the need-reinforcer (person-environment) difference by the need scale score. The authors

found consistently higher (negative) correlations between fit and satisfaction when incorporating directionality and importance into the index, particularly among the conditions where environment > person. The negative relationship indicated to the authors that the greater the person-environment difference, the lower the satisfaction.

Because the present study utilizes two dimensions (masculinity and femininity) directionality was calculated using the highest value of the individual scores on the masculinity versus femininity dimensions. That is, if an individual scored higher on the masculinity dimension and the workgroup score on that dimension was greater than that of the individual, the  $D^2$  value for that person was  $> 0$ . Alternately, if an individual scored higher on the masculinity dimension and the workgroup score on that dimension was less than that of the individual, the  $D^2$  value for that person was  $< 0$ . Importance was accomplished by multiplying the square of the difference scores on each dimension by the individual's score on that dimension, as follows:

$$D^2_{\text{mod}} = [M_p(M_e - M_p)^2 + F_p(F_e - F_p)^2] \quad (5)$$

Compatibility-differentiation index. Holland (1976, 1979) argues that not only is profile similarity (congruence) between the person and environment important to consider in evaluating fit, but also profile differentiation within the person. Differentiation refers to the "extent to which one favors certain ways of behaving while rejecting others" (Wiggins, Lederer, Salkowe & Rys, 1983, p. 113). Although conceptually slightly different, differentiation may be compared to

Rounds et al's (1987) notion of importance. Differentiation, alone and in combination with congruence, has been found to be related to job satisfaction (Wiggins et al, 1983), stability in vocational choice (Holland, 1979), decision-making ability (Holland, Gottfredson & Nafziger, 1975) and undecidedness (Lunneborg, 1975).

The concept of differentiation is based on Holland's (1976) assertion that the cleanest test of fit is likely to be between purer "types", where the preferred set of attributes are relatively easily distinguished. Like importance, this assertion is consistent with the notions of clarity, importance and centrality utilized by other personality researchers (e.g., Markus & Wurf, 1987; Rosenberg, 1984; Secord & Backman, 1961). In the present study, differentiation refers to the degree to which an individual espouses one sex-role orientation over the other. Since differentiation refers to the "peakedness" of a person's profile, a differentiation score was obtained by subtracting low from high scores on the masculinity and femininity dimensions.

The model set forth below is derived from the work of those who focus on Holland's theory of vocational choice (e.g., Iachan, 1984; Kwak & Pulvino, 1982; Wiggins, Lederer, Salkowe & Rys, 1983; Zener & Schnuelle, 1976). The indices developed by these authors are based on mathematical combinations of Holland's six personality types and attempt to recapture information lost in other indices from Holland's theory. In addition, the indices are conceptually consistent with the theory of work adjustment (e.g., Dawis & Lofquist, 1984; Rounds et al, 1987) in two principle ways. First, they accept the definition of fit as the

strength of environmental reinforcers (workgroup climate) being greater than or equal to the individual's needs (personality). Second, they incorporate the notion that where a need (personality aspect) is unimportant or less salient than alternate aspects of personality, large differences between the person and environment (climate) may be tolerable. Thus, the indices are theoretically sound in that they capture the notions of similarity, direction and differentiation (importance). Furthermore, these indices, while varied in their mathematical formulas, have been shown to be highly correlated (Fogg, 1983; Iachan, 1984).

Alternately, the indices present potentially greater empirical problems than the methods proposed above. They use Guttman-type scales, alone or in combination with other mathematical formulas. Guttman scales have been criticized (e.g., Nunnally, 1978) as a means of psychological measurement on the basis of validity. Since Guttman scales use ordinal values, they are not consistent with the assumptions held by many person-environment fit researchers in calculating fit. Finally, most of the other mathematical formulas incorporated in the indices use difference scores, which have been extensively criticized (e.g., Johns, 1981) for their unreliability.

Given the above concerns, the model below was proposed primarily for its theoretical strength. It was extrapolated from the work of Wiggins and Moody (1981), Wiggins, Lederer, Salkowe and Rys (1983) and Zener and Schnuelle (1976); that is, rather than necessitating "matches" among the six Holland "types" (dimensions) on the person and the



environment, the present study necessitated comparison of only two dimensions (masculinity and femininity). The model was comprised of two indices: a Compatibility Index (cf. Wiggins et al, 1983), which was a simple position-weighted (Guttman) order scale comparing the position value of the person on each dimension to the position value of the environment on each dimension, and a Differentiation Scale which consisted of subtracting the lowest score from the highest score on the masculinity and femininity dimensions within the person.

The Compatibility Index (CI) was derived by answering "yes" or "no" to the questions below and assigning the numbers as designated. It was assumed that any match between the individual and environment resulted in a "yes" answer to only one question (Nunnally, 1978).

- 7- Is the highest score on the same dimension for both P and E and is the "masculine" value for the environment (E) greater than the "masculine" value for the person (P) and is the "feminine" value for the environment (E) greater than the "feminine" value for the person (P)?
- 6- Is the highest score on the same dimension for both P and E and is the value of that dimension greater on E than P and is the E value on the lesser dimension equal to P?
- 5- Is the highest score on the same dimension for both P and E and is the E value on this dimension greater than the P value on this dimension and is the E value on the lesser dimension less than the P value on the lesser dimension?

4- Is the highest score on the same dimension for both P and E and is the E value on this dimension equal to the P value on this dimension and is the E value on the lesser dimension greater than the P value on the lesser dimension

or

Are the values on the masculine dimension the same for both P and E and are the values on the feminine dimension the same for both the person and environment?

3- Is the highest score on the same dimension for both P and E and is the E value on this dimension equal to the P value on this dimension and is the E value on the lesser dimension less than the P value on the lesser dimension

or

Is the highest score on the same dimension for both P and E and is the E value on this dimension less than the P value on this dimension and is the E value on the lesser dimension greater than the P value on the lesser dimension?

2- Is the highest score on the same dimension for both P and E and is the E value on this dimension less than the P value on this dimension and are the E and P values on the lesser dimension equal?

- 1- Is the highest score on the same dimension for both P and E and is the E value on this dimension less than the P value on this dimension and is the E value on the lesser dimension less than the P value on the lesser dimension?
- 0- Are the highest scores not on the same dimensions in P and E?

After Wiggins, Lederer, Salkowe and Rys (1983), job satisfaction is construed as a linear function of compatibility and differentiation, and was treated as a set in the regression equation predicting job satisfaction.

### Intervening Variables

#### Job Satisfaction

Job satisfaction was measured using a modified version of the long form of the Minnesota Satisfaction Questionnaire (MSQ) (Appendix D) developed by Weiss, Dawis, England and Lofquist (1967) and associated with the theory of work adjustment. The MSQ is a paper-and-pencil self-report instrument consisting of 100 items that represent reinforcers in the work environment. The respondent is asked to indicate how satisfied he or she is with each aspect of the present job. Response choices in a Likert-like format include Very Dissatisfied (value=1); Dissatisfied; Neither (dissatisfied nor satisfied); Satisfied; Very Satisfied (value=5). The measure yields twenty scales which ascertain an individual's satisfaction with twenty aspects of the work environment

that pertain to twenty psychological needs (Dawis et al, 1964; Dawis & Lofquist, 1984).

From the previous chapter, the work conditions most relevant to the present study and summarized by Locke (1976) as most conducive to job satisfaction were (1) rewards for performance which are in line with individuals' personal aspirations; (2) verbal recognition that supports a positive self-concept; and (3) agents in the workplace (e.g., supervisors, co-workers) who help the employee to attain important job values and whose basic values are similar to his or her own. A review of the items and scales in the MSQ suggested that the scales most salient to the present study in line with Locke were Ability Utilization, Achievement, Co-Workers, Recognition, and Supervisor-Human Relations. An additional subscale (General Satisfaction) is comprised of 20 items, five of which are items belonging to the previously mentioned scales. The questionnaire in the present study retained the 40 items assigned to these six subscales from the long form of the MSQ. Scoring consisted of summing an individual's values on the items specified for each subscale.

Reliability and validity data (Weiss, Dawis, England & Lofquist, 1967) indicates that the instrument is appropriate for research, where it is among the most widely used instruments for evaluating job satisfaction (cf. Cook, Hepworth, Wall, & Warr, 1981; Dawis & Lofquist, 1984). Median values of the Hoyt reliability coefficient indicate that the internal consistency on the retained scales is high: Ability Utilization (.91), Achievement (.84), Co-workers (.85), Recognition

(.93), Supervision-HR (.89), General Satisfaction (.88). Test-retest correlations on the retained scales after one week range from .66 (Co-workers) to .89 (General Satisfaction), and after one year from .40 (Co-workers) to .70 (General Satisfaction). Weiss et al (1967) provide support for the construct and content validity of the measure primarily by means of the measure performing according to theoretical expectations, the intercorrelations of the scale items and their factor structure.

Job satisfaction, operationalized in the present study as the above set of six MSQ subscales, functions as both an independent and a dependent variable in the model proposed at the conclusion of Chapter I. However, it is inappropriate to use multiple variable sets as dependent variables in regression analysis. In addition, it is inappropriate to use sets of variables in path analysis. To accommodate to these conditions, a factor analysis was conducted on the six satisfaction subscales. The results of this factor analysis (Table 3) indicate that 74% of the variance in the scales was accounted for by a single factor. A new satisfaction scale was created by

.....  
**Insert Table 3 About Here**  
.....

using the factor scores of all six scales. Intercorrelations among all the satisfaction scales and their coefficient alphas are presented on Table 4.

-----  
Insert Table 4 About Here  
-----

Since the newly created satisfaction scale was highly correlated with the General Satisfaction subscale ( $r=.96$ ,  $p\leq.001$ ), only the General Satisfaction subscale was retained for analysis.

### Dependent Variables

#### Organizational Citizenship Behavior

Managerial assessments of an employee's organizational citizenship behavior were obtained using the measure developed by Smith et al (1983) (Appendix E). This is a 16 item instrument which asks the supervisor to indicate on a 5-point scale how characteristic each behavior is of the subordinate in question, from "not at all characteristic" (value = 1) to "very characteristic" (value = 5). Some of the subordinate behaviors on which ratings were requested include "helps others who have heavy work loads", "does not take unnecessary time off work", "volunteers for things that are not required".

Previous research (e.g., Organ & Konovsky, 1989; Smith et al, 1983) indicates that these items result in the two related but distinct factors discussed earlier: altruism and compliance/conscientiousness. Reliability for these factors appears adequate, with coefficient alphas of .91 and .81, respectively in the Smith et al (1983) study and .89 and .81 in the Organ and Konovsky (1989) study.

Across studies, the most stable of the above two factors appears

to be altruism (Smith et al, 1983), or helping behaviors. The second, referred to as "generalized compliance" by Smith et al (or "conscientiousness" by Organ, 1988), appears less stable as a single factor. For example, Williams, Podsakoff, and Huber (1986) and Konovsky (1986) found that the compliance factor breaks into two factors: one defined by attendance and punctuality, and the other defined by adherence to other organizational rules. In the present study, a confirmatory analysis was conducted to ascertain which factor structure was appropriate for testing the hypothesized model (M. Konovsky, personal communications, Sept. 4 & 6, 1990).

The Smith et al (1983) measure of organizational citizenship behavior was used over others (e.g., Bateman & Organ, 1983; Puffer, 1987) for a number of reasons. First, the items appear to result in distinct and relatively consistent factors across studies. Second, the items are phrased in a manner that can be applied to different types of jobs within work settings, as in the present study. Third, the measure allows for behavioral assessment that is independent of respondent self-reports. Fourth, use of the supervisor to rate his or her subordinates permits consistency of item interpretation, at least within the same work group.

However, there are disadvantages to this method. For example, while utilization of supervisory ratings has been the most accepted means of assessing citizenship behaviors across research on this subject (cf. Organ, 1988), Organ and Konovsky (1989) point out that many citizenship behaviors may escape a supervisor's notice and that, like

subjective performance appraisals, it may be difficult to compare ratings across different raters.

Supervisory assessments were requested two weeks after in-store data collection was conducted on the supervisor's workgroup. This was done in order to provide consistency with the model's hypothesized causal relationships as well as to mitigate possible influences of the in-store data collection procedure on supervisory assessments. Drawing from the OCB literature and using supervisory assessments, Motowidlo (1984) used a similar time frame to investigate the causal relationship between job satisfaction and consideration/personal sensitivity.

Absence. The focus of the present study is voluntary absence, or that form of absence which is under the direct control of individual workers (Chadwick-Jones, Brown, Nicholson & Sheppard, 1971). The most common measure of voluntary absence is the Frequency Index (Hackett & Guion, 1985); that is, the number of times a worker is absent over a specified time period, excluding holidays and rest days. This measure is based on the work of Fox and Scott (1943) who argued that voluntary absences are likely to be of short duration and would be best reflected in an index which disregards the duration of each absence.

In the present sample, individuals reported to work in combinations which spanned all seven weekdays. Due to this, the Frequency Index was selected over other purported measures of voluntary absence (e.g., Chadwick-Jones et al, 1971) which assume workers report to work Mondays through Fridays. In contrast to earlier research (e.g., Hammer & Landau, 1981; Johns, 1978; Muchinsky, 1977) which indicates



that the Frequency Index is the most reliable measure of voluntary absenteeism, Hackett and Guion (1985) found that the mean reliability coefficients ( $r = .51$ , range  $-.25$  to  $.75$ ) for twenty-seven reported studies had rather high standard deviations ( $SD = .18$ ). They attributed this finding to both the type of reliability estimate used and length of time periods for recording absences across studies. However, their factor analysis provides support for the construct validity of the Frequency Index as an indicator voluntary absence.

Absenteeism data was collected for the three month period following in-store data collection from company records. Because absenteeism is a low base-rate phenomenon, a longer time frame was employed compared to that used for OCB assessments.

Tardiness. In this study, tardiness refers to the number of days in a given period on which the employee reports for work late. This measure has been used in the research reviewed by Clegg (1983) as well as in the study conducted by Clegg. Tardiness data was collected in the same manner as absenteeism data; that is, in the three month period following in-store data collection from company records. Both tardiness and absence were calculated by comparing scheduled crew member clock-in/out times against actual clock-in/out times.

#### Data Analysis

Data analysis steps included preliminary confirmation of pilot study results, factor, and other exploratory analyses discussed earlier in this chapter. In addition, all means, standard deviations,

coefficient alphas, and intercorrelations among all principle variables including potentially salient demographic variables (e.g., race, age, sex of individual, perceived sex composition of the workgroup, workshift, tenure) were reported for the sample, and where appropriate, for workgroups.

Path analysis (Cohen & Cohen, 1983; Heise, 1975; Kenny, 1979; Pedhazur, 1982) was used to test the model in Figure 1 and to determine the strength of the hypothesized relationships. Path analysis is an analytic tool designed to test the plausibility of a causal model specified by the researcher (Pedhazur, 1982).

The effects on each outcome variable of each of the three methods of fit were analyzed separately. Two of the operationalizations of fit (i.e., the statistical interaction model and the compatibility-differentiation index) used regression analysis to investigate the relationship between fit and job satisfaction. Both operationalizations used sets of variables to examine the independent contribution of fit to the explained variance in job satisfaction. Regression also was used to explore the effects on job satisfaction of the additional two-way, three-way, and four-way interactions in the statistical interaction model, as well as to rule out the possibility of curvilinear relationships between these variables.

Once the exploratory analyses were conducted and it was ascertained that fit independently contributed to the explained variance in job satisfaction, the variables comprising "fit" in each model were retained as separate but correlated independent variables in the path

analyses. For instance, to test and interpret the hypothesized causal relationships between fit and organizational citizenship behaviors in the statistical interaction model, it was necessary to retain only the masculine person x environment interaction term and its feminine counterpart as independent variables (M.J. Burke, personal communication, Oct. 25, 1990; D.A. Kenny, personal communication, Oct. 24, 1990). Hence, both the person and environment main effect variable sets were dropped.

The measure of goodness of fit, Q, provided by Pedhazur (1982) was used to test the models. The significance of Q was tested by calculating W (Pedhazur, 1982), which has an approximate  $\chi^2$  distribution. The closer  $\chi^2$  is to zero, the better the fit of each model. Where the models required modification, a .05 path coefficient was used as the criterion for meaningfulness (Pedhazur, 1982). Any paths in the fully identified models not meeting this criterion were deleted.

## CHAPTER III. RESULTS

### Introduction

This chapter details the results of both the pilot and primary studies discussed in the previous chapters. First, the pilot study results and confirmation of these results in the primary study are discussed. Next the confirmatory factor analysis on the organizational citizenship behavior measure and discussion of related exploratory analyses are presented. Third, descriptive statistics, coefficient alphas and intercorrelations among the variables in the primary study are reviewed. Fourth, results from the testing of the three hypotheses forwarded in Chapter I are presented. This section includes results from both the regression and path formulations for investigating the relationship between fit and job satisfaction as well as the path analyses investigating the relationship between job satisfaction and the outcome variables. In the final section, tests and modifications to the overall path models are discussed.

### Pilot Study

The purpose of the pilot study was (a) to examine the adequacy of the variability in climate (workgroup) perceptions, (b) to examine if individuals can distinguish between their own gender identity and that of their workgroups, (c) to ascertain potential order effects from the placement of the individual and group measures of gender identity in the questionnaire, and (d) to ascertain qualitatively the validity of the workgroup measure.

The following presents separate analyses for both the total pilot

sample (n=64) and the subsample (i.e., those employees from the same chain in the pilot sample, n=49) discussed in the previous chapter. This was done for two reasons: (1) the question of climate variability in the context of the present research was more appropriately examined using one chain, and (2) retaining only the subsample would reduce the pilot sample by nearly 25%. Because it was appropriate to examine the remaining pilot issues using more than one chain, the larger sample size was also employed. However, there did not appear to be major differences in the results of the two sets of analyses. In general, these results were supported in the primary study.

Description and Variability of Climate Perceptions

Tables 5 and 6 report the means, standard deviations, and ranges for perceptions of climate using raw scores from the modified short version of the Bem Scale for the pilot total and subsample (Table 5) as well as these statistics by condition (Table 6). In the first condition

-----  
Insert Tables 5 and 6 About Here  
-----

(Cond1), the workgroup measure was administered first, followed by the self-evaluation. In the second condition (Cond2), the measure of self was administered first. Raw scores were used in the analyses in order to compare these data against the normative data provided by Bem (1978).

The results from Tables 5 and 6 indicate that workgroup climate, as measured by the short form of the BSRI, was perceived to be neither significantly more masculine nor feminine. Specifically, neither the pilot total ( $t=.31$ , n.s.) nor subsample ( $t=.69$ , n.s.) analyzed as

complete units revealed significant differences between individual perceptions of workgroup femininity and masculinity when raw scale scores were utilized. These non-significant results held up across all comparisons when the pilot data was broken down by condition (Table 6). Alternately, analysis of the primary study raw data scores revealed significant differences between the climate dimensions ( $t=-4.84$ ,  $p\leq.001$ ), wherein workgroups were perceived to be significantly more feminine ( $M=4.94$ ,  $S.D.=1.20$ ) than masculine ( $M=4.57$ ,  $S.D.=1.00$ ). However, this relationship was reversed when scales were standardized to reflect equal representation by males and females. That is, when using standardized scales, workgroup climate was perceived as being significantly ( $t=2.50$ ,  $p\leq.01$ ) more masculine ( $M=46.99$ ,  $S.D.=12.58$ ) than feminine ( $M=44.68$ ,  $S.D.=15.30$ ).

Tables 7 and 8 compare the means for perceptions of climate against the BSRI short form normative data (Bem, 1978) and against the pilot respondents' self evaluations. Six of the eight comparisons

.....  
Insert Tables 7 and 8 About Here  
.....

indicate that climate perceptions are generally less than their respective means on the normative data and self-evaluations. Only when perceptions of workgroup masculinity were compared to the BSRI masculinity norms did the results reveal non-significant differences. This occurred in both the pilot total ( $t=1.5$ , n.s.) and subsample ( $t=1.1$ , n.s.). The results of the analysis of the primary data using standardized scales (Table 9) is consistent with the results of

.....  
Insert Table 9 About Here  
.....

Tables 7 and 8. That is, on the average, individual perceptions of workgroup gender identity in the larger study were significantly lower than self perceptions of gender identity for both masculinity ( $t=4.36$ ,  $p\leq.001$ ) and femininity ( $t=9.02$ ,  $p\leq.001$ ).

Finally, examination of respective pairs of standard deviations in Tables 7, 8, and 9 indicates that there is greater variability in individuals' perceptions of climate than in individuals' self-evaluations. This occurred across all self versus workgroup comparisons in both the pilot study and primary study. This information suggests that there is adequate variability using the modified short BSRI as a measure of climate.

Perceptions of Individual vs Group Gender Identity

Table 10 presents the correlations between individuals' ratings of the person and environment on the masculinity and femininity scales.

.....  
Insert Table 10 About Here  
.....

For both the total ( $r=.16$ ) and subsample ( $r=.13$ ) the correlations between the masculinity scales were non-significant. While the correlations between the femininity scales of the person and environment were significant in both the total sample ( $r=.31$ ,  $p\leq.01$ ) and the subsample ( $r=.31$ ,  $p\leq.05$ ), the correlation is not high enough to be deemed problematic.

These results, in part, were replicated in the primary study. That is, although the correlations between evaluations of the self and the workgroup (Table 9) are of higher magnitude in the primary sample on both the masculinity ( $r=.39$ ,  $p\leq.001$ ) and femininity ( $r=.58$ ,  $p\leq.001$ ) dimensions, they still are not high enough to be considered problematic. These results along with those presented in the previous section suggest that individuals are able to distinguish between their own gender identity and that of their workgroups . It should be noted here that, when using standardized values, even though the climate was perceived as more masculine, individual respondents perceived themselves as more feminine ( $M=52.67$ ,  $S.D.= 13.04$ ) than masculine ( $M=50.99$ ,  $S.D.=12.02$ ), but not significantly so ( $t=-1.76$ ,  $n.s.$ ).

Order Effects

Tables 11 and 12 contain comparisons of the correlations between the person and environment by condition as well as a comparison of group mean differences on all scales by condition for both the pilot total sample and the subsample.

-----  
Insert Tables 11 and 12 About Here  
-----

Using two-tailed tests, neither the correlations between similar dimensions by condition in the total sample nor in the subsample are significantly different from each other (Table 11). It should be noted, however, that the magnitude of the scale correlations appear to "flip" between conditions. For example, in Table 11 the correlation between the person and environment on the masculinity scales in Condition 1 is



identical to the person-environment correlation on the femininity scales in Condition 2 ( $r=.44$ ). It also appears that the correlation on the feminine scales in Condition 2 is similar to the correlation on the masculinity scales in Condition 1, and that these correlations appear less (though not significantly so) than the previously mentioned pair. The lack of significance may be due to the small sample. In addition, there were no significant group mean differences on any of the scales in either the total sample or the subsample (Table 12).

Given the curious appearance of the correlations in Table 11, two versions of the questionnaire were retained for the larger study. As in the pilot study analysis, differences in means and correlations between conditions provided the basis for investigating potential order effects in the large study. Consistent with the pilot study, there were no significant group mean differences on either the group or the self measures of gender identity (Table 13). Alternately, there were differences between person-environment correlations by condition (Table 14), but in a pattern which differed from that in the pilot study. That is, in the primary study the person-environment correlations were

-----  
Insert Tables 13 and 14 About Here  
-----

significantly higher in the condition where the group measure was administered first (masculinity [ $z=2.32$ ,  $p\leq.01$ ]; femininity [ $z=2.76$ ,  $p\leq.01$ ]). In addition, the correlations between the femininity dimensions were higher in both conditions (group first [ $z=2.70$ ,  $p\leq.01$ ]; self first [ $z=2.10$ ,  $p\leq.05$ ]), even though the differences in magnitude

within ( $z=.45$ , n.s.) and between ( $z=.46$ , n.s.) conditions on the masculinity and femininity measures were non-significant.

The above findings indicate that order effects may exist, but that these effects may be relatively minor. It also appears that the within-person person-environment relationships are affected similarly on both the masculinity and femininity dimensions. Given the pilot study results, these effects may not be due to greater ease in answering one questionnaire version over the other. Furthermore, examination of the primary study correlations suggests that the order effects may be artifactual; that is, the only potentially salient demographic variable associated with questionnaire condition was age ( $r=-.14$ ,  $p\leq.05$ ), where youth was related to having received questionnaire Condition 2 (self first). Since the results on Table 14 indicate that Condition 2 is associated with lower person-environment correlations, two possible explanations for the order effects exist: (a) younger individuals were better able to discriminate between person and environment, or (b) the lower correlations are an indicator of potentially less "fit" between the person and environment for younger subjects.

#### Qualitative Evaluation: Validity

As was mentioned earlier, following pilot study questionnaire completion, respondents were debriefed during which a majority were asked questions (Appendix C3) to ascertain the validity of the workgroup measure. Statistical results on these questions are contained on Table 15. The results suggest that individuals perceived no problems in using the modified BSRI short form as a measure of workgroup climate.

-----  
Insert Table 15 About Here  
-----

During the interview, those respondents who indicated that they did have some problems using the workgroup measure were asked if they remembered any specific items which gave them trouble. Several respondents mentioned "conscientious" and "conventional", in particular. In probing, it appeared they did not understand the definition of these words, and thus were unable to use them in the workgroup measure. It seemed that if it were the case that the definitions were unknown to respondents, these respondents also would be unable to assign values for the "Self" on the same items. A review of the pilot data and condescriptives suggests this occurred: the only items that had reduced valid n's in both the workgroup and self scales were "conscientious" and "conventional", with an equal number of responses missing from both scales. Other items from the workgroup scale with missing values included "tactful", "secretive", and "assertive". It should be noted that, of the five problematic items, only "assertive" is associated with the masculinity or femininity subscales. The others are BSRI filler items.

The qualitative portion of the pilot study indicated that there is adequate face validity to use the modified BSRI short form as a measure of workgroup climate.

#### Confirmatory Factor Analysis

A factor analysis was conducted on the Organizational Citizenship

Behavior (OCB) scale (Smith et al, 1983) to confirm the factor structure of the scale's 16 items. Unlike that of Smith et al (1983) or Organ and Konovsky (1989), the factor analysis revealed 3 distinct factors which accounted for 67.4% of the variance in the items (Table 16). The first

-----  
Insert Table 16 About Here  
-----

factor, accounting for 44.1% of the variance, was comprised of the same seven items that make up the altruism factor in prior studies.

Alternately, Smith et al's (1983) compliance (or conscientiousness [Organ, 1988]) dimension split into two factors in a manner consistent with the factor structure found by Williams et al (1986). In the present study, the second factor, Conscientiousness, was comprised of the five items addressing work breaks, personal conversations, etc. It accounted for 14.0% of item variance. The third factor Compliance/Attendance, consisted of the four attendance and punctuality items.

Since (a) the altruism factor appears most stable across studies, (b) the factor structure was clear and interpretable, and (c) the three factors in the present study were consistent with those found in other research, they were retained over the two factor structure in the model presented at the conclusion of Chapter I (M. Konovsky, personal communication, Sept. 6, 1990). The revised model containing the three organizational citizenship behavior factors derived from the above analysis, as well as the two objective measures of citizenship behavior (absence and tardiness) are presented in Figure 2.

-----  
Insert Figure 2 About Here  
-----

In order to rule out the possibility that other non-modelled but potentially salient study variables influenced the enactment or assessments of citizenship behaviors (OCB's), OCB ratings were compared by workshift. In addition, the relationship between OCB ratings and a manager's gender identity was evaluated.

Table 17 provides the results of oneway ANOVA's investigating the impact of workshift on citizenship behaviors. Three of the five

-----  
Insert Table 17 About Here  
-----

analyses revealed significantly lower mean ratings on the evening shift than on the earlier shifts. The three analyses that resulted in significant effects were subjective assessments by managers of employee citizenship behaviors (i.e., Altruism [ $F=3.91, p \leq .05$ ]; Conscientiousness [ $F=3.44, p \leq .05$ ]; Compliance/Attendance [ $F=6.68, p \leq .01$ ]). The two objective measures of citizenship behaviors (absence and tardiness), where the data were obtained from company records, did not result in significant effects.

In addition, the non-significant correlations between evaluators' perceptions of their own masculinity and femininity and the three OCB dimensions provided in the correlation matrix on Table 18 indicate that a manager's own gender identity did not influence his or her assessments of subordinates' citizenship behaviors.

### Descriptive Statistics

Table 18 provides the means, standard deviations, intercorrelations and Cronbach alphas for relevant study and potentially salient demographic variables. The variables are broken down by their

-----  
Insert Table 18 About Here  
-----

units of analysis (individual vs group) and fit (individual and group level combinations). Coefficient alpha ranges (.73 -.91, in parentheses) indicate that the reliabilities of all calculated scales were acceptable. This range of alphas includes the correction for attenuation of reliability on a difference score (Nunnally, 1978) in the Compatibility-Differentiation Index (reliability =.73).

Two potentially salient demographic variables, ethnicity and tenure, were dropped from the analysis. As was mentioned previously, the acquiring organization for the data site was unable to supply employee hire and termination dates at the conclusion of data collection. As a result, neither tenure nor turnover could be calculated nor controlled.

In addition, a review of the relationships between ethnicity (dummy coded) and the other study variables revealed relationships for "blackness" and "whiteness" that appeared to be a function of sex, rather than ethnicity. Specifically, "blackness" was negatively correlated with sex ( $r = -.17, p \leq .01$ ) and "whiteness" was positively correlated with sex ( $r = .27, p \leq .001$ ). Sex was coded female (1) and male

(0). The remaining significant relationships were similar to the pattern between sex and other study variables (e.g., femininity, group femininity, perceived group sex composition, etc.). No other ethnicity groups were affected.

Tables 19 and 20 present the results of the exploratory analyses drawn from the descriptive statistics on Table 18. These analyses

-----

Insert Tables 19 and 20 About Here

-----

investigate (a) the relationship between perceptions of group gender identity (perceived environment) and aggregated self-evaluations of gender identity at the group level, and (b) the influence of (perceived) sex composition of the workgroup on perceptions of group gender identity.

The results of Table 19 indicate that, at least on an exploratory basis, aggregated perceptions of group gender identity may not be able to be equated to group level self-evaluations. That is, in both the masculinity ( $t=-8.49$ ,  $p\leq.001$ ) and femininity ( $t=-17.58$ ,  $p\leq.001$ ) dimensions, group evaluations and group level self-evaluations were significantly different from each other. Furthermore, while the correlations between the group and self measures were quite high, especially on the femininity dimension ( $r=.65$ ,  $p\leq.001$ ), they were not high enough to be deemed equivalent. It must be remembered, however, that the individuals who comprised each respondent's perceived group were uncontrolled; when evaluating their groups, respondents were merely asked to think of the individuals with whom they worked most often.

Therefore, the perceived group members who were the basis for respondent evaluations of group gender identity may not have been the same as (or even similar to) the actual group level sample.

Table 20 summarizes the correlations between sex, group sex composition and perceptions of workgroup gender identity at both the group and individual levels of analysis. The data indicate that neither sex, perceived sex composition of the group, nor actual sex composition of the sample group was correlated with perceptions of group masculinity. Conversely, all of the previously mentioned variables were correlated with perceptions of group femininity. This general pattern is consistent with that of the pattern of relationships between sex and self-evaluations of masculinity and femininity in this sample, as well as with Fagenson (1990) and the normative data (Bem, 1978). In the latter, sex differences were absent (t-tests) on the masculinity (short form) measure.

In addition to the above, a pattern of relationships with workshifts and age was found. Specifically, later shifts were found to be younger ( $r = -.28$ ,  $p \leq .001$ ) and more part-time ( $r = -.50$ ,  $p \leq .001$ ), were perceived to be more male ( $r = -.26$ ,  $p \leq .001$ ), and were evaluated as less masculine ( $r = -.15$ ,  $p \leq .05$ ) and less feminine ( $r = -.23$ ,  $p \leq .001$ ). Workshift and age also were related to job satisfaction as well as several of the dependent variables.

#### Hypothesis Testing

The proposed revised model (Figure 2) posits that when the gender identity of the person and the gender identity of the workgroup are congruent (fit), the individual will be more satisfied, and thereby will



exhibit more altruistic, conscientiousness, and compliance/attendance behaviors, and will be less absent and less tardy than when the person and environment are incongruent. Figures 3-5 present the results of testing this model via path analysis using three measures of fit: statistical interaction (Figure 3), the profile similarity index ( $D^2$  Modified [Figure 4]), and the compatibility-differentiation index (Figure 5). Specifically, three hypotheses were offered:

-----  
Insert Figures 3 to 5 About Here  
-----

Hypothesis 1

The first hypothesis stated that individuals in congruent environments will demonstrate greater job satisfaction than those who are in incongruent environments. Both regression and path analysis were used to test this hypothesis.

Regression analysis. Two versions of fit, the the statistical interaction model and the compatability-differentiation index, necessitated preliminary regression analyses using sets of variables to examine the relationship between fit and job satisfaction. In the statistical interaction model, hierarchical regression was used to investigate the independent contribution of the person x environment interaction set to the explained variance in job satisfaction as well as to conduct additional exploratory analyses. In the compatibility-differentiation model, the two independent variables were entered as a set to predict job satisfaction. If the variable sets comprising "fit" in both models independently accounted for a significant portion of the

explained variance in job satisfaction, the component parts of the sets were retained as separate but correlated independent variables in the path analysis.

Table 21 presents the results of the hierarchical regression of general job satisfaction on the person, environment, fit and remaining interaction variables in the statistical interaction model using

.....

Insert Table 21 About Here

.....

standardized values. The twoway within-gender person x environment interaction set (i.e., fit), twoway cross-gender person x environment interaction set, and twoway within-person or within-environment interactions were entered as separate sets, in that order. There were significant main effects from both the person ( $R_{sqch} = .11$ ,  $p \leq .001$ ) and environment ( $R_{sqch} = .04$ ,  $p \leq .01$ ) sets as well as from the twoway within-gender person x environment (fit) interaction set ( $R_{sqch} = .03$ ,  $p \leq .05$ ).

A large part of the independent contribution of the twoway within-gender interaction set was from the masculinity (person x environment) interaction set ( $\beta = 1.49$ ). This finding suggests that, when controlling for main effects from the person and environment, the higher an individual scores on the masculinity dimension when in a workgroup perceived to be highly masculine, the more satisfied the individual will be on the job.

In addition, there was a significant effect from the twoway within-person (P x P) and within-environment (E x E) interactions ( $R_{sqch} = .04$ ,  $p \leq .01$ ). A large portion of this effect was from the within-

person interaction term ( $\beta = 1.03$ ). This finding is consistent with both Bem's (1974, 1981, 1982) additive effects formulation and with Hall and Taylor's (1985) emergent properties formulation (where both additive and interaction effects are predicted). In the present study, high femininity scores, alone ( $\beta = .33$ ) and in combination with high masculinity scores ( $\beta = -1.03$ ), significantly influenced job satisfaction. There were no significant effects from three-way interactions.

Hierarchical regression employing standardized squared values for person, environment, and relevant (within-gender) person x environment interaction terms (i.e., fit) also was used to evaluate whether the relationship between fit and job satisfaction was curvilinear. After Cohen and Cohen (1975), Pedhazur (1982), and Jaccard, Turrisi, and Wan (1990), the hierarchical steps were as follows: (1) person variables, (2) squared person variables, (3) environment variables, (4) squared environment variables, (5) 6 twoway interaction terms, (6) squared within gender interaction terms. Neither the squared person variables ( $R_{sqch} = .005$ , n.s.), the squared environment variables ( $R_{sqch} = .006$ , n.s.), nor the squared interaction terms ( $R_{sqch} = .004$ , n.s.) significantly contributed to the explained variance in job satisfaction. These results indicate that a curvilinear relationship does not exist between fit and job satisfaction.

The above results support the notion that person-environment fit, in a statistical interaction sense, influences job satisfaction and that this relationship is not curvilinear. Since the fit interaction set independently accounted for a significant portion of the explained

variance in general job satisfaction, the two within-gender P x E interaction terms were retained for use as correlated independent variables in the path analysis (Figure 3).

A similar regression method was used to investigate the relationship between compatibility-differentiation and job satisfaction, wherein compatibility and differentiation were entered as a set in the regression equation. Without corrections for attenuation in difference scores, the compatibility-differentiation index accounted for 4.4% of the variance in general job satisfaction ( $R=.21$ ,  $p\leq.01$ ). With corrections for attenuation, the variance explained by fit increased to 6.2% ( $R=.25$ ,  $p\leq.001$ ). As in the statistical interaction model, since there was a significant relationship between the index (i.e., fit) and general job satisfaction ( $R=.21$ ,  $p\leq.01$ ), the two component parts of the index were retained as separate independent variables in the path analysis (Figure 5).

Path analysis. The path analytic results for the testing of the first hypothesis (Figures 3-5) differ depending upon which model of fit was used. There were significant positive relationships supporting the hypothesis in the statistical interaction model (Figure 3), non-significant negative relationships in the profile similarity index ( $r=-.047$ , n.s.[Figure 4]), and significant negative (or counter-hypothesized) relationships in the compatibility-differentiation index (Figure 5).

The results of testing the statistical interaction model, presented in Figure 3, indicate that when the person and environment variables are no longer controlled, the larger contribution to job

satisfaction comes from fit along the femininity dimension (path=.29,  $p \leq .001$ ). Fit along the masculinity dimension is meaningful (Pedhazur, 1982) but non-significant (path=.124, n.s.). In light of the results presented on Table 21, it is expected that the strength of the path along the femininity dimension is largely a function of individual femininity. That is, Table 21 indicates that individual femininity, alone and in combination with masculinity, is positively related to job satisfaction. In addition, when the person variables are entered first, there are main effects from individual femininity (beta = .33) but not group femininity (beta=.08) even though individual and group femininity (climate) are not highly correlated ( $r = .12$ ,  $p \leq .05$ ).

Alternately, in the compatibility-differentiation index (Figure 5) the largest contributor to job satisfaction (uncorrected  $R = .21$ ,  $p \leq .01$ ) is differentiation (path =  $-.209$ ,  $p \leq .01$ ). In spite of the fact that compatibility and differentiation are uncorrelated ( $r = -.001$ , n.s.), compatibility's contribution to job satisfaction is non-significant (path =  $-.028$ , n.s.) and is considered non-meaningful (Pedhazur, 1982). Both paths are in the counter-hypothesized direction. The negative relationships indicate that the less the within-person discrepancy between the higher score and lower score (individual masculinity versus individual femininity) the more satisfied the individual will be on the job.

The above two sets of significant results are not necessarily incompatible. Taken together they suggest that when the person has high scores on the femininity scale and there is little differentiation between the person's masculinity and femininity scores (i.e., the person

falls into Hall and Taylor's [1985] "emergent properties" quadrant), and when the person fits with the environment, where fit is defined as the environment is greater or equal to the person (i.e., the environment also is not highly differentiated), the individual will be more satisfied on the job.

### Hypothesis 2

The second hypothesis states that job satisfaction will positively affect altruism and compliance behaviors, with the exception of absence and tardiness. This hypothesis has been altered to include three citizenship behavior factors (i.e., Altruism, Conscientiousness, Compliance/Attendance), rather than two. In support of the hypothesis, the relationships between general job satisfaction and the three citizenship behavior factors were positive and significant in all three models (Figures 3-5). They ranged from path = .12 ( $p \leq .05$ ) in the satisfaction-altruism relationship (Figure 4) to path = .171 ( $p \leq .01$ ) in the satisfaction-conscientiousness relationship (Figures 3 and 5). In all cases the strongest relationships occurred in the statistical interaction model (Figure 3) and the compatibility-differentiation index (Figure 5). The discrepancies between path values in Figures 3 and 5 versus those in Figure 4 may be due to missing data in the profile similarity index ( $D^2$  Modified) analysis ( $n=186$ ).

### Hypothesis 3

The third hypothesis states that job satisfaction will negatively affect absence and tardiness. Although the path between satisfaction and absence in the profile similarity index (Figure 4) would be considered

meaningful by Pedhazur (1982 {path=.051, n.s.}), none of the relationships in any of the models is significant. Nor are any of the relationships in the hypothesized (negative) direction. These results indicate that Hypothesis 3 was not supported.

### Model Testing and Modification

#### Test of the Models

Each of the hypothesized models was tested against the fully identified model for goodness of fit using the Q statistic (Pedhazur, 1982). The summary of goodness of fit results are provided on Table 22.

-----  
Insert Table 22 About Here  
-----

With the exception of the model investigating the relationship between compatibility-differentiation and absence ( $Q = .976$ ,  $W = 4.697$ ,  $p \leq .05$ ), the Q statistics of all models were non-significant. These results indicate that, in general, the hypothesized models fit the data.

#### Model Modifications

Figures 6-8 provide modifications to the hypothesized statistical interaction (Figure 6), profile similarity index (Figure 7), and compatibility-differentiation index (Figure 8) models based on Pedhazur's (1982) criterion of path meaningfulness (i.e.,  $\text{path} \leq .05$ ) rather than on a path's statistical significance. Any path in the fully identified model having a coefficient of less than .05 was considered meaningless and deleted from the model.

-----  
Insert Figures 6 to 8 About Here  
-----

The modified models suggest that fit influences citizenship behaviors in a variety of ways. Depending upon the operationalization of fit, these effects are through job satisfaction (in either hypothesized or counter-hypothesized directions), through direct effects, or both. Although meaningful (Pedhazur, 1982), the direct effects of fit on OCB's resulting from model modifications never were significant. Therefore, the following presentation of direct effects as a result of model modification should be considered suggestive. In addition, because the statistical interaction model of fit is considered the most empirically sound because it avoids problems inherent to difference scores (e.g., Johns, 1981) or Guttman scales (Nunnally, 1978), this modified model (Figure 6) will be used as a basis from which to present the modification results.

Three of the five modifications in the statistical interaction path model indicate that fit has significant indirect effects on citizenship behaviors through job satisfaction, as hypothesized. In addition, there were positive meaningful (but non-significant) direct effects from the masculinity dimension of fit on Altruism (path =.11, n.s.), Conscientiousness (path =.06, n.s.), and tardiness (path =.08, n.s.). Although small, these direct effects suggest that when individuals fit into a masculine environment, they are assessed as more helpful and less likely to take extra breaks or participate in non-work related conversations. Conversely, these individuals appear to be more



tardy.

Alternately, there were meaningful but non-significant direct relationships between fit on the femininity dimension and Compliance/Attendance (path = .08, n.s.), Conscientiousness (path = -.11, n.s.) and tardiness (path = -.07, n.s.). These results suggest that when individuals fit into a feminine environment, they are assessed as less conscientious but more compliant and less tardy. Taken together, the results of the direct effects indicate that fit operates differently on citizenship behaviors, depending upon the dimension of fit. In some instances these dimensions of fit appear to counteract each other; that is, masculine fit directly leads to higher assessments of conscientious behavior but more tardiness while feminine fit directly leads to lower assessments of conscientious behavior but less tardiness.

Although the compatibility-differentiation index resulted in counter-hypothesized relationships between fit and job satisfaction (Figure 5), these results are not necessarily incompatible with those of the statistical interaction model. The modified model of the compatibility-differentiation index (Figure 8) indicates an indirect effect of differentiation on Altruism, Conscientiousness, Compliance/Attendance and absence through job satisfaction. These results suggest that individuals who internally are less differentiated in their masculine and feminine attributes are more satisfied on the job and are assessed as being more altruistic, conscientious, and compliant, but also are more absent.

Model modifications also revealed that differentiation had meaningful but non-significant direct effects on Compliance/Attendance

(path=-.083, n.s.) and on absence (path=.132, n.s.) in a manner consistent with the indirect results (i.e., that lower differentiation results in higher assessments of OCB and lower absence). Although compatibility had no meaningful indirect relationships with any of the outcome variables through job satisfaction, it also had a direct relationship with absence (path=-.083, n.s.). Specifically, this path indicated that the more an individual fits with the environment, where the greatest fit occurs when the environment is greater than the person, the less absent the individual will be.

The modified models also indicated that the weakest of the operationalizations of fit was the profile similarity index, or  $D^2$  Modified (Figure 7). There were no meaningful indirect relationships between fit and citizenship behaviors through job satisfaction; that is, the hypotheses were unsupported in this model. Although there were meaningful direct effects of the profile similarity index on Conscientiousness (path=-.069, n.s.) and Compliance/Attendance (path = -.06, n.s.), these relationships were non-significant and ran counter to prior research (e.g., Rounds et al, 1987)<sup>2</sup>. Simply put, the present results from  $D^2$  Modified suggest that the greater the difference between the person and environment, where the environment is less than the person, the more the person will exhibit compliance and conscientiousness behaviors.

#### Summary

The results presented in this chapter suggest four broad findings: (a) workgroup climate can be construed in terms of gender identity; (b) person-environment fit based on gender identity can impact

organizational citizenship behaviors through job satisfaction; (c) there are systematic patterns of relationships associated with female-related demographic variables, workshift, and age; and (d) organizational citizenship behavior is comprised of three related but distinct factors.

First, the results suggest that workgroup climate can be construed in terms of personality on a potentially important yet unexplored dimension (gender identity). Using the modified short form of the BSRI, individuals could evaluate their workgroups along the dimensions of masculinity (i.e., instrumentality) and femininity (i.e., expressiveness) in a manner quite separate from the way they evaluate themselves. These individual perceptions of the group seemed to provide adequate face validity and variability; there was sufficient evidence that these evaluations could be aggregated to the group level (Table 2). These data indicated that individuals generally described their workgroups as more masculine than feminine. Although individual self-evaluations were consistently higher than individual perceptions of the group (Table 9), this did not affect the measure of the environment since the individual evaluations were removed from the group measure for the analysis.

Second, using three operationalizations of fit, partial support was provided for two of the three hypotheses set forth in Chapter I. Only Hypothesis 3, the relationship between job satisfaction and objective measures of absence and tardiness, was unsupported. In the path models these results suggest that the fit between a person's gender identity and that of his or her workgroup appears to influence organizational citizenship behavior through job satisfaction, as

hypothesized, but in a manner apparently more complex than was captured by any one of the three operationalizations of fit.

Furthermore, support for the proposed revised general model (Figure 2) is demonstrated in that the goodness of fit results (Table 22) indicate that the hypothesized models generally fit the data in all three operationalizations of fit. In addition, direct effects resulting from model modifications (Figures 6 - 8) are all non-significant and not as strong as the indirect effects.

The indirect relationships between fit and OCB's within the most reliable of the proposed models, the statistical interaction model, were in the hypothesized directions, meaningful (Pedhazur, 1982), and significant, with the exception of the relationships reflected in Hypothesis 3. Although relatively small in magnitude, it was through this model that the most consistent relationships between fit and citizenship behaviors were found. This model also contained the single strongest tested relationship: it occurred between fit and Conscientiousness ( $R^2 = .04$ ). In addition, the larger contribution of fit to the attitudes and behaviors of interest comes from the femininity dimension. In combination with the other models, these data suggest that citizenship behavior is most positively affected when the person has high scores on the femininity scale and there is little differentiation between the person's masculinity and femininity scores and when the person fits with the environment, where fit is defined as the environment is greater or equal to the person (i.e., the environment also is not highly differentiated).

The weakest of the operationalizations of fit was the profile

similarity index, where no meaningful indirect relationships between fit and OCB were found.

Third, two systematic patterns of relationships were found in exploratory analyses. There was a uniform pattern of positive relationships between female-related demographic variables (i.e., sex, perceived sex composition of the workgroup, actual sex composition of the sample group) and variables measuring evaluations of individual and group femininity. This pattern, which is consistent with other research, was not mirrored in the relationships between males and evaluations of individual and group masculinity. There also was a pattern between workshift, age, other demographic variables, group evaluations, and managerial assessments of OCB. Specifically, individuals in later shifts were younger, more part-time, were perceived to be more male as well as less masculine and less feminine, and generally were assessed as exhibiting fewer citizenship behaviors than those in earlier shifts.

Finally, the data in the present study suggest a three-factor solution to the Organizational Citizenship Behavior scale of Smith et al (1983). The three factors were clear and interpretable: the first factor was equivalent to Smith et al's (1983) Altruism factor. It accounted for the most variance in the sixteen item scale. Smith et al's second factor split into two factors. The first of these, Conscientiousness, paralleled the conscientiousness interpretation of Smith et al's second factor. The third factor, Compliance/Attendance, was comprised of the scales attendance and punctuality items. These results are similar to prior research. While a manager's gender identity did not influence his or her assessments of subordinates'

OCB's, a subordinate's age and his/her working the evening versus daytime workshift did.

## CHAPTER IV. DISCUSSION

### Introduction

Using three operationalizations of fit, the results presented in Chapter III indicated initial support for the notion that when an individual's gender identity fits with the gender identity (climate) of the workgroup, the individual will be more satisfied and thereby will exhibit more citizenship behaviors, and be less absent and less tardy than when the person and workgroup climate do not fit. However, this support is with nuance and qualification. In attempting to provide some understanding to these results, this chapter is organized as follows. First, gender identity as an alternate construal of climate is considered. Second, explanations and implications of the results obtained for the three hypotheses as well as for the overall modified models are provided. Third, potentially salient and influential patterns within the data based on exploratory analyses are discussed. Fourth, an overview of methodological issues and limitations is presented. The chapter closes with some general conclusions and directions for future research.

### Masculine and Feminine Climates

The results of this study suggest that workgroup climate can be construed in terms of gender identity, or a workgroup's masculinity (i.e., instrumentality/assertiveness) and femininity (i.e., expressiveness/ nurturance). Specifically, it appears that people can distinguish between perceptions of their own personality and that of the workgroup on dimensions presumably inherently important to them.

Furthermore, these perceptions can be aggregated to the level of the workgroup, as demonstrated by the degree of agreement on these perceptions within settings. These findings are consistent with the organizational literature which indicates that work environments can be construed in terms of personality (e.g., Gellerman, 1959); that the perceptions of these environments (climates) emanate from the personalities of the individuals who inhabit them (e.g., Cantor et al, 1982; Holland, 1976; Schneider, 1987a, 1987b); and, that justification for aggregation of these perceptions is provided by the amount of agreement within settings (e.g., George, 1990; Joyce & Slocum, 1984; Schneider, 1983; Schneider & Bowen, 1985).

In addition, this research supports the concept that climates are specific or that they are for "something" (Schneider & Reichers, 1983). Specifically, this research investigated masculine and feminine climates, with these climates conceptualized as orthogonal dimensions. In this case, a masculine climate can be viewed as a climate for instrumentality, dominance, assertiveness, or agency while a feminine climate can be viewed as a climate for expressiveness, nurturance, interpersonal warmth, or communality. In the context of the climate literature, aggregated values on these dimensions indicate summary perceptions by employees about their workgroups and the degree to which the behaviors noted above will be expected, supported, and rewarded (e.g., Campbell et al, 1970; Pritchard & Karasick, 1973; Schneider & Bowen, 1985; Schneider & Hall, 1972).

The notion of masculine and feminine environments, though new to climate and person-environment fit research in the organizational and



vocational psychology tradition, is not original. For instance, in his study on work-related values, Hofstede (1980) focused on several dimensions of societal culture (contrasted with organizational culture [Kopelman, Brief, & Guzzo, 1990]) as explanations for organizational behavior. Among these were the two bi-polar dimensions, masculinity-femininity and individualism-collectivism. Although Hofstede separated these dimensions, his discussion of these dimensions as well as the discussion of the individualism-collectivism dimension by other cross-cultural psychologists (e.g., Bond, 1988a, 1988b; Kagitcibasi & Berry, 1989; Triandis, McCusker, & Hui, 1990) are conceptually similar to the discussion of the orthogonal dimensions used in this study.

The present research not only allows integration of two substantial bodies of literature in organizational and personality psychology but it also provides a foundation for integrating culture and climate literature and thinking about their implications for organizations. For example, Hofstede (1980) argued that his masculinity dimension represents the dominant values in a society. Masculine values in a society include assertiveness, dominance, independence, ambition, excitement, and materialism. These parallel the "masculine" values revealed by other researchers in terms of both biological sex (e.g., Feather, 1975; Rokeach, 1973, 1979) and psychological gender (Feather, 1984). Hofstede found that, out of 40 countries investigated, the United States was the single most individualistic country and nearly in the top 25% of the most masculine countries.

Kopelman et al (1990) argue that societal values will strongly influence climate perceptions in organizations. In Western society,

historically what is "male" (masculine) has been valued more than what is "female" (feminine) (e.g., Amsden, 1980; Rosenkrantz, Vogel, Bee, Broverman & Broverman, 1968) and that business and its incumbents (especially "good" American-style business) have been described using masculine attributes (e.g., Darley, 1976; Harvey, 1983; Heilman, 1983; Tung, 1984). It is not surprising, then, that the present research results indicate that workgroups were perceived as being significantly more masculine than feminine (when scores reflected equal representation by the sexes). Nor is it surprising that in this and other research (e.g., Bem, 1978; Fagenson, 1990), men and women are equally likely to find the masculine items socially desirable but not the femininity items (see Bem, 1978) and to evaluate themselves accordingly. Nor is it surprising that employed men and women are viewed as more masculine (i.e., agentic) than feminine (i.e., communal) (Eagly & Steffan, 1984).

What do these findings mean for organizations? First, the above discussion suggests that the same pattern of climate perceptions on the masculinity dimension may hold up across workgroups, organizations, and industries in our culture and vary in societies with different dominant values than ours. In the globalization of economies, multinationalization of corporations, and increasing diversity among employees in the workplace, the findings suggest that managers should be sensitive to these differences and the resulting norms for behavior. Alternately, perceptions on the femininity dimension, at least in the United States, may be more variable. The present data suggest that sex composition of the group can influence these perceptions.

Second, using an attraction-selection-attrition framework

(Schneider, 1987), the present discussion also suggests that if the masculinity dimension is a relatively stable framework around which people organize work perceptions, people may be attracted to and selected into organizations based in some part on each party's perceptions of its own and the other's masculinity (instrumentality, etc). But, it may be through lack of fit on the femininity dimension that attrition occurs. Although the data in the present study do not allow investigation of this question, the idea provides an alternative to the "Mommy-track", "Glass Ceiling" or economic theory (e.g., Becker, 1975, 1985; Doeringer & Piore, 1971; Polachek, 1975, 1976, 1979) explanations for sex segregation in jobs, organizations, and departments and for recent reports in the business press on the departure of managerial women from the corporate world into private enterprise.

For instance, in addition to the person-environment fit and climate literature, there is evidence that both sex and gender identification influence individuals' choices in occupations, training, and work goals (e.g., Dunteman, Wisenbaker & Taylor, 1978; Fox & Denham, 1974; Harren, Kass, Tinsley & Moreland, 1978; 1979) and that sex-typed individuals prefer sex-typed occupations (Darrow & Brief, unpublished). The findings of this and the previously discussed research indicating no sex differences in the masculinity dimension leads one to believe that it is more likely that a male will be sex-typed than a female. This suggests that when there is freedom of choice, only a minority of women might choose to go into traditionally sex-typed occupations/environments as a result of their gender identities. It also accounts for the possibility that some women may only partially be able to fit, and

ultimately may not desire to stay, in masculine work environments.

Finally, the discussion suggests that the perception of masculinity in work environments within our society is more or less a given and that the perception of femininity in work environments comprises a swing factor in terms of fit. In this context, it is not surprising that, in the present research, fit on the femininity dimension had more influence on attitudes and motivated (i.e., not linked to ability) behavior.

### Tests of Hypotheses

#### Hypothesis 1

The first hypothesis posited that when an individual's gender identity is congruent (fits) with the gender identity of his or her workgroup, the individual will be more satisfied on the job. Using three operationalizations of fit, the results indicated partial support for this hypothesis. Specifically, the statistical interaction model, considered the most reliable, supported the hypothesis; the compatibility-differentiation index, adopted for its theoretical relevance, resulted in a counter-hypothesized (negative) relationship; the profile-similarity index, adopted for its extensive use in person-environment research, received no support.

In the statistical interaction model, the effects of fit on job satisfaction were analyzed in two ways. The first, the more conservative of the tests, used hierarchical regression to assess the independent contribution of the within-gender P x E interaction set to job satisfaction, holding the person and environment constant. The second used the two fit variables as correlated independent variables in

the path analysis. This second method allowed comparative assessment of the impact of fit along each dimension in the model.

The hierarchical regression results indicated main effects for both the person (particularly femininity) and environment (particularly masculinity); further, the person-environment fit set independently influenced job satisfaction. In addition, there were significant within person/environment effects, primarily from the within-person interaction term. It should be remembered that a variety of opinions exist as to whether or not significant main effects render significant interaction terms meaningless (cf Cohen & Cohen, 1975). Nonetheless, taken together these results not only support the person-environment literature indicating that fit influences job attitudes, but also support the literature indicating a dispositional foundation to job satisfaction (e.g., Pulakos & Schmitt, 1983; Staw, Bell & Clausen, 1986; Staw & Ross, 1985), the importance of both disposition and environment for perceptions of job satisfaction (e.g., Arvey, Bouchard, Segal, & Abraham, 1989), and the previously discussed potency of gender identity on many types attitudes. In these data, the within-person gender effects are consistent with both Bem's (1974, 1981, 1982) additive effects formulation and with Hall and Taylor's (1985) emergent properties formulation (where both additive and interaction effects are predicted). In the present study, high femininity scores, alone and in combination with high masculinity scores, significantly influenced job satisfaction.

The path analyses for both the statistical interaction model and the compatibility differentiation index offer further insights into the

hierarchical regression results. First, in the statistical interaction path model, the larger contribution for explained variance in job satisfaction comes from fit along the femininity dimension. Given the regression results, because individual femininity and group femininity (climate) are significantly but not highly correlated, it is expected that the strength of the path is largely a function of individual femininity. These findings help to bridge the arguments against (e.g., Weaver, 1978) and for (e.g., Locke, 1976) sex differences in job satisfaction. It may be that it is individuals' perceptions of their own femininity and the fit between these evaluations and the degree of communality, expressiveness, nurturance and support in their workgroups that is important.

Second, in the compatibility-differentiation path model, only differentiation (the within-person difference between masculinity and femininity) is a significant contributor to job satisfaction. Compatibility is neither a meaningful nor a significant contributor. The relationships of both compatibility and differentiation are in the counter-hypothesized direction. The negative relationship between differentiation and satisfaction suggests that the less the within person discrepancy between the higher score and lower score (masculinity versus femininity), the more satisfied the individual will be on the job.

The above finding runs counter to previous person-environment fit research (e.g., Wiggins et al, 1983), wherein differentiation, alone and in combination with congruence, relates to job satisfaction. At the same time, it is not incongruent with other gender research (e.g., Taylor & Hall, 1982) and the results of the hierarchical regression

analysis which indicate that femininity, alone and in combination with masculinity, is positively related to job attitudes. Thus, rather than contradicting the relationships in the statistical interaction model, the counter-hypothesized results due to the compatibility-differentiation index add depth of understanding to the conditions under which these relationships are the strongest. Specifically, it appears that when the person has high scores on the femininity scale and there is little differentiation between the person's masculinity and femininity scores, and when the person fits with the environment, where fit is defined as the environment is greater or equal to the person (i.e., the environment also is not highly differentiated), the individual will be more satisfied on the job.

Although the issue of leadership was not addressed in the present study, the above results are consonant with leadership theories (e.g., House, 1971; House & Mitchell, 1974) which assert that the situation (i.e., person and task characteristics) moderates the relationship between leader style, in this case translated as climate, and satisfaction/performance. For example, early (e.g., Indik, 1968; Lewin, 1951; Likert, 1967; Litwin & Stringer, 1968; McGregor, 1960) and contemporary (e.g., James & Jones, 1974; Schneider, 1983; 1987) climate theorists and researchers implicate leadership perceptions and behaviors in the formation and maintenance of climate perceptions. Recent work on the role of leadership in climate perceptions using an interactionist perspective (e.g., Kozlowski & Doherty, 1989) begins to address the importance of leader-subordinate interactions on perceptions of climate. According to House (House, 1971; House & Baetz, 1979; House & Mitchell,

1974) people prefer more support, consideration, and openness when tasks are routine. It might be expected that the tasks for employees in the present study (fast food workers) were routine, and thus the feminine (expressive, nurturing, supportive) environment was an important component of job satisfaction. In their data collected in banks, Smith et al (1983) also found leader supportiveness to be related to job satisfaction.

Alternately, attempting to stimulate work environments that are both instrumental/agentive and expressive/nurturing, in a manner similar to the behavioral school of leadership (e.g., Blake & Mouton, 1964) might lead to more satisfied, longer retained, and more productive employees. Given the results of Litwin and Stringer (1968), who found that climates become increasingly differentiated over time in a manner consistent with leadership style, stimulating and developing more expressive, supportive and communal leadership styles might address some of the international diversity and lack of fit issues presented in the earlier section.

### Hypothesis 2

The second hypothesis states that job satisfaction will positively affect organizational citizenship behaviors (i.e., altruism, conscientiousness, and compliance/attendance), as assessed by store managers. In all cases there was support for the hypotheses, suggesting that job satisfaction not only affects citizenship behaviors in organizations, but also argues for the possibility that satisfaction acts as a principal intervening variable between fit and behavioral



outcomes. The largest of these relationships occurred between job satisfaction and conscientiousness.

Conversely, the relationships between satisfaction and citizenship behaviors were not nearly as large as those found in prior research (e.g., Bateman & Organ, 1983; Motowidlo, 1984; Puffer, 1987; Smith et al, 1983) One explanation for the results of the present study may be found in the data collection procedure. As discussed in Chapter II, managerial assessments of employees' citizenship behaviors were requested two weeks after in-store data collection. Questionnaires were distributed to each unit manager and, due to the turbulence in the organization at that time, were to be sealed for collection by the district manager within two weeks after their receipt. In fact, in many units and for a variety of reasons, the assessments were obtained after a delay of up to six months. Many of these late assessments were done by managers who had been reassigned to new units; that is, managers were assessing individuals with whom they were no longer associated. Even if both the satisfaction and OCB scales were perfectly reliable and valid, the length of time between variable measurement in addition to the problem of relating general attitudes to specific OCB behaviors would affect the strength of these relationships (e.g., Deaux & Wrightsman, 1988; Penrod, 1983).

Another explanation, perhaps more intriguing but related, has to do with history threats to internal validity. During the course of data collection the site organization was acquired by another firm. During the data collection period, which spanned approximately four and a half months due to different start dates in each store, the following events

occurred: (1) rumors regarding the imminent buyout of the site organization abounded; (2) there was significant discussion centered on potential negative effects of the buyout (i.e., fewer benefits, lower bonuses for managers, job loss, more tasks due to menu change, etc.) despite some discussion by managers and employees regarding potential positive effects of the purchase (i.e., more involvement by the purchasing organization because fast food was the focus of their business); (3) employees at the data sites frequently expressed the feeling that the (acquired) organization didn't care about them; (4) the tentative purchase agreement was announced; (5) several ( I was aware of four) managers were fired for white collar crime (e.g., pilfering of funds); (6) several more managers either resigned or were rotated to new units (in one unit, there were four different temporary general managers in the course of four months); (7) the final purchase and scheduling announcements were made that the menus would be gradually changed over the next eighteen months culminating with the change of restaurant name. These events might have influenced other potentially important, yet unmeasured, individual level variables such as organizational commitment and assessments of fairness (cf, Organ, 1990).

In the present study, it could be argued that the satisfaction-citizenship behavior relationship is mediated by organizational commitment. Organizational commitment, a construct involving an individual's identification with and internalization of organization goals and values as well as a willingness to comply with those goals and values (e.g., Mowday et al, 1982), has not only been strongly related to job satisfaction (cf, Mowday et al, 1982; Reichers, 1985) but also has

been linked to initial job expectations (e.g., Mowday & McDade, 1980), person/job fit (e.g., Stumpf & Hartman, 1984), absence (e.g., Steers, 1977), tardiness (Angle & Perry, 1981) and prosocial behaviors (O'Reilly & Chatman, 1986) through reciprocation norms. Specifically, reciprocation norms, often tied both to assessments of fairness and citizenship/prosocial behaviors (cf. Organ, 1988, 1990), have been tied to feelings of commitment when organizations are viewed as caring about employee well-being (Mowday et al, 1982).

In discussing the results of O'Reilly and Chatman (1986) and Scholl (1981), Organ (1990) asserts that commitment affects citizenship behaviors through the identification and internalization components of commitment. He also argues that norms of reciprocity may influence OCB's as a result of feelings of fairness or unfairness. These norms and feelings may be activated through simultaneous stimulation from several levels in the organization. For example, an employee could feel generally satisfied on the job, pleased with the supervisor, co-workers, or tasks, yet feel the organization is unfair. It is reasonable to expect that since the acquisition process appeared to be, at best, ambiguous, and employees felt the organization didn't care about them, the most salient components in the commitment-citizenship behavior relationship were affected. That is, it may have been difficult for individuals to define, identify with or internalize the expected goals of the acquiring organization. And, it may have been impossible for individuals to feel they should reciprocate to an organization that was forsaking them.

A third and final explanation for the lower relationships between

satisfaction and citizenship behavior is based on the work of Scarpello and Campbell (1983), who argue that global job satisfaction (the measure used in the analysis) is different from and more complex than the sum of the measured parts of facet satisfaction. Chapter II set forth five facets of job satisfaction in addition to general satisfaction suggested to be most salient to the present study. These were to be treated as a set in the analysis. Due to the high correlation between an index of job satisfaction based on the factor scores of the facets and general job satisfaction, only the global measure was retained for the study. In taking these actions, key satisfaction components to the understanding of the fit-OCB relationship may have been left unattended.

One such component is attitudes toward the leader. The importance of leader perceptions to perceptions of climate (e.g., Kozlowski & Doherty, 1989) was discussed in the previous section. In addition, research indicates that leader supportiveness (Smith et al, 1983) and supervisory satisfaction (Williams, Podsakoff, & Huber, 1986) influence citizenship behaviors. Similar to Smith et al (1983), the data presented in Table 23 supports the notion that attitudes toward and perceptions about a leader may be one of the more important components in the relationship between fit and OCB, especially between fit and conscientiousness or compliance/attendance. Specifically, the highest correlations between the conscientiousness/compliance factors

-----  
Insert Table 23 About Here  
-----

of OCB and facet satisfaction occurred between three facets of

satisfaction (i.e., Ability, Recognition, Supervisor-HR). Yet, of these three facets, the strength of the relationship between general satisfaction and satisfaction with the supervisor was the weakest (Table 4). In common with Scarpello and Campbell (1983), this finding suggests that a potentially important separate component may not have been considered.

### Hypothesis 3

The third hypothesis states that job satisfaction will negatively affect absence and tardiness, the objectively measured correlates of Compliance/Attendance. None of the relationships was significant, nor were any of them in the hypothesized directions.

One explanation for the absence of results may be in the lack of validity or reliability of the outcome variables. That is, the calculation of these variables used a count system (Frequency Index for absence [Hackett & Guion, 1985]; simple count for tardiness) based on company record data. Actual punch-in/punch-out times were compared against scheduled punch-in/punch-out times to determine absence and tardiness. Much of the data were missing.

Because the organization did not supply the information necessary to determine the nature of missing data (e.g., turnover [leave the system], promotion [stay in the system]) temporary reassignment to another store, lost files, leave of absence, temporary turnover, days off, etc.), any count system could become meaningless. If a simple count was used, for instance, a person who had only 30 days of complete data and who was tardy 4 times was counted the same as someone who had 90 days of complete data and was tardy 4 times. Because the schedules

of fast food employees can vary dramatically, it was inappropriate to exclude respondents without knowing the reasons for the missing data.

In addition, even if hire and, if appropriate, termination dates were provided by the organization so that tenure/turnover could be evaluated and controlled, it is possible that the turbulence in the organization may have influenced absence and tardiness over the period of time investigated. Using hazard rate models, for instance, Fichman (1989) and Harrison and Hulin (1989) found temporal and historical influences in absence patterns. Because there were no macro level controls in the present study, these patterns could not be modelled.

#### Modified Models

The modified models partially support the notion that the fit between a person's gender identity and that of his or her workgroup indirectly influences organizational citizenship behavior through job satisfaction, but in a manner apparently more complex than was captured by any one of the three operationalizations of fit. Specifically, in two operationalizations of fit, three of the five model modifications indicate that fit operates on citizenship behaviors through job satisfaction, as hypothesized. These three citizenship behaviors are the managerial assessments of Altruism, Conscientiousness, and Compliance/Attendance. Based on the statistical interaction model, much of this indirect relationship appears to be a function of fit on the femininity dimension. In combination with the results of the compatibility-differentiation index, it appears that when an individual is highly feminine, is not highly differentiated in his or her gender

identity, and fits in a highly feminine and also not highly differentiated environment, he or she will be more satisfied and thereby will exhibit more citizenship behaviors.

Although the models positing indirect effects of fit on citizenship behavior generally fit the data, the modified models also indicate some meaningful direct effects. Because the previous section focused on the hypothesized indirect effects of fit on OCB's through job satisfaction, this section will focus on additional direct effects resulting from model modification. Furthermore, because the statistical interaction model of fit is considered the most reliable and the results indicate that the relationships from this modified model are the most complex, I will use it as a basis to from which to commence discussion. As was mentioned earlier, the direct effects in all three models are non-significant. Therefore, the results and the following discussion should be taken as exploratory and suggestive rather than explicit and substantive.

The modified statistical interaction model indicates meaningful direct effects on the outcome variables as a function of fit on both the masculinity and the femininity dimensions. Specifically, there are positive direct effects from the masculinity dimension of fit on Altruism, Conscientiousness, and tardiness. This suggests that when individuals fit into a masculine environment, they are at least seen as (and may be) more helpful and less likely to take extra breaks or participate in non-work related conversations. However, they are also more tardy. Alternately, there is a positive direct relationship between fit on the femininity dimension and Compliance/Attendance and a

negative relationship between fit on this dimension and both Conscientiousness and tardiness.

The direct effects of fit help to provide a basis for clarifying the recently proposed dispositional approach to organizational citizenship behavior set forth by Organ (1990). These effects conform to the notion that an individual seeks to maintain consistency with his or her self-concept (cf. Cantor & Kihlstrom, 1987; Fiske & Taylor, 1984; Rosenberg, 1984) and that, at work, there are conditions that lead people to employ specific and preferred aspects of their personal selves in the course of job performance (Kahn, 1990). In the present study, these conditions could be construed as those in which the environment rewards, supports and sets expectations of behavior that are consonant with the individual's personality.

The prosocial literature provides explanations for both the direct (hypothesized direction) effects of masculinity fit on altruism as well as the counter-hypothesized effects of femininity fit on conscientiousness. It should be remembered that there were no sex differences in fit on the masculinity dimension (Table 18). Rather, fit on the masculinity dimension suggests that norms of independence, assertiveness, and agency or a sense of self (Bakan, 1966) support those qualities in a person.

In a meta-analytic review of gender and helping behavior, Eagly and Crowley (1986) argue that gender roles as well as other social roles, such as those one adopts at work, impact helping behavior. They assert that the finding that, in general, men helped more than women, was in part due to the fact that most research in helping behavior



focuses on short-term relationships rather than long-term, more intimate relationships. Gender role theory suggests that helping behavior in women is more likely to be elicited in close relationships, such as in families, where helping behavior in men is more likely to be elicited in heroic, chivalrous, or publicly recognized situations. Included among public recognitions could be positive assessments by customers or managers at work.

While Eagly and Crowley (1986) address only sex, rather than gender identity, they speak in terms of gender role. If self evaluations of one's own gender identity includes those desirable socially acknowledged gender-related attributes, it might be expected that those who see themselves as more masculine or instrumental will also be more helpful when it is perceived that those behaviors will be rewarded, recognized, and supported. In line with the dominant view in Western psychology (cf. Batson, 1987), this suggests the possibility that prosocial or helping behavior at work, rather than being truly altruistic or empathically motivated, may be egoistic and self-oriented.

Alternately, the negative direct relationship between fit on the femininity dimension and conscientiousness supports the ideas presented in the work of Brief and Motowidlo (1986) on prosocial organizational behavior as well as in Rentsch's (1990) work on the differences between climate assessments and the meaning of these assessments. Specifically, Brief and Motowidlo (1986) assert that while prosocial organizational behaviors are enacted with the intentions that the results will be beneficial, these behaviors can, in fact, be dysfunctional to the organization. In addition, Rentsch (1990) asserts that even if

individuals agree about how descriptive an attribute is of a work environment, the individuals may disagree about what these attributes mean. In the present study, femininity is associated with characteristics such as expressiveness, nurturance, supportiveness, communality, etc.. However, the meaning of attributes in terms of expected, supported and rewarded behaviors may vary. This explains how fit along the femininity dimension could lead to acts that are perceived as sociable, expressive and nurturing, but which could be evaluated in a negative light by the organization (e.g., participates in personal conversations).

There are also apparently contradicting direct effects of fit on Compliance/Attendance and tardiness. Specifically, fit on the femininity dimensions was in the hypothesized directions: fit led individuals to be more compliant and less tardy. Conversely, fit on the masculinity dimension led individuals to be more tardy. The conformity literature relative to group norms, often integrated with the compliance literature (Deaux & Wrightsman, 1988), suggests that a key feature of non-conforming behavior is that it attracts attention (Ridgeway, 1978, 1981). In line with the prosocial literature, the conformity literature suggests that gender roles and group norms influence conforming behavior, with males receiving more status and recognition with non-conforming behavior and with females being perceived more positively with conforming behavior (cf. Dion, 1985; Eagly & Wood, 1985). Although individual differences in masculinity and femininity have been found to be uncorrelated with conformity (Eagly, Wood, & Fishbaugh, 1981), the normative component of climate perceptions may support these

differential behaviors in the present study. That is, if it is perceived that the environment supports, rewards and expects independent, assertive and agentic behaviors, those who fit and prefer these behaviors will act in a less rules and procedures oriented manner. Alternately, those who fit (i.e., are rewarded) along the femininity dimension are more willing to accommodate to rules and procedures in line with normative expectations.

Finally, direct effects from the compatibility-differentiation index are consistent with the results from the testing of the first hypothesis. In the compatibility-differentiation index, people were more compliant and less absent when their masculinity and femininity scores were not highly differentiated. This finding does not support the person-environment fit literature where higher differentiation has been found to lead to greater job satisfaction, longer tenure, and higher performance. However, the results do support the literature on the interaction between masculinity and femininity (e.g., Hall & Taylor, 1985) and are consonant with the findings of the statistical interaction model. The modified model also indicates that compatibility, the degree to which an individual fits with the environment based on a Guttman scale, directly (but not indirectly) impacts absence in the hypothesized manner. These findings, along with the counter-hypothesized relationship between job satisfaction and absence, provide an explanation for the lack of fit between the data and this model (Table 22).

In sum, the above discussion provides additional insight into the mechanisms through which individuals may exhibit organizational

citizenship behaviors. In line with Kahn (1990), it appears that individuals may bring aspects of their personal selves to the job, from which preferred behaviors are prompted by certain conditions in the work environment. One of these conditions is person-environment fit; that is, the condition where an individual's personality (i.e., gender identity) is rewarded and supported by the work environment (climate). This condition elicits citizenship behaviors indirectly through job satisfaction and, to a lesser degree, directly. These relationships appear quite complex. Yet, explanations for these relationships can be readily integrated into the extant social psychological and organizational literature.

#### Potentially Salient and Influential Data Patterns

As a result of exploratory analyses, two potentially salient and influential patterns within the data were revealed. The first involves the relationship between sex, at the individual and group levels, and perceptions of masculinity and femininity. The second focuses on the relationship between workshift, age, and managerial assessments of organizational citizenship behaviors as well as other demographic variables. This section attends to understanding the meaning and impact of these variables.

#### Sex-related Influences on Perceptions of Individual and Group Gender Identity

The results in Chapter III presented a bifurcation in the sex-related influences on perceptions of individual and group gender identity. Specifically, neither sex, perceived sex composition of the

workgroup, nor actual sex composition of the sample group was related to perceptions of individual and group masculinity. Conversely, all of the previously mentioned demographic variables were related to perceptions of individual and group femininity.

The above patterns are similar to the patterns between sex and self evaluations found by Fagenson (1990) and in the normative data (Bem, 1981a). Bem (1981a) never really offers an explanation for this pattern other than the possibility that the results might have been peculiar to the elite college sample from which the norms were based. Given the variety of respondents in which this pattern is found, Bem's explanation does not appear plausible. Specifically, Bem sampled college students at an elite university during the 1970's; Fagenson (1990) more recently sampled upper (i.e., middle level management and above) and lower level (i.e., technician and supervisor) employees of a management development office; this study sampled hourly fast food employees. The variety of respondents and consistency of results suggests that this pattern may be stable across time and person within our culture.

Why is it that this relationship between sex and self-evaluations as well as group evaluations occurs on the feminine side of the pattern, but not on the masculine side? One explanation can be found in the discussion presented earlier in this chapter regarding the importance of valued attributes of the society on perceptions of both self and workgroup. That is, the measure of gender identity utilized in this study is comprised of socially desirable traits and behaviors that adhere norms of masculinity and femininity. Yet, as the earlier

discussion suggests, because what is masculine is perceived to be more valued than what is feminine (e.g., Deaux, 1976a, 1976b), it is not surprising that both women and men see the masculine dimension as desirable. Alternately, because feminine characteristics are not as valued by society, then these adhere more to Bem's (1981a) assertion that what is perceived as socially desirable is a function of an individual's sex role.

Fagenson (1990) offers a related explanation for her findings. Specifically, for the relationship between being female and self-evaluations of femininity (vis a vis the work environment) she suggests that women may have a greater tendency to conform to societal expectations than men (Sherriffs & McKee, 1967) and that men may view feminine attributes as either inappropriate or undesirable for men (Massengil & DiMarco, 1979; Schein, 1973, 1975; Taylor & Hall, 1982). It also may be that the range of female stereotypes about the self and others is much broader than the range of male stereotypes and covers more attributes (Deaux & Lewis, 1984) or that taking on cross-sex attributes may be more costly to men in terms of other perceptions (Hayes & Leonard, 1983), especially in an environment perceived to be more masculine.

A similar social desirability/value explanation could be applied to understand why sex influences perceptions of workgroup femininity but not masculinity through perceptions of gender similarity (e.g., Cantor & Kihlstrom, 1987; Deaux, 1985). Related to this are the notions that in making assessments of others, individuals need to rely on observable, external features (such as persons in particular environments)

(Prentice, 1990), and use the self as a reference point or anchor around which other concepts are organized (Holyoak & Gordon, 1983; Srull & Gaelick, 1984), especially in domains that are important to their self-concepts (Markus & Smith, 1981; Markus, Smith, & Moreland, 1985).

In addition, the results of this study only partially support evidence by Eagly (1987), Wood, (1987), and Dion (1985) regarding the influence of sex composition of the group on perceptions of the group and behavior of its members. That is, it appears that neither the perceived sex composition of the group nor actual sex composition of the sample group influenced perceptions of the group's instrumentality (masculinity). However, it did influence perceptions of the group's expressiveness and communality (femininity). Once again, the arguments presented earlier may also apply to these relationships.

#### Workshift and Age Influences

A pattern of relationships with workshifts and age also was found. Specifically, workers on later shifts were younger, more part-time, were perceived to be more male, and were evaluated as less masculine and less feminine than workers on earlier shifts. In addition, Table 18 revealed systematic significant correlations between age, workshift, satisfaction, and the outcome variables. These relationships suggest the possibility that age and workshift may operate as exogenous contaminating co-variates which could lower or make non-significant the relationships between satisfaction and citizenship behaviors.

For example, exploratory hierarchical regression analyses revealed that when workshift and age are controlled (i.e., entered first in the regression equation), the relationship between fit and job satisfaction

is still significant ( $R_{sqch} = .08, p \leq .001$ ), but the relationship between job satisfaction and citizenship behaviors disappears.

There are several plausible explanations for these patterns. One is simply that the relationship between satisfaction and OCB's is spurious. Another is the possibility that due to the large number of analyses and increasing study-wise error, there may be random significance in some of the study relationships.

However, other explanations are equally plausible. For example, the ANOVA results on Table 17 reveal that workers on later workshifts were assessed by managers as being less altruistic, less conscientious, and less compliant. One explanation for these results can be tied to literature on expression of emotion in organizations (e.g., Rafaeli & Sutton, 1987, 1989, 1990; Sutton & Rafaeli, 1988). The findings of these authors that retail clerks and food service employees express less positive emotion during heavy business periods suggests that employees of evening shifts, when many fast food restaurants experience the heaviest volume, are the least service oriented. One behavioral aspect of service orientation, for example, might be helping behaviors.

Another explanation can be derived from Feldman's (1990) recent reconceptualization of the nature of part-time work. Feldman posits that older part-time workers are more satisfied than younger part-time workers. His assertion is supported in this study's data ( $n_{part-time} = 93; r = .46, p \leq .001$ ). Based on the present model, since later shifts were younger, these employees may have exhibited fewer citizenship behaviors as a result of lower satisfaction.

A third explanation suggests that it is not the effect of working



on a particular shift that impacts the enactment of citizenship behaviors, but the knowledge or familiarity of the manager with the employee that impacts assessments of these behaviors. That there were significant shift differences between hours worked per week (full-time vs. part-time, chi-square=67.80,  $p \leq .001$ ) and days worked per week with the evaluating manager (chi-square=53.83,  $p \leq .001$ ) makes this explanation plausible. That is, evening workers (87%) were more likely to be part-time than daytime workers (5%) and work fewer days with the same manager than daytime workers. In addition, managers who are less familiar with the employee may rely on observable characteristics (such as age) and associated stereotypes in making behavioral attributions. These ideas are consistent with the large body of literature associating raters' familiarity with ratees and their assessments (e.g., Landy & Farr, 1980; Prentice, 1990).

Unfortunately, it is beyond the scope of the present study to ascertain whether the workshift and age effects on assessments of OCB's are due to differential enactment of OCB's as a function of workshift or age, due to differential assessments by the evaluating manager as a function of manager-employee familiarity, or due to other alternative explanations.

#### Study Issues and Limitations

The discussion to this point has centered on providing explanation and understanding to the present study's findings that individuals can construe perceptions of their work environments in terms of masculinity and femininity and that an individual's fit with these dimensions can

influence organizational citizenship behaviors. During the course of this discussion, several potential limitations to the study were presented. These include the inability to ascertain causes for differential assessments of citizenship behaviors by workshift and age, the lack of a definitive explanation for the pattern of correlations found between the sex-related variables and perceptions of masculinity and femininity, the incomplete specification of job satisfaction, potential macro-level threats to internal validity and the inability to accurately measure the objective variables of absence and tardiness.

The discussion in this section will focus on other potentially critical methodological limitations. These limitations can be broken down into three broad separate but related categories: measurement issues, design/operationalization issues, and validity/control issues.

#### Measurement Issues

Three variables central to this study were subject to incomplete specification and measurement. That is, Scarpello and Campbell's (1983) criticism of neglected determinants of job satisfaction may be applicable to all of the the study's principal constructs. For example, because general job satisfaction correlated highly with the set of satisfaction variables considered salient, general job satisfaction was adopted as a surrogate for the variable set for statistical reasons. As a result, key components to the understanding of the relationship between this particular conceptualization of person-environment fit and citizenship behaviors may not have been sufficiently represented. In addition, as discussed in the first chapter, there is reason to believe that the measurement of citizenship behavior utilized in the present

study doesn't capture all of the dimensions that may comprise organizational citizenship behaviors (e.g., Organ, 1988, 1990; Podsakoff & McKenzie, 1988). This suggests that, at best, the examination of fit's impact on citizenship behaviors was less than comprehensive.

Probably the most important measurement issue concerns the restricted view and measurement of masculinity and femininity, relative both to perceptions of the self and to perceptions of climate. Although the notion of masculinity and femininity appears useful and salient on multiple levels of analysis, recent research (for reviews see Carson, 1989; Deaux, 1985) questions whether the particular conceptualization of masculinity and femininity as orthogonal dimensions is any stronger than other models. Among these other available models include conceptualizing masculinity and femininity as bi-polar opposites, as a multifactor model, or as influenced by gender schemata. Edwards and Spence's (1987) data, for instance, appear to support a multifactor model.

In addition, Kagitcibasi and Berry (1989) suggest that, in cultural contexts substantially different from Western patterns, both sex-role definitions and measures like the BSRI may have limited validity and hence limited usefulness. The results of both the present study and others (e.g., Bem, 1981a; Fagenson, 1990) also indicate that neither of the two principal measures of gender identity (Bem, 1978; Spence & Helmreich, 1978) is able to discriminate between socially accepted and desirable sex-role attributes in our own society, at least on the masculinity dimension. Alternately, Carson (1989) argues that it is premature to think that the current measures, such as the one

utilized, hopelessly lack construct validity. Perhaps, as suggested in Chapter I, it is best to think of these trait dimensions simply in terms of instrumentality/assertiveness and expressiveness/communality.

Measuring the person. In the many research populations on which the BSRI has been used, relatively few documents reviewed for this study reported between-sex mean differences on the masculinity and femininity dimensions or sex-masculinity/femininity correlations. Those that did leave open the possibility that the inability of the above measures to discriminate on the masculinity dimension may be the context in which these measures were taken. For example, Bem's (1978) sample was an elite group of college students, Fagenson's (1990) and this study's were employees. Consonant with the notion that individuals' self-concepts are multi-faceted and dynamic (Markus & Wurf, 1987), it is possible that what was measured in the employee samples was a "public" versus a "private" self-concept in a manner similar to Higgins' (1987, 1989) "actual" versus "ought" self or Rosenberg's (1984) "psychological interior" aspect of the self versus the "social exterior" aspect of the self. Rosenberg, for instance, describes the psychological interior or dispositional component of the self-concept as "what we truly are" set against the social identity component as "what we surely are" (p.16). The social component is thought to be a function of the social expectations of either the individual or salient others.

In the context of work, Fagenson (1990) found that female managers scored higher on the masculinity dimension than did male managers. A qualitative examination of the breakdown of male versus female managers in this data set suggests the possibility of the same

relationship. Although it is well beyond the scope of this study, it is reasonable to wonder whether these findings indicate that female managers see themselves as generally more masculine than their male counterparts, or that these self-evaluations are a function of the public (work) selves. Both alternatives have potentially important implications for future research and application addressing the role of "self" in work organizations (e.g., Brief & Aldag, 1981). For instance, consistent with Higgins' (1987, 1989) theorizing, an alternative view of fit could be the degree to which an individual's public (work) self is congruent with the individual's private (non-work) self. In a general sense, this notion has been addressed in the research on work/non-work relationships (e.g., Champoux, 1980; Kabanoff, 1980; Near, Rice & Hunt, 1980) and the literature on role conflict (e.g., Barnett & Baruch, 1985; Fisher & Gitelson, 1983; Greenhaus & Beutell, 1985; Jackson & Schuler, 1985) but there has not been significant attention in terms of personality and self-concept. Based on the notion of fit, it might be expected that congruence between an individual's public and private selves in terms of gender identity would lead to similar outcomes as posited in the person-environment fit literature.

Measuring the environment. Although the results suggested that climate could be construed and measured in terms of gender identity, the results also indicated several limitations in addition to those discussed earlier.

The first of these is that, on the average, self-evaluations of gender identity were consistently higher than evaluations of the group (Tables 9 & 18). This is consonant with the nature of the the BSRI, in

which the social desirability (i.e., positive perception) of the items is considered to be a function of the individual's sex role (Bem, 1978). Given that individuals tend to be self-enhancers (Fiske & Taylor, 1984; Swann, 1985; Swann, Griffin, Predmore, & Gaines, 1987), it makes sense that individuals would perceive themselves more "positively" than their workgroups.

The above person-environment relationships were present both in the within-person person-environment evaluations and when comparing the individual self-evaluation to the aggregated group perceptions, minus the individual. In the analysis, the latter relationship was used. Because of this, the measure of the environment and the fit construct potentially should not have been affected. Yet, because individuals scored higher than the group, even in the aggregated measure, fit, on the average, never could be achieved. Before it is conveyed that this criticism should invalidate the entire study, an alternative point of view should be presented. That is, perhaps the higher perceptions of self actually reflect the relative perceptions of individuals and that, in fact, individuals did not fit in this environment. Although the data were not available in this study, this point of view would support the espoused high turnover rate among fast food employees.

Order effects also were found in the primary study data (Tables 13 & 14). While there were no differences found in mean ratings of the same scales between conditions, there were substantially higher person-environment correlations in condition 1, where the climate measure was administered first, than in condition 2. Bassilli and Racine (1990) provide an explanation for these results. They found that when

judgments about the self were asked in conjunction with asking judgments about a situation, the situation judgments facilitated the self-judgments when the situation judgments were requested first. While these results lend understanding to why the order effects occurred, they do not solve the problem of order effects. Perhaps future research can attend to these issues.

#### Design/Operationalization Issues

Four major limitations regarding study design and operationalization of variables are (1) failure to acknowledge the potential reciprocal nature of the fit-OCB relationships in the study design; (2) limitations in the operationalizations of fit; (3) weaknesses in the operationalization of outcome variables; and (4) limitations in the assignment of subjects to workgroups based on shift.

Investigating reciprocal relationships. A critical limitation of the study's design is that the path analytic models used to investigate fit-outcome relationships failed to take into consideration the potential reciprocal nature of citizenship behaviors and fit. The interactionist perspective and the person-environment fit tradition (e.g., Dawis et al, 1964) construe persons and situations as mutually responsive to each other. This suggests the plausibility that the environment (workgroup) accommodates to the individual, as well as the notion that the individual accommodates to the environment. It also includes the possibility that citizenship behaviors can directly impact perceptions of the environment, through the attribution process (Fiske & Taylor, 1984), or that they can impact perceptions of the self directly

or through job satisfaction (Bem, 1972; Lawler & Porter, 1967). Recent research indicates that the manner in which adjustment takes place may change over time (Helmreich et al, 1986; Kanfer et al, 1988). Although the design of the present study was longitudinal, this discussion suggests the importance of designing longitudinal research to include methods for investigating reciprocal relationships (Williams & Podsakoff, 1989) in future studies.

Operationalization of fit. The rationale for operationalizing fit in the three utilized methods is presented in Chapter II. Each was selected for a particular theoretical or statistical strength, or because of the frequency in which similar operationalizations have been used in person-environment fit investigations. While there are innumerable other operationalizations of fit that have been used historically (cf. Joyce et al, 1982; Rounds et al, 1987; Spokane, 1985), there are also new ones emerging (e.g., Caldwell & O'Reilly, 1990; Chatman, 1989). Each of these has at the core of its calculations three assumptions. Because they have already been discussed at length, it is not necessary for a discussion to be repeated here. Nonetheless, it is apparent that the methods of calculating fit utilized in this study far from captured all of the potential variations on the theme, and thus, far from captured all of the potential nuances and relationships.

The results from two of the models presented and discussed in Chapter III and earlier in this chapter were not surprising. As might have been expected, due to reliability and statistical soundness, the statistical interaction model demonstrated the greatest strength in predicting relationships between fit and the outcome variables.



Although the differentiation portion of the compatibility-differentiation index revealed counter-hypothesized results, these results were consistent with the stronger method. In addition, the weakness of the compatibility portion of the index is not necessarily surprising, given the potential lack of validity of Guttman scales. Furthermore, while the development of this study's compatibility scale attempted to capture the mathematical combinations of those who use Holland's six personality types as a basis for investigating person-environment fit, it may be that the reduction from six dimensions to two reduced the meaning of the scale.

The greatest problem lay in the profile similarity index, or  $D^2$  Modified. This model was selected less for a particular theoretical or statistical reason, than for its common use in the literature. Unfortunately, there were no significant relationships as a result of this model and few meaningful path relationships. In the modified model, the relationship between fit and job satisfaction was deleted. The direct effects between fit and Conscientiousness or Compliance/Attendance were meaningful (Pedhazur, 1982) but non-significant and in the counter-hypothesized direction.

Considering the strength of some of the relationships found in other literature (e.g., Rounds et al, 1987) these results were surprising and disappointing. A review of the literature presented in Chapter I in which profile similarity index calculations were used offers some insight into why the current operationalization may have performed poorly. Specifically, the profile similarity index is typically calculated using two scales, one for the person and one for the

environment. The resulting  $D^2$  measure is relatively straightforward, and statistically can be manipulated easily to account for importance, direction and a variety of other attributes (e.g., Rounds et al, 1987).

However, when more than two scales are used, the statistical manipulation becomes more difficult. For example, in using non-standardized values in the BSRI, Motowidlo (1981) broke profile segments into the four quadrants based on Bem's (1978) sex-typing procedure. Furthermore, Motowidlo did not use direction or importance, other than capturing importance by analyzing fit in terms of type. In the present study, both directionality and importance were calculated in order to adhere to the study's definition of fit. Importance was calculated after Rounds et al (1987). Directionality was operationalized by using only the highest value of the individual scores on the masculinity versus femininity dimensions. Thus, the current index potentially did not grasp the full concept of fit as being when the environment (i.e., both dimensions) is greater than the individual.

In part, this discussion suggests that the calculation of the index used in the present study not only did not capture the full definition of fit but also may simply have been too quantitatively cumbersome to be useful. In fact, in discussing their findings, Rounds et al (1987) argue that less convoluted indices based on shape (e.g., product moment correlation, Spearman's rho, Kendall's tau, and  $D^2$  prime) may be the best predictors of job satisfaction. However, they did not make it clear how more than two scales can be used at one time with these indices, nor how they can be used in causal (path) models. In addition, the authors also question the usefulness of the direction and

importance statistical manipulations. In sum, it appears that, in simultaneously attempting to correspond to a prevailing operationalization of fit and adhere to the study's definition of fit while using more than one scale each for the person and environment, the resulting index may have been rendered meaningless.

Operationalization of outcome variables. The discussion of Hypothesis 3 addressed limitations in the absence and tardiness variables as a result of the inability to clarify the cause of missing data and the turbulence in the organization. In addition the study was unable to make clear distinctions between voluntary and involuntary absence and tardiness, even though it used the Frequency Index for absence. Due to the motivational nature of voluntary absence and tardiness, the ability to identify correctly these variables may have been more revealing.

In a related manner, it may also have provided greater insight if the measures of citizenship behavior also included aspects of non-role-prescribed customer service behavior. The measurement of citizenship behavior primarily focussed on manager-subordinate and peer relationships. Given the nature of the fast food industry, it also could be expected that the customer-employee relationship was important and influenced by fit. This idea is consistent with other work on service behavior in the climate (e.g., Schneider & Bowen, 1985; Schneider, Parkington, & Buxton, 1980) and prosocial organizational behavior (e.g., George & Bettenhausen, 1990; Puffer, 1987) literature.

Operationalization of workgroups. The final design/operationalization issue concerns the manner in which individuals

were assigned to workgroups versus how they evaluated members of their workgroups. After initial selection parameters outlined in Chapter II were met, each individual was assigned to a workgroup based on one of three workshifts. Alternately, each individual evaluated his or her workgroup based on individual perceptions of most worked with individuals. For all intentions, this eliminated or drastically reduced the ability to compare workgroup perceptions with the workgroup. This issue was discussed in more depth in the descriptive statistics section of Chapter III.

A more accurate way of assigning workgroups in this convenience sample could have been to assign individuals based not only on workshift but also on position. For instance, most positions in these fast food restaurants could be assigned into one of three categories based on geographical location within the unit. These categories include counter/frontroom, grill/cooking area, and backroom. It appeared that individuals in each category interacted primarily with one another, and also that these categories were dominated more by one sex than another. Assignment by these categories would be consistent with the idea that mini-collectivities (Awal & Stumpf, 1981) and interaction groups (Rentsch, 1990) are important to perceptions and interpretations of climate. Although, using a convenience sample, this type of assignment would necessitate an increased sample size in order to sample large enough groups, it also might increase the likelihood of making better comparisons.

#### Validity/Control Issues

The final area of study issues and limitations concerns the area

of study control which may have influenced the validity of the results. Three of these issues have been addressed already: the inability to control for macro level variables during the course of the organization's buy-out, the resulting late managerial assessments of organizational citizenship behavior, and the inability to obtain start/end dates for subjects which neutralized controls for tenure and turnover.

A review of the notes taken over the course of data collection revealed two other control issues which should be mentioned, although the impact of these variables on the study cannot be ascertained. The first is language and literacy. Although a relatively low number of subjects (16%) were hispanic, I encountered language problems during the course of data collection for most of these individuals. In addition, literacy may have been a problem among this sample. Although language and literacy were investigated in the pilot study, these trends were not uncovered.

The second concerns subject selection. Since the sample was a convenience sample, the potential existed for managers to use survey participation as a reward. In many units employees who asked to participate were not allowed to, for a variety of reasons. Since subjects were on the clock (i.e., paid) but not working while filling in the original survey, they appeared to view this as a privilege. In addition, managers often used words and phrases like "take a break", "enjoy yourself", or "have fun" when referring to subjects' permission to fill in the questionnaire. Usually questionnaires were filled out in the main dining room of the unit, and subjects were permitted to bring

with them food or beverages. Of course, if participation was used as a reward, it cannot be determined whether the basis for the reward was managerial liking, tenure, work habits, or other factors.

Among these control issues, the most significant is probably the influence of macro-level variables. The turbulence of the business environment in recent years suggests the possibility that, if meaningful longitudinal micro-level research is to be conducted, controls for these variables should be built into the design of the study. In this particular study, controls for these variables may have been very revealing and helpful.

#### Conclusions and Recommendations

In sum, this research suggests that workgroup climate can be construed in terms of personality on a potentially important yet unexplored dimension. This dimension is gender identity, or a person's evaluations of one's own femininity and masculinity, conceived here as orthogonal elements. In addition, the results also provide initial support for the suggestion that the fit between a person's gender identity and that of his or her workgroup influences organizational citizenship behavior through job satisfaction. The manner in which these relationships operate appear to be a function of the specific operationalization of fit and relatively complex. However, explanations for most of these relationships can be found in the extant fit, climate and personality literature. Thus, this research enhances, specifies, extends and integrates current knowledge in organizational and personality psychology. Furthermore, this research lends insights into

the structure of organizational citizenship behavior.

Alternately, it should be remembered that, even though meaningful relationships exist in this design and conceptualization, the model's contribution to explained variance in the dependent variable (citizenship behaviors) was smaller than anticipated, based on supporting research. In no case did an  $R^2$  exceed .04. Several  $R^2$ 's were below .01. In addition, due to the large number of analyses and increasing studywise error, there may be random significance in some of the study's relationships. Thus, it is clear that there are a wide variety of other important factors that affect citizenship behavior besides an individual's fit with the gender identity of the workgroup (i.e., the climate for instrumentality vs expressiveness).

The many limitations of the study may help to account for the small amount of explained variance in OCB's as a function of fit. Many of these issues and limitations, presented earlier in this chapter, have left open more questions than have provided insights. Methodological and measurement issues that have been relatively unattended to necessitate investigation well beyond the scope of the present work. Thus, potential directions for future research are almost limitless.

To be certain, in focusing on next steps related directly to the present study, future research needs to explore the impact of other versions and calculations of fit. Efforts should be directed towards evaluating their strengths and weaknesses in predicting citizenship behaviors. Closely related is the attention that should be directed toward other potential forms and dimensions of extra-role or citizenship behaviors, the interpretations individuals attach to these behaviors,

and potentially salient and influential data patterns that may impact the fit-behavior relationship. The results of this research suggests that the antecedents of these behaviors may be different as a function of fit, as well as their causal mechanisms.

Second, research needs to focus on understanding the meaning of both masculinity and femininity to individuals in work environments. Research should be directed at developing reliable and valid measures of these constructs. On the individual level, researchers should use these measures to ascertain how potential discrepancies in public versus private selves may impact an individual's longevity, attitudes and behavior in an organization. The current study didn't distinguish between the two aspects of the self. In addition there is the necessity of understanding the degree to which the perceptions of the masculinity and femininity of the work environment hold across organizations, industries, and societies, to understand the extent to which these work climate perceptions reflect the dominant values in society, and to ascertain to what degree the work behavior of individuals across cultures are influenced by these perceptions. In the ever-increasing global economy, multi-nationalization of organizations, and diversity among employees it is important to consider the predilections of many cultures and to understand their similarities and differences.

Third, because the notion of reciprocal effects is inherent to models of fit, research should begin to use methods that can ascertain the these effects across time. In particular, recent research suggests that people may accommodate in different ways across different tenure periods. In some periods, personality appears potentially more



important; in others, the situation or social norms appear more important. In addition, fit models incorporate the notion that the workplace can also accommodate to individuals. Attention should be given to the simultaneous nature in which these processes occur.

Finally, effort should be directed to the role of leader personality and behavior in influencing climate perceptions and citizenship behaviors. Although it has long been acknowledged that leaders can influence climate perceptions, only recently has research begun to integrate the two bodies of literature. More steps need to be taken to gain a comprehensive view of climate and citizenship.

In spite of there being a strong tradition in each of the major bodies of literature addressed in this study, the integrative and expansive nature of the work suggests a new line research which is in its infancy. The limitations of the present work should not be discouraging. Rather, although the results were not dramatic, the consistencies revealed in the models suggest that this research should be considered more than exploratory. They should provide the basis for further consideration of the impact of salient aspects of personality, self-concept and climate on organizations and the behaviors of the individuals in them.

**REFERENCES, FOOTNOTES, TABLES, ILLUSTRATIONS AND APPENDICES**

## References

- Adams, J. (1984). Women at West Point: A three year perspective. Sex Roles, 11, 525-541.
- Aderman, D. (1972). Elation, depression, and helping behavior. Journal of Personality and Social Psychology, 24, 91-101.
- Adler, S. & Golan, J. (1981). Lateness as a withdrawal behavior. Journal of Applied Psychology, 66, 544-554.
- Ajzen, I. (1987). Attitudes, traits, and actions: Dispositional prediction of behavior in personality and social psychology. Advances in Experimental Social Psychology, 20, 1-63.
- Alagna, S.W. (1982). Sex role identity, peer evaluation of competition and the responses of women and men in a competitive situation. Journal of Personality and Social Psychology, 43, 546-554.
- Amsden, A.H. (ed.). (1980). The economics of women and work. New York: St. Martin's Press.
- Angle, H., & Perry, J. (1981). An empirical assessment of organizational commitment and organizational effectiveness. Administrative Science Quarterly, 26, 1-14.
- Arvey, R.D., Bouchard, T.J., Jr., Segal, N.L., & Abraham, L.M. (1989). Job satisfaction: Environmental and genetic components. Journal of Applied Psychology, 74, 187-192.
- Atieh, J.M. (1987). The affective and cognitive components of job satisfaction: Their dispositional and group antecedents and their behavioral consequences. Unpublished doctoral dissertation: New York University Graduate School of Business Administration, New York City.

- Awal, D., & Stumpf, S.A. (1981). Differentiating between perceived organization and work group climates. Journal of Management, 7, 33-42.
- Bakan, D. (1966). The duality of human existence. Chicago: Rand McNally.
- Barnett, R.C., & Baruch, G.K. (1985). Women's involvement in multiple roles and psychological distress. Journal of Personality and Social Psychology, 49, 135-145.
- Bassilli, J.N., & Racine, J.P. (1990). On the process relationship between person and situation judgments in attribution. Journal of Personality and Social Psychology, 59, 881-890.
- Bateman, T.S. & Organ, D.W. (1983). Job satisfaction and the good soldier: The relationship between affect and employee "citizenship". Academy of Management Journal, 26, 587-595.
- Batson, C.D. (1987). Prosocial motivation: Is it ever truly altruistic? Advances in Experimental Social Psychology, 20, 65-122.
- Becker, G.S. (1975). Human capital, 2nd ed. New York: Columbia University Press.
- Becker, G.S. (1985). Human capital, effort and the sexual division of labor. Journal of Labor Economics, 3, S33-S58.
- Beehr, T.A. & Gupta, N. (1978). A note on the structure of employee withdrawal. Organization Behavior and Human Performance, 21, 73-79.
- Bem, D.J. (1972). Self-perception theory. Advances in Experimental Social Psychology, 6, 1-62.

- Bem, S.L. (1974). The measurement of psychological androgyny. Journal of Consulting and Clinical Psychology, 42, 155-162.
- Bem, S. L. (1977). On the utility of alternate procedures for assessing psychological androgyny. Journal of Consulting and Clinical Psychology, 45, 196-620.
- Bem, S.L. (1978). Bem Inventory. Palo Alto, CA: Consulting Psychologists Press.
- Bem, S.L. (1981) Gender schema theory: a cognitive account of sex typing. Psychological Review, 88, 354-364.
- Bem, S.L. (1981a). Bem sex-role inventory professional manual. Palo Alto, CA: Consulting Psychologists Press.
- Bem, S.L. (1985). Androgyny and gender schema theory: A conceptual and empirical integration. In T.B. Sonderegger (Ed.) Psychology and gender: Nebraska Symposium on Motivation, 1984. (vol. 32). Lincoln Nebraska: University of Nebraska Press.
- Bem, S.L. & Lenney, E. (1976). Sex typing and the avoidance of cross-sex behavior. Journal of Personality and Social Psychology, 33, 48-54.
- Bem, S.L., Martyna, W. & Watson, C. (1976). Sex typing and androgyny: Further explorations of the expressive domain. Journal of Personality and Social Psychology, 34, 1016-1023.
- Berkowitz, L. & Daniels, L. (1963). Responsibility and dependency. Journal of Abnormal and Social Psychology, 66, 429-437.
- Blake, R.R., & Mouton, J.S. (1964). The managerial grid. Houston, TX: Gulf Publishing.

- Blau, P.M. (1968). Social exchange. In D.L. Sills (Ed.), International encyclopedia of the social sciences (vol. 7, p. 452-457). New York: MacMillan.
- Bond, M.H. (1988a). Invitation to a wedding: Chinese values and global economic growth. In D. Sinha & H.S.R. Kao (Eds.), Social values and development (pp. 197-209). New Delhi: Sage.
- Bond, M.H. (Ed.) (1988b). The cross-cultural challenge to social psychology. London: Sage.
- Boss, W.R. (1983). Team building and the problem of regression. The personal management interview as an intervention. Journal of Applied Behavioral Science, 19, 67-83.
- Bowers, K.S. (1973). Situationism in psychology: An analysis and critique. Psychological Review, 80, 307-336.
- Brief, A.P., & Aldag, R.J. (1981). The "self" in work organizations: A conceptual review. Academy of Management Review, 6, 75-88.
- Brief, A.P., & Aldag, R.J. (1989). The economic functions of work. Research in Personnel and Human Resources Management, 7, 1-23.
- Brief, A.P. & Motowidlo, S.J. (1986). Prosocial organizational behaviors. Academy of Management Review, 11, 710-725.
- Butler, J.K., Jr. (1983). Value importance as a moderator of the value fulfillment-job satisfaction relationship: Group differences. Journal of Applied Psychology, 68, 420-428.
- Caldwell, D.F., & O'Reilly, C.A., III (1990). Measuring person-job fit with a profile comparison process. Journal of Applied Psychology, 75, 648-657.

- Campbell, J.P., Dunnette, M.D., Lawler, E.E. III, & Weick, K.E., Jr. (1970). Managerial behavior, performance, and effectiveness. New York: McGraw-Hill.
- Cantor, N., & Kihlstrom, J.F. (1987). Personality and social intelligence. Englewood Cliffs, NJ: Prentice-Hall.
- Cantor, N., Mischel, W., Schwartz, J.C. (1982). A prototype analysis of psychological situations. Cognitive Psychology, 14, 45-77.
- Caplan, R.D. (1987). Person-environment fit theory and organizations: commensurate dimensions, time perspective and mechanisms. Journal of Vocational Behavior, 31, 248-267.
- Carson, R.C. (1989). Personality. Annual Review of Psychology, 40, 227-248.
- Chadwick-Jones, J.K., Brown, C.A. & Nicholson, N. (1973). Absence from work: Its meaning, measurement and control. International Review of Applied Psychology, 22, 137-156.
- Chadwick-Jones, J.K., Brown, C.A., Nicholson, N. & Sheppard, C. (1971). Absence measures: Their reliability and stability in an industrial setting. Personnel Psychology, 24, 463-470.
- Chadwick-Jones, J.K., Nicholson, N. & Brown, C.A. (1982). Social psychology of absenteeism. New York: Praeger.
- Chatman, J.A. (1989). Improving interactional organizational research: A model of person-organization fit. The Academy of Management Review, 14, 333-349.
- Champoux, J.E. (1980). The world of nonwork: Some implications for job re-design efforts. Personnel Psychology, 33, 61-75.

- Chodorow, N. (1978). The reproduction of mothering: Psychoanalysis and the sociology of gender. Berkeley: University of California Press.
- Clark, M.S. & Isen, A.M. (1982). Toward understanding the relationship between feeling states and social behavior. In A.H. Hastorf & A.M. Isen (eds.), Cognitive social psychology. New York: Elsevier.
- Clegg, C.W. (1983). Psychology of employee lateness, absence and turnover: A methodological critique and an empirical study. Journal of Applied Psychology, 68, 88-101.
- Cohen, J. (1977). Statistical power analysis for the behavioral sciences. New York: Academic.
- Cohen, J. (1978). Partialled products are interactions: Partialled powers are curve components. Psychological Bulletin, 85, 858-866.
- Cohen, J. & Cohen, P. (1975). Applied multiple regression/correlation analysis for the behavioral sciences. Hillsdale, NJ: Lawrence Erlbaum.
- Constantinople, A. (1973). Masculinity-femininity: An exception to a famous dictum? Psychological Bulletin, 80, 389-407.
- Cook, E.P. (1985). Psychological androgyny. New York: Pergamon.
- Cook, J.D., Hepworth, S.J., Wall, T.B., & Warr, P.B. (1981). The experience of work. London: Academic Press.
- Cronbach, L.J., & Furby, L. (1970). How should we measure "change"--- or would we? Psychological Bulletin, 74, 68-80.
- Cronbach, L.J., & Gleser, G.C. (1953). Assessing similarity between profiles. Psychological Bulletin, 50, 456-473.



- Dalton, D.R., & Cosier, R.A. (1988). Psychometric properties of the organizational citizenship behavior scale. Educational and Psychological Measurement, 48, 479-482.
- Darley, S. (1976). Big-time careers for the little woman: A dual-role dilemma. Journal of Social Issues, 32, 85-98.
- Darrow, A.L. & Brief, A.P.. Sex type, occupational preference and attitudes towards work. Unpublished manuscript, New York University Graduate School of Business Administration, NYC.
- Dawis, R.V. (1987, October 29-30). Person-environment fit and job satisfaction. Paper presented at the Bowling Green Job Satisfaction Conference, Bowling Green University.
- Dawis, R.V., England, G.W., & Lofquist, L.H. (1964). A theory of work adjustment. Minnesota Studies in Vocational Rehabilitation, XV.
- Dawis, R.V. & Lofquist, L.H. (1984). A psychological theory of work adjustment. Minneapolis: University of Minnesota Press.
- Deaux, K. (1976a). The behavior of women and men. Monterey, CA: Brooks/Cole.
- Deaux, K. (1976b). Sex: A perspective on the attribution process. In J.H. Harvey, W.J. Ickes, & R.F. Kidd (Eds.), New directions in attribution research (vol. 1). Hillsdale, N.J.: Erlbaum.
- Deaux, K. (1985). Sex and gender. Annual Review of Psychology, 36, 49-81.
- Deaux, K. (1987). Psychological constructions of masculinity and femininity. In J.M. Reinisch, L.A. Rosenblum, & S.A. Saunders (Eds.), Masculinity/femininity: Basic perspectives. New York: Oxford University Press.

- Deaux, K., & Lewis, L.L. (1984). The structure of gender stereotypes: Interrelationships among components and gender label. Journal of Personality and Social Psychology, 46, 991-1004.
- Deaux, K. & Major, B. (1987). Putting gender into context: An interactive model of gender-related behavior. Psychological Review, 94, 369-389.
- Deaux, K. & Wrightsman, L.S. (1988). Social psychology in the 80's. Monterey, CA: Brooks/Cole .
- Dion, K.L. (1985). Sex, gender, and groups: Selected issues. In V.E. O'Leary, R.K. Unger, & B.S. Wallston (Eds.), Women, gender, and social psychology, (pp. 293-347). Hillsdale, NJ: Lawrence Erlbaum.
- Doeringer, P.B., & Piore, M.J. (1971). Internal labor markets and manpower analysis. Lexington, MA: Lexington Books.
- Dunteman, G.H., Wisenbaker, J., & Taylor, M.E. (1978). Race and sex differences in college science participation. Report to the National Science Foundation. Raleigh, NC:Research Triangle Park, cited in Eccles, 1985.
- Eagly, A.H. (1987) Sex differences in social behavior: A social-role interpretation. Hillsdale, NJ: Lawrence Erlbaum.
- Eagly, A.H., & Crowley, M. (1986). Gender and helping behavior: A meta-analytic review of the social psychological literature. Psychological Bulletin, 100, 283-308.
- Eagly, A.H., & Steffan, V.J. (1984). Gender stereotypes stem from the distribution of women and men into social roles. Journal of Personality and Social Psychology, 46, 735-754.

- Eagly, A.H., & Wood, W. (1985). Gender and influenceability: Stereotype versus behavior. In V.E. O'Leary, R.K. Unger, & B.S. Wallston (Eds.), Women, gender, and social psychology, (pp. 225-256). Hillsdale, NJ: Erlbaum.
- Eagly, A.H., Wood, W., & Fishbaugh, L. (1981). Sex differences in conformity: Surveillance by the group as a determinant of male nonconformity. Journal of Personality and Social Psychology, 40, 384-394.
- Eccles, J. (1985). Sex differences in achievement patterns. In T.B. Sonderegger, (Ed.), Nebraska Symposium on Motivation, 1984, (vol. 32). Lincoln, NB: University of Nebraska Press.
- Edwards, V.J., & Spence, J.T. (1987). Gender related traits, stereotypes, and schemata. Journal of Personality and Social Psychology, 53, 146-154.
- Ekehammar, B. (1974). Interactionism in personality from a historical perspective. Psychological Bulletin, 81, 1026-1048.
- Endler, N.S. & Magnusson, D. (1976). Toward an interactional psychology of personality. Psychological Bulletin, 83, 956-974.
- Erickson, E. (1950). Childhood and society. New York: Norton.
- Fagenson, E.A. (1990). Perceived masculine and feminine attributes examined as a function of individuals' sex and level in the organizational power hierarchy: A test of four theoretical perspectives. Journal of Applied Psychology, 75, 204-211.
- Feather, N.T. (1975). Values and education in society. New York: Free Press.

- Feather, N.T. (1984). Masculinity, femininity, psychological androgyny and the structure of values. Journal of Personality and Social Psychology, 47, 604-620.
- Feldman, D.C. (1990). Reconceptualizing the nature and consequences of part-time work. The Academy of Management Review, 15, 103-112.
- Festinger, L. (1954). A theory of social comparison processes. Human Relations, 7, 117-140.
- Fichman, M. (1990). Attendance makes the heart grow fonder: A hazard rate approach to modeling attendance. Journal of Applied Psychology, 74, 325-335.
- Fisher, C.D., & Gitelson, R. (1983). A meta-analysis of the correlates of role conflict and ambiguity. Journal of Applied Psychology, 68, 320-333.
- Fiske, S.T., & Taylor, S.E. (1984). Social cognition. New York: Random House.
- Fogg, N. (1983). Effects of advanced organizer and test interpretation on absorption of information. Unpublished master's thesis, University of Maryland, College Park.
- Fox, J.B., & Scott, J.R. (1943). Absenteeism: Managements problem. Boston: Graduate School of Business Administration, Harvard University.
- Fox, L.H., & Denham, S.A. (1974). Values and career interests of mathematically and scientifically precocious youth. In J.C. Stanley, D.P. Keating, & L.H. Fox (Eds.), Mathematical talent: Discovery, description and development. Baltimore: Johns Hopkins University Press.

- Frable, D.E.S. (1989). Sex typing and gender ideology: Two facets of the individual's gender psychology that go together. Journal of Personality and Social Psychology, 56, 95-108.
- Frable, D.E.S. & Bem, S.L. (1985). If you are gender schematic, all members of the opposite sex look alike. Journal of Personality and Social Psychology, 49, 459-468.
- French, J.R.P., Jr., Caplan, R.D., & Harrison, R.V. (1982). The mechanism of job stress and strain. New York: Wiley.
- French, J.R.P. Jr., Rodgers, W. & Cobb, S. (1974). Adjustment as person-environment fit. In G.V. Coelho, D.A. Hamburg, & J.E. Adams (Eds.), Coping and adaptation. New York: Basic Books.
- Friedlander, R. & Margulis, N. (1969). Multiple impacts of organizational climate and individual value systems upon job satisfaction. Personnel Psychology, 22, 171-183.
- Gavin, J.F. (1975). Organizational climate as a function of personal and organizational variables. Journal of Applied Psychology, 60, 135-139.
- Gay, E.G., Weiss, D.J., Hendel, D.D., Dawis, R.V., & Lofquist, L.H. (1971). Manual for the Minnesota Importance Questionnaire. Minnesota studies in vocational rehabilitation. University of Minnesota Press.
- Gellerman, S. (1959). The company personality. Management Review, 48, 69-76.
- George, J.M. (1989). Mood and absence. Journal of Applied Psychology, 74, 317-324.

- George, J.M. (1990). Personality, affect and behavior in groups. Journal of Applied Psychology, 75, 107-116.
- George, J.M., & Bettenhausen, K. (1990). Understanding prosocial behavior, sales performance, and turnover: A group-level analysis in a service context. Journal of Applied Psychology, 75, 698-709.
- George, J.M. & Brief, A.P. (in press). The economic instrumentality of work: An examination of the moderating effects of financial requirements and sex on the pay-life satisfaction relationship. Journal of Vocational Behavior.
- Gilligan, C (1982). In a different voice. Cambridge, MA: Harvard University Press.
- Gouldner, A. (1960). The norm of reciprocity: A preliminary statement. American Sociological Review, 25, 161-178.
- Greenhaus, J.H., & Beutell, N.J. (1985). Sources of conflict between work and family roles. The Academy of Management Review, 10, 76-88.
- Hackett, R.D. & Guion, R.M. (1985). A reevaluation of the absenteeism-job satisfaction relationship. Organizational Behavior and Human Decision Processes, 35, 340-381.
- Hackman, J.R. (1976). Group influences on individuals. In M.D. Dunnette (Ed.), Handbook of industrial and organizational psychology. Chicago:Rand-McNally.
- Hackman, J.R. (1983). The design of work teams. In J. Lorsch (Ed.) Handbook of organizational behavior. Englewood Cliffs, NJ: Prentice-Hall.

- Hackman, J.R. & Oldham, G.R. (1980). Work Redesign. Reading, MA: Addison-Wesley.
- Hall, J.A., & Taylor, M.C. (1985). Psychological androgyny and the masculinity x femininity interaction. Journal of Personality and Social Psychology, 49, 429-435.
- Hammer, T.H., & Landau, J. (1981). Methodological issues in the use of absence data. Journal of Applied Psychology, 66, 574-581.
- Hansen, R.D. & O'Leary, V.E. (1985). Sex-determined attributes. In V.E. O'Leary, R.K. Unger & B.S. Wallston, (Eds.), Women, gender and social psychology. Hillsdale, NJ: Erlbaum.
- Harren, V., Kass, R., Tinsley, H. & Moreland, J. (1978). Influence of sex role attitudes and cognitive styles on career decision making. Journal of Counseling Psychology, 25, 390-398.
- Harren, V., Kass, R., Tinsley, H., & Moreland, J. (1979). Influence of gender, sex-role attitudes and cognitive complexity on gender dominant career choices. Journal of Counseling Psychology, 26, 227-234.
- Harrison, D.A., & Hulin, C.L. (1989). Investigations of absenteeism: Using event history models to study the absence taking process. Journal of Applied Psychology, 74, 300-316.
- Hayes, S.C., & Leonard, S.R. (1983). Sex-related motor behavior: Effects on social impressions and social cooperation. Archives of Sexual Behavior, 12, 415-426.
- Harvey, M. (1983). The multinational corporations expatriate problem: An application of Murphy's Law. Business Horizons, 26, (1), 71-78.

- Heilman, M.E. (1983). Sex bias in work settings: The lack of fit model. Research in Organizational Behavior, 5, 269-298.
- Heise, D.R. (1975). Causal analysis. New York: Wiley.
- Helmreich, R.L., Sawin, L.L. & Carsrud, A.L. (1986). The honeymoon effect in job performance: Temporal increases in the predictive power of achievement motivation. Journal of Applied Psychology, 71, 185-188.
- Helmreich, R.L., Spence, J.T. & Holahan, C.K. (1979). Psychological androgyny and sex role flexibility: A test of two hypotheses. Journal of Personality and Social Psychology, 37, 1631-1644.
- Higgins, E.T. (1987). Self-discrepancy: A theory relating self and affect. Psychological Review, 94, 319-340.
- Higgins, E.T. (1989). Self-discrepancy theory: What patterns of self-beliefs cause people to suffer? Advances in Experimental Social Psychology, 22, 93-136.
- Hofstede, G. (1980). Culture's consequences: International differences in work-related values. London: Sage.
- Holland, J.L. (1959). A theory of vocational choice. Journal of Counseling Psychology, 6, 35-45.
- Holland, J.L. (1966). The psychology of vocational choice: A theory of personality types and model environments. Waltham, MA: Blaisdell.
- Holland, J.L. (1973). Making vocational choices: A theory of careers. Englewood Cliffs, NJ: Prentice-Hall.
- Holland, J.L. (1979). Professional manual for the Self-directed Search. Palo Alto, CA: Consulting Psychologists Press.



- Holland, J.L. (1984). Making vocational choices: A theory of careers (2nd ed). Englewood Cliffs, NJ: Prentice-Hall.
- Holland, J.L., Gottfredson, G.D., & Nafziger, D.H. (1975). Testing the validity of some theoretical signs of vocational decision-making ability. Journal of Counseling Psychology, 22, 411-422.
- Holyoak, K.J., & Gordon, P.C. (1983). Social reference points. Journal of Personality and Social Psychology, 44, 881-887.
- Homans, G.C. (1961). Social behavior: Its elementary forms. New York: Harcourt Brace Jovanovich.
- Hoppock, R. (1935). Job satisfaction. New York: Harper.
- House, R.J. (1971). A path-goal theory of leadership. Administrative Science Quarterly, 16, 321-338.
- House, R.J., & Baetz, M.L. (1979). Leadership: Some empirical generalizations and new research directions. Research in Organizational Behavior, 1, 341-423.
- House, R.J., & Mitchell, T.R. (1974). Path-goal theory of leadership. Journal of Contemporary Business, 5, 81-94.
- Iachan, R. (1984). A measure of agreement for use with the Holland classification system. Journal of Vocational Behavior, 24, 133-141.
- Ickes, W. (1981). Sex role influences in dyadic interaction: a theoretical model. In C. Mayo and N. Henley (Eds.), Gender, androgyny and non-verbal behavior. New York: Springer-Verlag.

- Indik, B.P. (1968). The scope of the problem and some suggestions toward a solution. In B.P. Indik & F.K. Berrien (Eds.), People, groups, and organizations (pp. 3-30). New York: Teachers' College Press.
- Isen, A.M., Clark, M. & Schwartz, M.F. (1976). Duration of the effect of good mood on helping: "Footprints on the sands of time". Journal of Personality and Social Psychology, 34, 385-393.
- Isen, A.M. & Levin, A.F. (1972). Effect of feeling good on helping: Cookies and kindness. Journal of Personality and Social Psychology, 21, 384-388.
- Jaccard, J., Turrisi, R., & Wan, C.K. (1990). Interaction effects in multiple regression. Newbury Park, CA: Sage.
- Jackson, S.E., & Schuler, R.S. (1985). A meta-analysis and conceptual critique of research on role ambiguity and role conflict in work settings. Organizational Behavior and Human Decision Processes, 36, 16-78.
- James, L.R., Demaree, R.G., & Wolf, G. (1984). Estimating within-group interrater reliability with and without response bias. Journal of Applied Psychology, 69, 85-98.
- James, L.R. & Jones, A.P. (1974). Organizational climate: A review of theory and research. Psychological Bulletin, 81, 1096-1112.
- James, L.R., & Jones, A.P. (1976). Organizational structure: A review of structural dimensions and their conceptual relationships with individual attitudes and behavior. Organizational Behavior and Human Performance, 16, 74-113.

- James, L.R. & Tetrick, L.E. (1986). Confirmatory analytic tests of three causal models relating job perceptions to job satisfaction. Journal of Applied Psychology, 71, 77-82.
- Johns, G. (1978). Attitudinal and nonattitudinal predictors of two forms of absence from work. Organizational Behavior and Human Performance, 22, 431-444.
- Johns, G. (1981). Difference score measures of organizational behavior variables: A critique. Organizational Behavior and Human Performance, 27, 443-463.
- Johns, G. & Nicholson, N. (1982). The meaning of absence: New strategies for theory and research. Research in Organizational Behavior, 4, 127-172.
- Jones, A.P. & James, L.R. (1979). Psychological climate: Dimensions and relationships of individual and aggregated work environment perceptions. Organizational Behavior and Human Performance, 23, 201-250.
- Joyce, W.F., & Slocum, J.W., Jr. (1984). Collective climate: Agreement as a basis for defining aggregate climates in organizations. Academy of Management Journal, 4, 721-742.
- Joyce, W., Slocum, J.W., Jr., & Von Glinow, M.A. (1982). Person-situation interaction: Competing models of fit. Journal of Occupational Behavior, 3, 265-280.
- Kabanoff, B. (1980). Work and nonwork: A review of models, methods, and findings. Psychological Bulletin, 88, 60-77.

- Kagitcibasi, C., & Berry, J.W. (1989). Cross-cultural psychology: Current research and trends. Annual Review of Psychology, 40, 493-531.
- Kahn, W.A. (1990). Psychological conditions of personal engagement and disengagement at work. Academy of Management Journal, 33, 692-724.
- Kanfer, R., Crosby, J.V., & Brandt, D.M. (1988). Investigating behavioral antecedents of turnover at three job tenure levels. Journal of Applied Psychology, 73, 331-335.
- Kantor, J.R. (1924). Principles of psychology, v.1. Bloomington: Principia Press.
- Kantor, J.R. (1926). Principles of psychology, v.2. Bloomington: Principia Press.
- Katz, D. (1964). The motivational basis of organizational behavior. Behavioral Science, 9, 131-146.
- Katz, D. & Kahn, R.L. (1966). The social psychology of organizations. New York: Wiley.
- Katzell, R.A. (1964). Personal values, job satisfaction and job behavior. In H. Borow (Ed.) Man in a world at work. Boston: Houghton Mifflin.
- Kenny, D.A. (1979). Correlation and causality. Toronto: Wiley.
- Keys, D.E. (1985). Gender, sex role and career decision making of certified management accountants. Sex Roles, 13, 33-46.
- Kohlberg, L. (1966). A cognitive developmental analysis of childrens' sex-role concepts and attitudes. In E.E. Maccoby (Ed.), The of sex differences. Palo Alto, CA: Stanford University Press.

- Konovsky, M.A. (1986). Antecedents and consequences of informal leader helping behavior: A structural equation modeling approach. Unpublished doctoral dissertation. Bloomington, Indiana: Indiana University.
- Konovsky, M.A. (1987, August). Supervisor counseling behavior: An example of informal helping behavior in the workplace. Paper presented at the National Academy of Management, New Orleans.
- Kopelman, R.E., Brief, A.P., & Guzzo, R.A. (1990). The role of climate and culture in productivity. In B. Schneider (Ed.), Organizational climate and culture. San Francisco: Jossey-Bass.
- Kozlowski, S.W., & Doherty, M.L. (1989). Integration of climate and leadership: Examination of a neglected issue. Journal of Applied Psychology, 74, 546-553.
- Krebs, D.L. (1970). Altruism - An examination of the concept and a review of the literature. Psychological Bulletin, 73, 258-302.
- Kwak, J.C., & Pulvino, C.J. (1982). A mathematical model for comparing Holland's personality and environmental codes. Journal of Vocational Behavior, 21, 231-241.
- Landy, F.J., & Farr, J.L. (1980). Performance rating. Psychological Bulletin, 87, 72-107.
- Lawler, E.E., III, & Porter, L.W. (1967). The effect of performance on job satisfaction. Industrial Relations, 7, 20-28.
- Leigh, J.P. & Lust, J. (1988). Determinants of employee tardiness. Work and Occupations, 15, 78-95.
- Lerner, M.J. (1975). The justice motive in social behavior. Journal of Social Issues, 31, 1-19.

- Levinson, H. (1965). Reciprocation: The relationship between man and organization. Administrative Science Quarterly, 9, 370-390.
- Lewin, K. (1935). A dynamic theory of personality: Selected papers. New York: McGraw-Hill.
- Lewin, K. (1951). Field theory in the social sciences. New York: Harper.
- Litwin, G.H., & Stringer, R.A., Jr. (1968). Motivation and organizational climate. Boston: Harvard University, Graduate School of Business Administration.
- Locke, E.A. (1976). The nature and causes of job satisfaction. In M.D. Dunnette (Ed.) Handbook of industrial and organizational psychology. Chicago: Rand-McNally.
- Lubinski, D., Tellegen, A., & Butcher, J.N. (1983). Masculinity, femininity, and androgyny viewed and assessed as distinct concepts. Journal of Personality and Social Psychology, 44, 428-439.
- Lunneborg, P.W. (1975). Interest differentiation in high school and vocational indecision in college. Journal of Vocational Behavior, 7, 297-303.
- Magnusson, D. & Endler, N.S. (1977). Interactional psychology: Present status and future prospects. In D. Magnusson & N.S. Endler (Eds.) Personality at the crossroads: Current issues in interactional psychology. Hillsdale, NJ: Erlbaum.
- Markus, H. (1977). Self-schemata and processing information about the self. Journal of Personality and Social Psychology, 35, 63-78.

- Markus, H., Crane, M., Bernstein, S. & Siladi, M (1982). Self-schemas and gender. Journal of Personality and Social Psychology, 42, 38-50.
- Markus, H., & Smith, J. (1981). The influence of self-schemata on the perception of others. In N. Cantor & J. Kihlstrom (Eds.), Personality, cognition, and social interaction. Hillsdale, NJ: Erlbaum.
- Markus, H., Smith, J. & Moreland, R.L. (1985). Role of self-concept in the perception of others. Journal of Personality and Social Psychology, 49, 1494-1512.
- Markus, H. & Wurf, E. (1987). The dynamic self-concept: A social psychological perspective. Annual Review of Psychology, 38, 299-337.
- Massengill, D., & DiMarco, N. (1979). Sex role stereotypes and requisite management characteristics: A current replication. Sex Roles, 5, 561-570.
- McGregor, D. (1960). The human side of enterprise. New York: McGraw-Hill.
- Melamed, S. & Meir, E.I. (1981). The relationship between interests-job incongruity and selection of avocational activity. Journal of Vocational Behavior, 18, 310-325.
- Mischel, W. (1966). A social learning view of sex differences in behavior. In E.E. Maccoby (Ed.), The development of sex differences. Palo Alto, CA: Stanford University Press.
- Mischel, W. (1968). Personality and assessment. New York: Wiley.

- Mischel, W. (1970). Sex-typing and socialization. In P.E. Mussen (Ed.), Carmichael's manual of child psychology, vol. 2, 3rd ed. New York: Wiley.
- Mobley, W.H., Griffith, R.W., Hand, H.H. & Meglino, B.M. (1979). Review and conceptual analysis of the employee turnover process. Psychological Bulletin, 86, 493-522.
- Moos, R.H. (1974). Systems for the assessment and classification of human environment: An overview. In R.H. Moos & P.M. Insel (Eds.), Issues in social ecology: Human milieus. Palo Alto, CA: National Press Books.
- Morgan, L.G. & Herman, J.B. (1976). Perceived consequences of absenteeism. Journal of Applied Psychology, 61, 738-742.
- Moss, M.K. & Page, R.A. (1972). Reinforcement and helping behavior. Journal of Applied Social Psychology, 2, 360-371.
- Motowidlo, S.J. (1981). A scoring procedure for sex-role orientation based on profile similarity indices. Educational and Psychological Measurement, 41, 735-745.
- Motowidlo, S.J. (1982). Sex-role orientation and behavior in a work setting. Journal of Personality and Social Psychology, 42, 935-945.
- Motowidlo, S.J. (1984). Does job satisfaction lead to consideration and personal sensitivity? Academy of Management Journal, 27, 910-915.
- Mowday, R.T., & McDade, T. (1980, August). The development of job attitudes, job perceptions, and withdrawal propensities during the early employment period. Paper presented at the 40th annual meeting of the Academy of Management, Detroit.



- Mowday, R.T., Porter, L.W. & Steers, R.M. (1982). Employee-organization linkages: The psychology of commitment, absenteeism, and turnover. New York: Academic.
- Muchinsky, P. (1977). Employee absenteeism: A review of the literature. Journal of Vocational Behavior, 10, 316-334.
- Near, J.P., Rice, R.W., & Hunt, R.G. (1980). The relationships between work and nonwork domains: A review of empirical research. Academy of Management Review, 5, 415-429.
- Nunnally, J.C. (1978). Psychometric theory. New York: McGraw-Hill.
- O'Reilly, C., III, & 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.
- Organ, D.W. (1977). A reappraisal and reinterpretation of the satisfaction-causes-performance hypothesis. Academy of Management Review, 2, 46-53.
- Organ, D.W. (1988). Organizational citizenship behavior: The good soldier syndrome. Lexington, MA: D.C. Heath/Lexington Books.
- Organ, D.W. (1989, March 16). Organizational citizenship behavior. Paper presented at monthly meeting of New York Metro. Grand Hyatt Hotel, New York, NY.
- Organ, D.W. (1990). The motivational basis of organizational citizenship behavior. Research in Organizational Behavior, 12, 43-72.

- Organ, D.W. & Konovsky, M. (1989). Cognitive versus affective determinants of organizational citizenship behavior. Journal of Applied Psychology, 74, 157-164.
- Payne, R.L. & Pugh, D.S. (1976). Organizational structure and climate. In M.D. Dunnette (Ed.) Handbook of industrial and organizational psychology. Chicago: Rand-McNally.
- Pearce, J.A. II & David, F.R. (1983). A social network approach to organizational design-performance. Academy of Management Review, 8, 436-444.
- Pedhazur, E.J. (1982). Multiple regression in behavioral research: Explanation and prediction. New York: Holt, Rinehart & Winston.
- Penrod, S. (1983). Social psychology. Englewood Cliffs, NJ: Prentice-Hall.
- Perry, D.G. & Bussey, K. (1979). The social learning theory of sex differences: Imitation is alive and well. Journal of Personality and Social Psychology, 37, 1699-1712.
- Pervin, L.A. (1967). A twenty-college study of student x college interaction using TAPE (transactional analysis of personality and environment): Rationale, reliability, and validity. Journal of Educational Psychology, 58, 290-302.
- Pervin, L.A. (1968). Performance and satisfaction as a function of individual-environment fit. Psychological Bulletin, 69, 56-68.
- Pervin, L.A. (1985). Personality: Current controversies, issues, and directions. Annual Review of Psychology, 36, 83-114.

- Pervin, L.A. (1987). Person-environment congruence in light of the person-situation controversy. Journal of Vocational Behavior, 31, 222-230.
- Pervin, L.A. & Lewis, M. (Eds.) (1978), Perspectives in interactional psychology. New York: Plenum.
- Podsakoff, P.M., & Mckenzie, S. (1988). The structure of organizational citizenship behavior. Unpublished manuscript, Indiana University, Bloomington, IN.
- Polachek, S. (1975). Discontinuous labor force participation and its effects on market earnings. In C. Lloyd (Ed.), Sex discrimination and the division of labor. New York: Columbia University Press.
- Polachek, S. (1976). Occupational segregation: An alternative hypothesis. Journal of Contemporary Business, 5, 1-12.
- Polachek, S. (1979). Occupational segregation among women: Theory, evidence and a prognosis. In C. Lloyd, E. Andrews, & C. Gilroy (Eds.), Women in the labor market. New York: Columbia University Press.
- Porter, L.W. & Steers, R.M. (1973). Organizational, work and personal factors in employee turnover and absenteeism. Psychological Bulletin, 80, 151-176.
- Prentice, D.A. (1990). Familiarity and differences in self- and other-representations. Journal of Personality and Social Psychology, 59, 369-383.

- Pritchard, R.D. & Karasick, B.W. (1973). The effect of organizational climate on managerial job performance and job satisfaction. Organizational Behavior and Human Performance, 9, 126-146.
- Puffer, S.M. (1987). Prosocial behavior, noncompliant behavior, and work performance among commission salespeople. Journal of Applied Psychology, 72, 615-621.
- Pulakos, E., & Schmitt, N. (1984). A longitudinal study of a valence model approach for the prediction of job satisfaction of new employees. Journal of Applied Psychology, 68, 307-312.
- Rabinowitz, S. & Hall, D.T. (1977). Organizational research on job involvement. Psychological Bulletin, 84, 265-288.
- Rafaeli, A., & Sutton, R.I. (1987). Expression of emotion as part of the work role. Academy of Management Review, 12, 23-37.
- Rafaeli, A., & Sutton, R.I. (1989). The expression of emotion in organizational life. Research in Organizational Behavior, 11, 1-42.
- Rafaeli, A., & Sutton, R.I. (1990). Busy stores and demanding customers: How do they affect the display of positive emotion? Academy of Management Journal, 33, 623-637.
- Reichers, A.E. (1985). A review and reconceptualization of organizational commitment. Academy of Management Review, 10, 465-476.
- Rentsch, J.R. (1990). Climate and culture: Interaction and qualitative differences in organizational meanings. Journal of Applied Psychology, 75, 668-681.

- Rice, R.W., McFarlin, D.B., Hunt, R.G., & Near, J.P. (1985). Organizational work and the perceived quality of life: Toward a conceptual model. Academy of Management Review, 10, 296-310.
- Ridgeway, C.L. (1978). Conformity, group-oriented motivation, and status attainment in small groups. Social Psychology, 41, 175-188.
- Ridgeway, C.L. (1981). Nonconformity, competence, and influence in groups: A test of two theories. American Sociological Review, 46, 333-347.
- Rokeach, M. (1973). The nature of human values. New York: Free Press.
- Rokeach, M. (1979). Understanding human values. New York: Free Press.
- Rosenberg, M. (1984). Conceiving the self. Malabar, FL: Robert. E. Krieger.
- Rosenkrantz, P., Vogel, S., Bee, H., Broverman, I., & Broverman, D.M. (1968). Sex-role stereotypes and self-concepts in college students. Journal of Consulting and Clinical Psychology, 32, 287-295.
- Rounds, J.B. Jr., Dawis, R.V. & Lofquist, L.H. (1987). Measurement of person-environment fit and prediction of satisfaction in the Theory of Work Adjustment. Journal of Vocational Behavior, 31, 297-319.
- Rusbult, C.E., Farrell, D., Rogers, G. & Mainous, A.G. (1988). Impact of exchange variables on exit, voice, loyalty and neglect: An integrative model of responses to declining job satisfaction. Academy of Management Journal, 31, 599-627.
- Rushton, J.P. (1980). Altruism, socialization and society. Englewood Cliffs, NJ: Prentice-Hall.

- Sarbin, T.R. & Allen, V.L. (1968). Role theory. In G. Lindzey & E.A. Aronson (Eds.), The handbook of social psychology, (vol. 1), . Reading, MA: Addison-Wesley.
- Scarpello, V., & Campbell, J.P. (1983). Job satisfaction: Are all the parts there? Personnel Psychology, 36, 577-600.
- Schaffer, R.H. (1953). Job satisfaction as related to need satisfaction in work. Psychological Monographs, No. 364.
- Schank, R., & Abelson, R. (1977). Scripts, plans, goals, and understanding. Hillsdale, NJ: Lawrence Erlbaum.
- Schein, V.E. (1973). The relationship between sex role stereotypes and requisite management characteristics. Journal of Applied Psychology, 57, 95-105.
- Schein, V.E. (1975). Relationships between sex role stereotypes and requisite management characteristics among female managers. Journal of Applied Psychology, 60, 340-344.
- Schmidt, F.L., & Hunter, J.E. (1989). Interrater reliability coefficients cannot be computed when only one stimulus is rated. Journal of Applied Psychology, 74, 368-370.
- Schneider, B. (1975). Organizational climates: An essay. Personnel Psychology, 28, 447-479.
- Schneider, B. (1983). Interactional psychology and organizational behavior. Research in Organizational Behavior, 5, 1-31.
- Schneider, B. (1985). Organizational behavior. Annual Review of Psychology, 36, 573-611.
- Schneider, B. (1987a). The people make the place. Personnel Psychology, 40, 437-453.

- Schneider, B. (1987b). E-f(P,B): The road to a radical approach to person-environment fit. Journal of Vocational Behavior, 31, 353-361.
- Schneider, B. & Bartlett, C.J. (1968). Individual differences and organizational climate I: The research plan and questionnaire development. Personnel Psychology, 21, 323-333.
- Schneider, B., & Bartlett, C.J. (1970). Individual differences and organizational climate. II: Measurement of organizational climate by the multitrait-multirater matrix. Personnel Psychology, 23, 493-512.
- Schneider, B. & Bowen, D.E. (1985). Employee and customer perceptions of service in banks: Replication and extension. Journal of Applied Psychology, 70, 423-433.
- Schneider, B. & Hall, D.T. (1972). Toward specifying the concept of work climate: A study of Roman Catholic diocesan priests. Journal of Applied Psychology, 56, 447-455.
- Schneider, B., Parkington, J.J. & Buxton, V.M. (1980). Employee and customer perceptions of service in banks. Administrative Science Quarterly, 25, 252-267.
- Schneider, B. & Reichers, A.E. (1983). On the etiology of climates. Personnel Psychology, 36, 19-40.
- Scholl, R.W. (1981). Differentiating organizational commitment from expectancy as a motivating force. Academy of Management Review, 6, 589-599.

- Schwartz, S.H. (1973). Normative explanations of helping behavior: A critique, proposal, and empirical test. Journal of Experimental Social Psychology, 9, 349-364.
- Secord, P.F. & Backman, C.W. (1961). Personality theory and the problem of stability and change in individual behavior: An interpersonal approach. Psychological Review, 68, 21-32.
- Secord, P.F. & Backman, C.W. (1965). An interpersonal approach to personality. In B. Maher (Ed.), Progress in experimental personality research. (vol. 2). New York: Academic Press.
- Shaw, M.E. (1981). Group dynamics: The psychology of small group behavior. New York: McGraw-Hill.
- Sherriffs, A.C., & McKee, J.P. (1967). Qualitative aspects of beliefs about men and women. Journal of Personality, 26, 451-464.
- Skinner, B.F. (1978). The ethics of helping people. In L. Wispe (Ed.) Altruism, sympathy, and helping: Psychological and sociological principles. New York: Academic.
- Smith, C.A., Organ, D.W. & Near, J.P. (1983). Organizational citizenship behavior: Its nature and antecedents. Journal of Applied Psychology, 68, 653-663.
- Spence, J.T. (1983). Comment on Lubinski, Tellegen and Butcher's "Masculinity, Femininity, and Androgyny viewed and assessed as distinct concepts". Journal of Personality and Social Psychology, 44, 440-446.



- Spence, J.T. (1985). Gender identity and its implications for the concepts of masculinity and femininity. In T.B. Sonderegger (Ed.) Psychology and gender: Nebraska Symposium on Motivation, 1984. (vol. 32). Lincoln Nebraska: University of Nebraska Press.
- Spence, J.T., Deaux, K. & Helmreich, R.L. (1985). Sex roles in contemporary American society. In G. Lindzey & E. Aronson (Eds.), Handbook of social psychology. (vol. 2). New York: Random House.
- Spence, J.T. & Helmreich, R.L. (1978). Masculinity and femininity: Their psychological dimensions, correlates and antecedents. Austin, TX: University of Texas Press.
- Spence, J.T., Helmreich, R.L. & Holahan, C.K. (1979). Negative and positive components of psychological masculinity and femininity and their relationships to self-reports of neurotic and acting out behaviors. Journal of Personality and Social Psychology. 37, 1673-1682.
- Spence, J.T., Helmreich, R.L. & Stapp, J. (1974). The Personal Attributes Questionnaire: A measure of sex role stereotypes and masculinity-femininity. JSAS Catalog of Selected Documents in Psychology. 4, 43-44.
- Spence, J.T., Helmreich, R.L. & Stapp, J. (1975). Ratings of self and peers on sex role attributes and their relation to self-esteem and conceptions of masculinity and femininity. Journal of Personality and Social Psychology. 32, 29-39.

- Spence, J.T. & Sawin, L.L. (1985). Images of masculinity and femininity - a reconceptualization. In V.E. O'Leary, R.K. Unger & B.S. Wallston (Eds.), Women, gender and social psychology. Hillsdale, NJ: Erlbaum.
- Spokane, A.R. (1985). A review of research on person-environment congruence in Holland's Theory of Careers. Journal of Vocational Behavior, 26, 306-343.
- Spokane, A.R. (1987). Conceptual and methodological issues in person-environment fit research. Journal of Vocational Behavior, 31, 217-222.
- Strull, T.K., & Gaelick, L. (1984). General principles and individual differences in the self as a habitual reference point: An examination of self-other judgments of similarity. Social Cognition, 2, 108-121.
- Staines, G.L., Pottick, K.J. & Fudge, D.A. (1986). Wives' employment and husbands' attitudes toward work and life. Journal of Applied Psychology, 71, 118-128.
- Staw, B.M., Bell, N.E., & Clausen, J.A. (1986). The dispositional approach to job attitudes: A lifetime longitudinal test. Administrative Science Quarterly, 31, 56-77.
- Staw, B.M. & Oldham, G.R. (1978). Reconsidering our dependent variables: A critique and empirical study. Academy of Management Journal, 21, 539-559.
- Staw, 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). Organizational effectiveness: A behavioral view. Santa Monica, CA: Goodyear.
- Steers, R.M. & Rhodes, S.R. (1978). Major influences on employee attendance: A process model. Journal of Applied Psychology, 63, 391-407.
- Stumpf, S.A., & Hartman, K. (1984). Individual exploration of organizational commitment or withdrawal. Academy of Management Journal, 27, 308-329.
- Super, D.E. (1957). The psychology of careers: An introduction to vocational development. New York: Harper & Brothers.
- Super, D.E. (1970). Work values inventory manual. Boston: Houghton Mifflin.
- Sutton, R.I., & Rafaeli, A. (1988). Untangling the relationship between displayed emotions and organizational sales: The case of convenience stores. Academy of Management Journal, 31, 461-487.
- Swann, W.B., Jr. (1985). The self as architect of social reality. In B. Schlenker (Ed.), The self and social life (pp. 100-125). New York: McGraw-Hill.
- Swann, W.B. Jr. & Ely, R.J. (1984). A battle of wills: Self-verification versus behavioral confirmation. Journal of Personality and Social Psychology, 46, 1287-1302.
- Swann, W.B., Jr., Griffin, J.J., Predmore, S.C., & Gaines, B. (1987). The cognitive-affective crossfire: When self-consistency confronts self-enhancements. Journal of Personality and Social Psychology, 52, 881-889.

- Swann, W.B. & Hill, C.A. (1982). When our identities are mistaken: Reaffirming self-conceptions through social interaction. Journal of Personality and Social Psychology, 43, 59-66.
- Swann, W.B. Jr. & Read, S.J. (1981). Self-verification processes: How we sustain our self-conceptions. Journal of Experimental Social Psychology, 17, 351-372.
- Taylor, C.W., ed. (1972). Climate for creativity. Elmsford, NY: Pergamon.
- Taylor, M.C., & Hall, J.A. (1982). Psychological androgyny: Theories, methods, conclusions. Psychological Bulletin, 92, 347-366.
- Tellegen, A., & Lubinski, D. (1983). Some methodological comments on labels, traits, interaction, and types in the study of "femininity" and "masculinity": Reply to Spence. Journal of Personality and Social Psychology, 44, 447-455.
- Terborg, J.R. (1981). Interactional psychology and research on human behavior in organizations. Academy of Management Review, 6, 569-576.
- Tom, V.R. (1971). The role of personality and organizational images in the recruiting process. Organizational Behavior and Human Performance, 6, 573-592.
- Triandis, H.C., McCusker, C., & Hui, C.H. (1990). Multimethod probes of individualism and collectivism. Journal of Personality and Social Psychology, 59, 1006-1020.
- Tung, R.L. (1984). Human resource planning in Japanese multinationals: A model for U.S. firms? Journal of International Business Studies, 15, 139-149.

- Vroom, V.H. (1964). Work and motivation. New York: Wiley.
- Weaver, C.N. (1978). Sex differences in the determinants of job satisfaction. Academy of Management Journal, 21, 265-274.
- Weiss, D.J., Dawis, R.V., England, G.W., & Lofquist, L.H. (1967). Manual for the Minnesota Satisfaction Questionnaire. Minnesota Studies in Vocational Rehabilitation. University of Minnesota.
- Werts, C.E., & Linn, R.L. (1970). A general linear model for studying growth. Psychological Bulletin, 73, 17-22.
- Wiggins, J.D., Lederer, D.A., Salkowe, A., & Rys, G.S. (1983). Job satisfaction related to tested congruence and differentiation. Journal of Vocational Behavior, 23, 112-121.
- Wiggins, J.D., & Moody, A. (1981). Compatibility index description. Dover, Del: Training Associates.
- Williams, L.J., & Podsakoff, P.M. (1989). Longitudinal field methods for studying reciprocal relationships in organizational behavior research: Toward improved causal analysis. Research in Organizational Behavior, 11, 247-292.
- Williams, L.J., Podsakoff, P.M., & Huber, V. (1986, August). Determinants of organizational citizenship behaviors: A structural equation analysis with cross-validation. Paper presented at the National Academy of Management, Chicago.
- Wood, W. (1987). Meta-analytic review of sex differences in group performance. Psychological Bulletin, 102, 53-71.
- Zener, T.B., & Schnuelle, L. (1976). Effects of self-directed search on high school students. Journal of Counseling Psychology, 23, 353-359.

Zohar, D. (1980). Safety climate in industrial organizations:  
Theoretical and applied implications. Journal of Applied  
Psychology. 65, 96-102.

#### Footnotes

<sup>1</sup>Interviews were conducted with a majority ( $n_{\text{tot}}=57$ ,  $n_{\text{sub}}=43$ ) of pilot study respondents during their debriefing sessions. Over 80% of the sample said it would not have been easier to have received the scales in reverse order. There were no differences between conditions.

<sup>2</sup>This interpretation differs with Rounds et al (1987) who argued that a negative relationship indicated that the greater the difference between person and environment the less the job satisfaction. The distribution of the data in the present study suggests a variable whose extremes (range = -342,108 to +49,312) reflect the conditions where the environment (on the dimension where the person receives the higher within-person self-evaluation score) is either much greater or much less than the person. Rounds et al may have operationalized the variable differently. Specifically, although the sample n's in their tables do not clarify this point, they may have divided their sample into 2 groups, rather than retaining a continuous variable: (1) where the environment > person, and (2) where the environment < person. Such a division would account for their interpretation of a negative correlation between fit and job satisfaction.

Table 1

Effects of Prior Information on Workgroup Perceptions

	<u>Mean</u>	<u>S.D.</u>	<u>Corr</u>	<u>t</u>
No Prior Information (n=201)	5.62	1.61	.02, n.s.	-.33, n.s.
Prior Information (n=20)	5.75	1.68		



Table 2

Interrater Reliability and Confidence Intervals  
(n=216)

I. Interrater Reliability (James, Demaree & Wolf, n=73)

	<u>Mean</u>	<u>Minimum</u>	<u>Maximum</u>	<u>% Accepted</u>
Group Femininity	.93	.46	1.00	97 (n=71)
Group Masculinity	.96	.13	1.00	99 (n=72)

II. Confidence Intervals (Schmidt & Hunter, n=73)<sup>(a)</sup>

	<u>Mean</u>	<u>S.D.</u>		<u>SE<sub>m</sub></u>
Group Femininity	44.37	13.35	+/-	6.08
Group Masculinity	46.44	10.53	+/-	4.67

note: a) values represent average confidence intervals across 73 groups and were calculated with Schmidt and Hunter's technique (see George & Bettenhausen, 1990).

Table 3

Factor Analysis for Satisfaction Scale

<u>MSQ Subscale</u>	<u>Factor 1</u>
1. General Satisfaction	.96
2. Achievement	.90
3. Ability	.88
4. Recognition	.87
5. Supervisor-HR	.80
6. Co-Workers	.73
Eigenvalue	4.44
% Variance	74.00

Table 4  
Intercorrelations Among Satisfaction Scales<sup>(a,b)</sup>

Scale	Mean	S.D.	1	2
1. Ability	18.40	4.76	(.89)	
2. Co-Workers	19.88	3.64	.51***	(.81)
3. Recognition	17.86	5.08	.76***	.51***
4. Achievement	19.20	4.06	.82***	.58***
5. Supervisor-Human Relations	19.02	4.65	.56***	.59***
6. Satisfaction Scale	.00	1.00	.88***	.73***
7. General Satisfaction	72.31	13.60	.83***	.66***

Continued below

Scale	3	4	5	6	7
1. Ability					
2. Co-Workers					
3. Recognition	(.90)				
4. Achievement	.75***	(.82)			
5. Supervisor-Human Relations	.63***	.60***	(.87)		
6. Satisfaction Scale	.87***	.90***	.80***	(.86)	
7. General Satisfaction	.82***	.86***	.75***	.96***	(.91)

Notes: a) minimum  $n$  for any intercorrelation is 223; b) coefficient alphas are in parentheses.

\*\*\*  $p \leq .001$

Table 5

Comparison of Pilot Study Raw Score Means and Standard Deviations  
for Perceptions of the Environment on the Masculinity  
(MClimate) and Femininity (FClimate) Dimensions

	<u>MClimate</u>	<u>FClimate</u>	<u>t</u>
Total Sample:			
Mean	4.67	4.65	.31, n.s.
S.D.	.91	1.20	
Range	2.1-7.0	1.0-7.0	
n=	61	62	
SubSample:			
Mean	4.69	4.60	.69, n.s.
S.D.	.94	1.26	
Range	2.1-7.0	1.0-7.0	
n=	46	47	

Table 6

Comparison of Pilot Study Raw Score Means and Standard Deviations  
for Perceptions of the Environment on the Masculinity  
(MClimate) and Femininity (FClimate) Dimensions,  
by Condition

A. Total Sample

	<u>MClimate</u>	<u>FClimate</u>	<u>t</u>
Condition 1			
Mean	4.57	4.58	-.20, n.s.
S.D.	.83	1.05	
Range	3.0-6.2	2.7-6.7	
n=	31	32	
Condition 2			
Mean	4.77	4.72	.22, n.s.
S.D.	.98	1.35	
Range	2.1-7.0	1.0-7.0	
n=	30	30	

B. Subsample

	<u>MClimate</u>	<u>FClimate</u>	<u>t</u>
Condition 1			
Mean	4.60	4.58	.43, n.s.
S.D.	.79	1.11	
Range	3.0-6.2	2.7-6.7	
n=	25	26	
Condition 2			
Mean	4.80	4.63	.54, n.s.
S.D.	1.10	1.56	
Range	2.1-7.0	1.0-7.0	
n=	21	21	

Table 7

Comparison of Pilot Study Raw Score Means and Standard Deviations  
for Perceptions of the Environment (Climate) versus Normative  
Data for the Short Form of the BSRI

A. Total Sample vs. BSRI Norms

	<u>BSRI Norms</u> <sup>(a)</sup> (n=816)	<u>Climate</u> (n=61)	<u>t</u>
Masculinity:			
Mean	4.83	4.67	1.5
S.D.	.80	.91	
Femininity:			
Mean	5.38	4.65	5.8 ***
S.D.	.94	1.20	

B. Subsample vs. BSRI Norms

	<u>BSRI Norms</u> <sup>(a)</sup> (n=816)	<u>Climate</u> (n=46)	<u>t</u>
Masculinity:			
Mean	4.83	4.69	1.1
S.D.	.80	.94	
Femininity:			
Mean	5.38	4.60	5.4 ***
S.D.	.94	1.26	

Note: (a) The sample has been statistically weighted so as to  
equalize the number of males and females.

\*\*\*  $p \leq .001$

Table 8

Comparison of the Pilot Study Means for Perceptions of the Environment (Climate) versus Perceptions of Self (Self).

A. Total Sample

	<u>Self</u>	<u>Climate</u>	<u>t</u>
<b>Masculine</b>			
Mean	5.16	4.67	-3.65 ***
S.D.	.88	.90	
n=	62	61	
<b>Feminine</b>			
Mean	5.59	4.65	-6.17 ***
S.D.	.80	1.20	
n=	63	62	

B. Subsample

<b>Masculine</b>			
Mean	5.24	4.69	-3.33 **
S.D.	.94	.94	
n=	47	46	
<b>Feminine</b>			
Mean	5.55	4.60	-5.14 ***
S.D.	.81	1.26	
n=	48	47	

\*\*  $p \leq .01$  \*\*\*  $p \leq .001$

Table 9  
Individual Level Self vs. Group Perceptions

	<u>Mean</u>	<u>S.D.</u>	<u>t</u>	<u>r</u>
I. <u>Masculinity</u> (n=216)				
Self	51.01	12.03		
Group	46.99	12.58	4.36***	.39***
II. <u>Femininity</u> (n=219)				
Self	52.67	13.04		
Group	44.68	15.30	9.02***	.58***

\*\*\*  $p \leq .001$



Table 10

Pilot Study Correlations between the Measures of Person and Environment on the Masculinity and Femininity Scales.

	<u>Total Sample</u>	<u>Subsample</u>
Masculinity	.16 (n=61)	.13 (n=46)
Femininity	.31 ** (n=62)	.31 * (n=47)

\*  $p \leq .05$

\*\*  $p \leq .01$

Table 11

Differences in the Pilot Study Correlations between Person  
and Environment Masculinity and Femininity Scales by Condition  
(two-tailed tests)

A. Total Pilot Sample

	<u>Cond1</u>	<u>Cond2</u>	<u>z</u>
Masculinity			
r	.44 **	-.02	1.82 *
n-	31	32	
Femininity			
r	.18	.44 **	-1.07
n-	32	30	

B. Pilot Subsample

Masculinity			
r	.40 *	-.02	1.42
n-	25	21	
Femininity			
r	.22	.44 *	-.77
n-	26	21	

\*  $p \leq .05$       \*\*  $p \leq .01$

Table 12

Pilot Study Group Mean Differences on the Masculinity and  
Femininity Scales of the Person (Self) and Environment (Climate)  
by Condition (Cond1, Cond2)  
(two-tailed tests)

Total Pilot Sample

A. Measures of the Person (Self)

	<u>Cond1</u>	<u>Cond2</u>	<u>t</u>
Masculinity			
Mean	5.25	5.08	.75, n.s.
S.D.	.76	.99	
n=	31	31	
Femininity			
Mean	5.69	5.49	1.00, n.s.
S.D.	.79	.81	
n=	32	31	

B. Measures of the Environment (Climate)

Masculinity			
Mean	4.57	4.77	-.43, n.s.
S.D.	.83	.98	
n=	31	30	
Femininity			
Mean	4.58	4.72	-.88, n.s.
S.D.	1.05	1.35	
n=	32	30	

Pilot Subsample

A. Measures of the Person (Self)

	<u>Cond1</u>	<u>Cond2</u>	<u>t</u>
Masculinity			
Mean	5.31	5.15	.56, n.s.
S.D.	.74	1.13	
n=	25	22	
Femininity			
Mean	5.75	5.31	1.91, p $\leq$ .05
S.D.	.81	.78	
n=	26	22	

Table 12. contd

B. Measures of the Environment (Climate)

	<u>Cond1</u>	<u>Cond2</u>	<u>t</u>
<b>Masculinity</b>			
Mean	4.60	4.80	-.68, n.s.
S.D.	.79	1.10	
n=	25	21	
<b>Femininity</b>			
Mean	4.58	4.63	-.13, n.s.
S.D.	1.11	1.56	
n=	26	21	

Table 13

Order Effects on Self and Group Perceptions

I. Self-Perceptions (2-tailed)

	<u>Mean</u>	<u>S.D.</u>	<u>t</u>
Masculinity			
Workgroup first (n=106)	51.00	12.87	
Self first (n=112)	50.98	11.23	.01, n.s.
Femininity			
Workgroup first (n=106)	52.47	14.90	
Self first (n=113)	52.85	11.07	-.21, n.s.

II. Workgroup Perceptions (2-tailed)

Masculinity			
Workgroup first (n=109)	46.07	13.85	
Self first (n=112)	47.45	11.21	-.81, n.s.
Femininity			
Workgroup first (n=109)	45.18	16.98	
Self first (n=114)	44.09	13.47	.53, n.s.

Table 14

Differences in the Person/Environment Correlations on the  
 Masculinity and Femininity Dimensions by Condition  
 (two-tailed tests)

	<u>Group First</u>	<u>Self First</u>	<u>z</u>
<b>Masculinity</b>			
r=	.51***	.24**	2.32**
n=	106	110	
			.45, n.s.
<b>Femininity</b>			
r=	.68***	.42***	2.76**
n=	106	110	
z	2.70**	2.10**	

\*\*  $p \leq .01$   
 \*\*\*  $p \leq .001$

Table 15

Pilot Study Interview Results

1. "Did you have problems describing your workgroup using the scale given to you?"

	<u>Total Sample</u> (n=57)	<u>Subsample</u> (n=43)
% saying "no"	72 % (41)	74 % (32)
Chi-Square: (Cond x Response)	.00, n.s.	.37, n.s.

2. "Did it confuse you to have two similar measures, one for yourself and one for your workgroup?"

% saying "no"	89 % (50)	91 % (38)
Chi-Square: (Cond x Response)	.00, n.s.	.00, n.s.

Table 16

## Factor Analysis of Citizenship Behavior Items

<u>Items</u>	<u>Factor 1</u>	<u>Factor 2</u>	<u>Factor 3</u>
1. Volunteers to do things not formally required by the job.	.86	.26	.16
2. Helps other employees with their work when they have been absent.	.84	.24	.22
3. Takes the initiative to orient new employees to the store even though it is not part of his/her job description.	.82	-.03	.23
4. Makes innovative suggestions to improve the overall quality of the restaurant.	.81	-.14	.16
5. Assists me with my duties.	.80	.24	.14
6. Helps others when their work load increases (assists others until they get over the hurdles).	.77	.31	.14
7. Willingly attends functions not required by the organization, but helps in its overall image.	.69	.30	.14
8. Takes undeserved work breaks. (a)	.08	.80	.20
9. Spends a great deal of time in personal conversations. (a)	.04	.78	-.02
10. Does not spend a great deal of idle conversations.	.16	.74	.20
11. Coasts towards the end of the day. (a)	.35	.68	.14
12. Does not take extra work breaks.	.26	.64	.48
13. Exhibits attendance at work beyond the norm, e.g., takes less days off than most individuals or less than allowed.	.18	.24	.78
14. Does not take unnecessary time off.	.15	.10	.76
15. Gives advance notice if unable to come to work.	.15	.03	.75
16. Exhibits punctuality in arriving at work on time and after meals and breaks.	.30	.39	.60
Eigenvalue	7.05	2.24	1.48
% Variance (total=67.4%)	44.1	14.0	9.3

Note: (a) items reverse-scored.



Table 17

## Effect of Workshift on Citizenship Behavior Ratings

	<u>Mean</u>	<u>S.D.</u>	<u>F</u>
1. OCB1 (Altruism)			
Morning (n=63)	3.48 <sup>(a)</sup>	.93	3.91*
Midday (n=97)	3.37 <sup>(a)</sup>	1.03	
Evening (n=56)	2.99	1.04	
2. OCB2 (Conscientiousness)			
Morning (n=61)	3.62	.98	3.44*
Midday (n=97)	3.69 <sup>(a)</sup>	.93	
Evening (n=54)	3.29	.84	
3. OCB3 (Compliance/Attendance)			
Morning (n=63)	3.95 <sup>(a)</sup>	.93	6.68**
Midday (n=97)	3.71 <sup>(a)</sup>	1.13	
Evening (n=57)	3.29	.81	
4. Absence			
Morning (n=69)	3.35	2.13	1.62
Midday (n=99)	3.47	2.86	
Evening (n=56)	4.14	2.62	
5. Tardiness			
Morning (n=63)	22.27	14.75	2.12
Midday (n=101)	21.97	16.07	
Evening (n=57)	17.37	12.79	

Note: a) mean difference between this group and the evening shift

\*  $p \leq .05$

\*\*  $p \leq .01$

Table 18  
Means, Standard Deviations, Cronbach Alphas, &  
Study Variables<sup>(a)</sup>

Scale	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	
<b>A. INDIVIDUAL LEVEL VARIABLES</b>																
1. Age of Respondent	28.09	14.63	---													
2. Sex of Respondent <sup>(b)</sup>	.64	.48	.07	---												
3. Perceived #Female in Group	.59	.28	.20***	.39***	---											
4. Perceived Group Size <sup>(c)</sup>	2.87	1.30	-.01	.07	.02	---										
5. Sex of Evaluator <sup>(b)</sup>	.23	.42	.11	-.03	.12*	-.03	---									
6. Workshift	1.97	.74	-.28***	-.05	-.26***	.13*	-.05	---								
7. Fulltime (vs. Parttime)	.58	.50	.05	-.08	-.01	-.17**	-.03	-.50***	---							
8. Masculinity	50.99	12.02	.03	.00	.03	.04	.01	-.08	.15**	(.78)						
9. Femininity	52.67	13.04	.15**	.32***	.21***	.10	-.09	-.16**	.03	.41***	(.89)					
10. Evaluator Masculinity	58.45	7.42	-.07	.00	.00	.00	.41***	-.02	-.03	.04	-.03	(.73)				
11. Evaluator Femininity	46.03	11.26	-.02	.02	.02	-.07	-.32***	.16*	-.02	-.11	-.06	-.36***	(.89)			
12. Perceived Group Masculinity	46.77	12.57	.03	.09	.06	-.03	.02	-.15*	.02	.39***	.41***	-.01	.11	(.79)		
13. Perceived Group Femininity	46.62	15.26	.22***	.25***	.24***	.14*	-.09	-.23***	-.06	.27***	.58***	-.07	.04	.50***	(.91)	
14. General Satisfaction	72.31	13.60	.39***	.23***	.17**	-.10	-.04	-.28***	.03	.08	-.28***	-.15*	-.04	.10	.40***	(.8)
15. Combined Satisfaction Scale	1.00	1.00	.33***	.22***	.16**	-.07	-.02	-.29***	.00	.03	-.29***	-.16**	-.04	.15*	.43***	(.8)
16. OCB1: Altruism	3.32	1.01	.11*	.03	.04	.01	.16**	-.18**	.13*	.09	.07	-.04	.05	-.03	.00	.1
17. OCB2: Conscientiousness	3.56	.93	.22***	-.03	.01	-.02	.20**	-.13*	.05	.05	-.05	.07	-.06	.00	.05	.1
18. OCB3: Compliance/Attendance	3.68	1.02	.24***	-.02	.04	.09	.06	-.24***	.08	.06	.04	.02	-.03	-.02	.05	.1
19. Times Absent	3.59	2.61	-.12*	.05	-.03	.01	-.14*	.11*	.10	.03	.07	.00	.01	.00	-.03	.1
20. Tardiness	20.96	13.05	-.10	-.05	-.11*	-.04	.00	-.12*	.17**	.06	.05	.03	-.19**	.16*	-.02	-.1
<b>B. FIT VARIABLES<sup>(d)</sup></b>																
21. Interaction: $M_y \times M_x$	2374.53	693.50	.10	.09	.05	-.01	.06	-.23***	.16**	.42***	.34***	-.02	-.18**	.37***	.26***	.2
22. Interaction: $F_y \times F_x$	2334.22	809.93	.12*	.25***	.16**	.12*	-.16**	-.36***	.13*	.32***	.78***	-.13*	-.01	.38***	.47***	.3
23. Interaction: $M_y \times F_y$	2747.20	1029.52	.14*	.21***	.17**	.08	-.03	-.16**	.11*	.40***	.24***	-.01	-.11	.44***	.51***	.2
24. $D^2$ Modified (Fit 2)	-26587.81	39249.94	-.09	-.13*	-.10	.03	-.07	-.07	-.01	-.43***	-.48***	-.17**	.04	-.19**	-.26***	-.0
25. Compatibility Index (Fit 3)	1.36	2.14	-.07	-.07	-.09	.00	-.02	-.07	.00	-.24***	-.36***	-.03	-.10	-.15**	-.26***	-.0
26. Differentiation (Fit 3)	10.18	9.16	-.08	-.01	-.06	-.01	.08	.01	-.04	-.09	-.13*	.13*	-.05	.00	-.11*	-.1
<b>C. AGGREGATED VARIABLES<sup>(e)</sup></b>																
27. Group Masculinity	46.64	7.22	---	---	---	---	---	---	---	---	---	---	---	---	---	---
28. Group Femininity	46.37	8.77	---	---	---	---	---	---	---	---	---	---	---	---	---	---
29. Perceived Sex Composition <sup>(f)</sup>	.59	.20	---	---	---	---	---	---	---	---	---	---	---	---	---	---
30. #Female in Each Group	63.17	7.47	---	---	---	---	---	---	---	---	---	---	---	---	---	---
31. Actual Group Masculinity	50.55	6.68	---	---	---	---	---	---	---	---	---	---	---	---	---	---
32. Actual Group Femininity	52.57	7.91	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Notes: (a) coefficient alphas are in parentheses. Minimum  $n$  for intercorrelations among variables 1-26 is 193; for variables 27-32 is 204; (b) sex is coded 1=female, 0=male; (c) mean and s.d. reflect intervals where 2-6 persons, 3-7-9 persons; (d) Fit 1 is a regression equation. Only the two-way interaction terms of primary interest are included; (e) reliability corrected for attenuation; (f)  $n = 73$  groups.

\*  $p \leq .05$  \*\*  $p \leq .01$  \*\*\*  $p \leq .001$



13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

(.91)

.40000	(.91)																			
.43000	.76000	(.86)																		
.30	.11*	.12*	(.73)																	
.33	.14000	.13000	.32000	(.84)																
.35	.17000	.19000	.47000	.49000	(.80)															
.33	.01	.01	-.10	-.16*	-.26000	...														
.02	-.02	-.01	.01	-.06	-.11*	.20000	...													

13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

.26000	.25000	.23000	.15000	.05	.05	.02	.04	...												
.47000	.32000	.31000	.07	-.03	.10	-.02	-.01	.42000	...											
.31000	.27000	.26000	.11*	.02	.10	.04	.06	.67000	.65000	...										
.24000	-.05	-.07	-.05	-.09	-.08	-.03	-.01	-.13*	.03	-.55000	...									
.26000	-.02	-.03	-.03	.00	.01	-.08	-.01	-.08	-.12*	-.35000	.31000	...								
.11*	-.17000	-.14*	-.05	.00	-.10	.08	-.06	-.05	-.12*	-.24000	-.14*	-.01	(.73)(*)							
...	...	...	...	...	...	...	...	.61000	.34000	.10	.32000	.17000	.01	...						
...	...	...	...	...	...	...	...	.27000	.70000	.10	.50000	.20000	-.07	.44000	...					
...	...	...	...	...	...	...	...	.03	.23000	.10	.03	.03	-.04	.09	.28000	...				
...	...	...	...	...	...	...	...	.07	.21000	.10	-.08	.01	.00	.09	.20000	.54000	...			
...	...	...	...	...	...	...	...	.57000	.37000	.45000	-.08	-.01	-.02	.34000	.22000	-.01	-.03	...		
...	...	...	...	...	...	...	...	.33000	.68000	.50000	-.12*	-.05	-.04	.30000	.54000	.30000	.28000	.53000	...	



Table 19

Comparison of Aggregated Group Perception of the Environment vs.  
Aggregated (Group Level) Self-Perceptions

	<u>Masculinity</u> (n=224 aggregated to 73)			
	<u>Mean</u>	<u>S.D.</u>	<u>r</u>	<u>t</u>
Group Perceptions	46.44	7.23		
Self Perceptions	50.55	6.68	.46***	- 8.49***
	<u>Femininity</u> (n=224 aggregated to 73)			
Group Perceptions	44.37	8.77		
Self Perceptions	52.57	7.91	.65***	-17.58***

\*\*\*  $p \leq .001$

Table 20

Correlations between Sex, Group Sex Composition and Perceptions  
of Workgroup Masculinity and Femininity (a)

I. Individual Level of Analysis

	<u>Group Masc</u>	<u>Group Fem</u>
1. Perceived Sex Composition	.06	.24***
2. Sex	.09	.25***

II. Group Level of Analysis

1. Perceived Sex Composition	.06	.28***
2. Actual Sex Composition of Sample Group	.07	.39***

Note: a) female scored 1, male scored 0

\*\*\*  $p \leq .001$

Table 21

Regression of General Satisfaction on Standardized  
Person, Environment, and Person x Environment Interactions

Hierarchical Step	beta	R	RsqCh	Cum Rsq
1. Person				
Femininity	.33			
Masculinity	-.02	.33	.11***	.11***
2. Environment				
Femininity	.08			
Masculinity	.20	.39	.04**	.15***
3. Person x Environment Interaction (a)				
Masculinity ( $M_p \times M_e$ )	1.49			
Femininity ( $F_p \times F_e$ )	-.02	.43	.03*	.19***
4. Person x Environment Interaction (b)				
Masculinity ( $M_p \times F_e$ )	.09			
Femininity ( $F_p \times M_e$ )	.28	.44	.001	.19***
5. Person x Environment Interaction (c)				
Person ( $M_p \times F_p$ )	1.03			
Environment ( $M_e \times F_e$ )	.57	.48	.04**	.23***
6. Three-way Interactions				
Masc <sub>p</sub> x Masc <sub>e</sub> x Fem <sub>e</sub>	2.17			
Fem <sub>p</sub> x Masc <sub>e</sub> x Fem <sub>e</sub>	2.72			
Masc <sub>p</sub> x Fem <sub>p</sub> x Masc <sub>e</sub>	-4.52			
Masc <sub>p</sub> x Fem <sub>p</sub> x Fem <sub>e</sub>	-2.33	.49	.02	.24***
7. Fourway Interaction not entered				

Notes: a) twoway within-gender P x E interactions; b) twoway cross-gender P x E interactions; c) twoway within person (P x P) or within environment (E x E) interactions.

\*  $p \leq .05$     \*\*  $p \leq .01$     \*\*\*  $p \leq .001$



Table 22

Summary of Goodness of Fit Results<sup>(a)</sup>

	$\chi^2$	$\chi^2$ (b)
<u>Fit on OCB1 (Altruism)</u>		
1. Statistical Interaction Model	.989	2.256
2. $D^2$ Modified	.999	.167
3. Compatibility-Differentiation	.999	.234
<u>Fit on OCB2 (Conscientiousness)</u>		
1. Statistical Interaction Model	.991	1.802
2. $D^2$ Modified	.995	.872
3. Compatibility-Differentiation	.999	.176
<u>Fit on OCB3 (Compliance/Attendance)</u>		
1. Statistical Interaction Model	.996	.880
2. $D^2$ Modified	.996	.090
3. Compatibility-Differentiation	.992	1.566
<u>Fit on Absence</u>		
1. Statistical Interaction Model	.999	.254
2. $D^2$ Modified	.999	.278
3. Compatibility-Differentiation	.976	4.697*
<u>Fit on Tardiness</u>		
1. Statistical Interaction Model	.994	1.174
2. $D^2$ Modified	.999	.111
3. Compatibility-Differentiation	.998	.312

Notes: (a) When it is concluded that the model fits the data (i.e., when values @  $\alpha=.05$  are non-significant) it indicates that the hypotheses that the paths in the fully identified models are zero cannot be rejected; (b) cut-off for  $\chi^2$  at  $\alpha=.05$  is 3.841.

\*  $p \leq .05$

Table 23

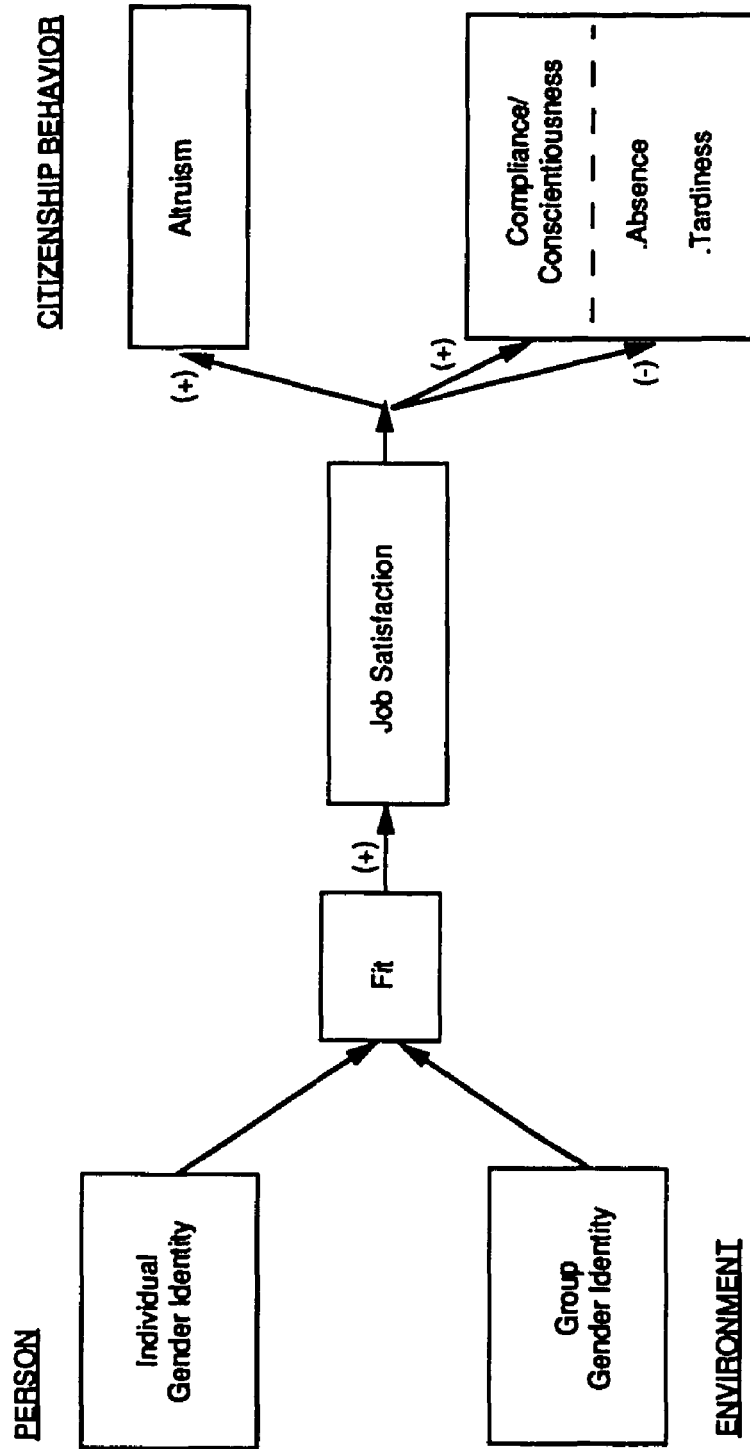
Correlations Between Satisfaction Subscales  
and Dependent Variables

<u>MSQ Subscale</u>	<u>OCB1 (a)</u>	<u>OCB2 (b)</u>	<u>OCB3 (c)</u>	<u>ABSENCE</u>	<u>TARDY</u>
1. Ability	.14*	.14*	.20***	-.02	.02
2. Co-Workers	.04	.03	.11**	.00	.03
3. Recognition	.07	.15**	.20***	.00	.00
4. Achievement	.08	.06	.09	.04	-.04
5. Supervisor-HR	.12*	.22***	.19**	-.01	-.03
6. General Satisfaction	.11*	.14*	.18**	.01	-.02
7. Satisfaction Scale	.11*	.15*	.19**	.01	-.01

Notes: a) Altruism, b) Conscientiousness, c) Compliance/Attendance

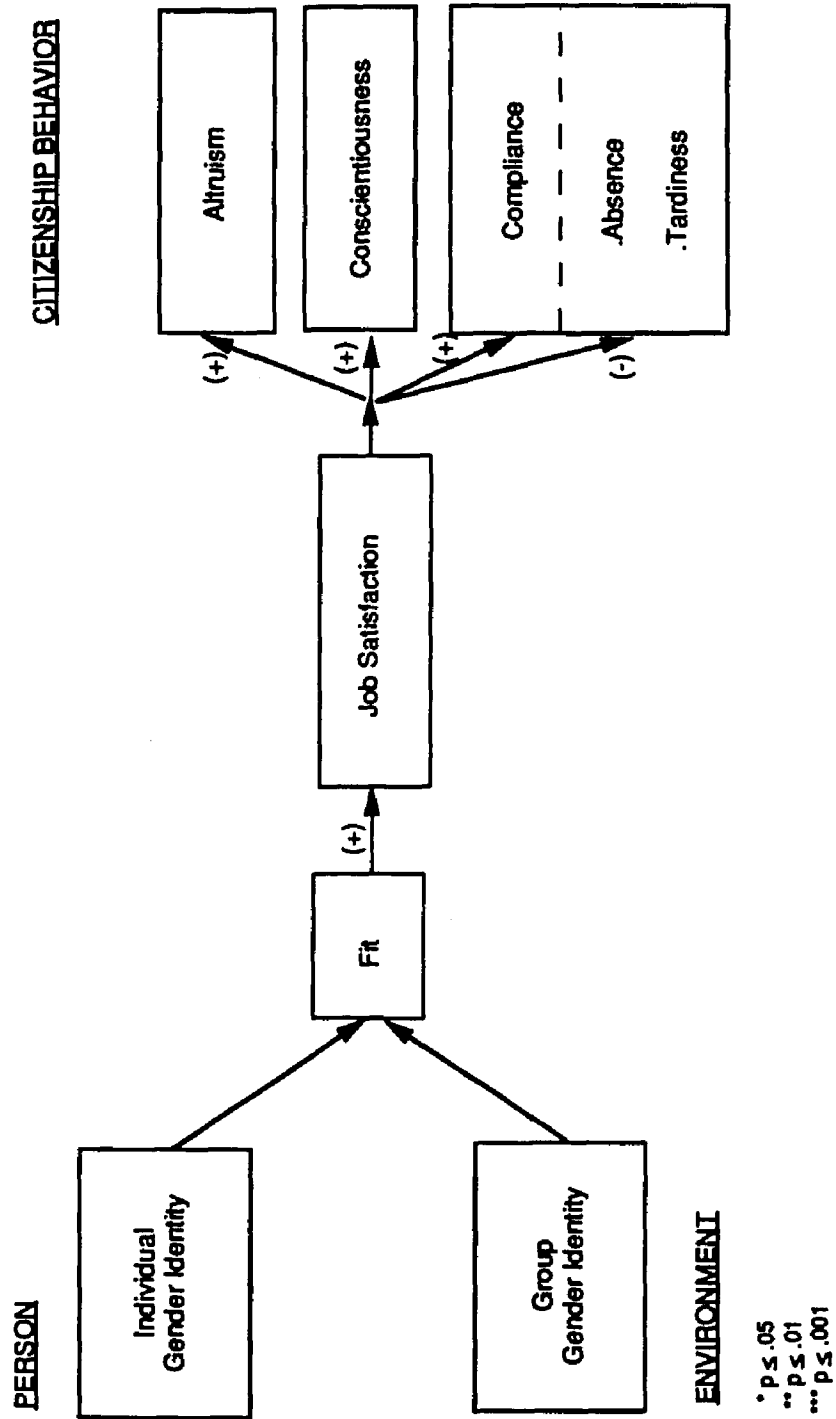
\*  $p \leq .05$  \*\*  $p \leq .01$  \*\*\*  $p \leq .001$

**FIGURE 1**  
**MODEL OF THE IMPACT OF PERSONALITY FIT ON ORGANIZATIONAL CITIZENSHIP**

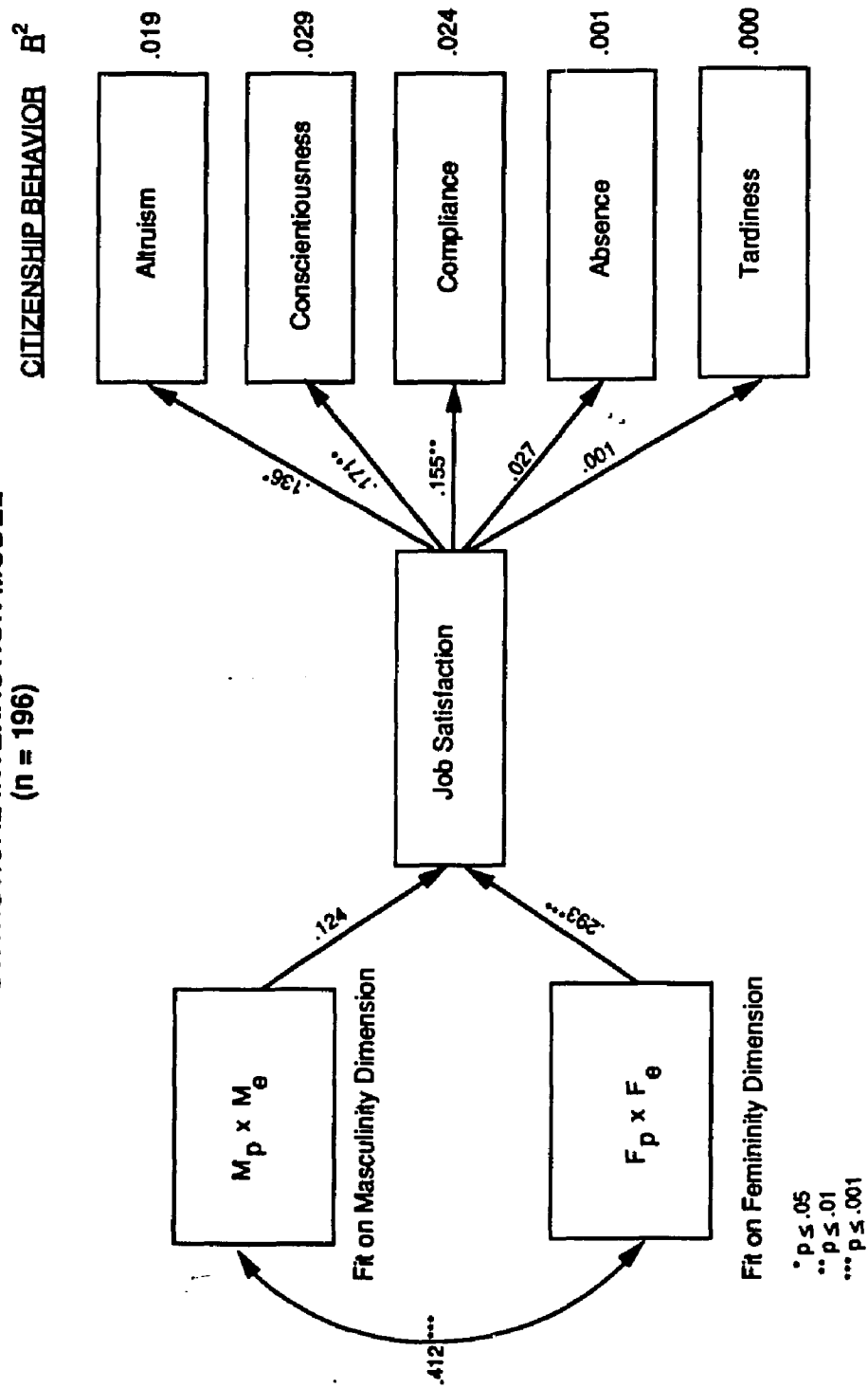


\* p ≤ .05  
 \*\* p ≤ .01  
 \*\*\* p ≤ .001

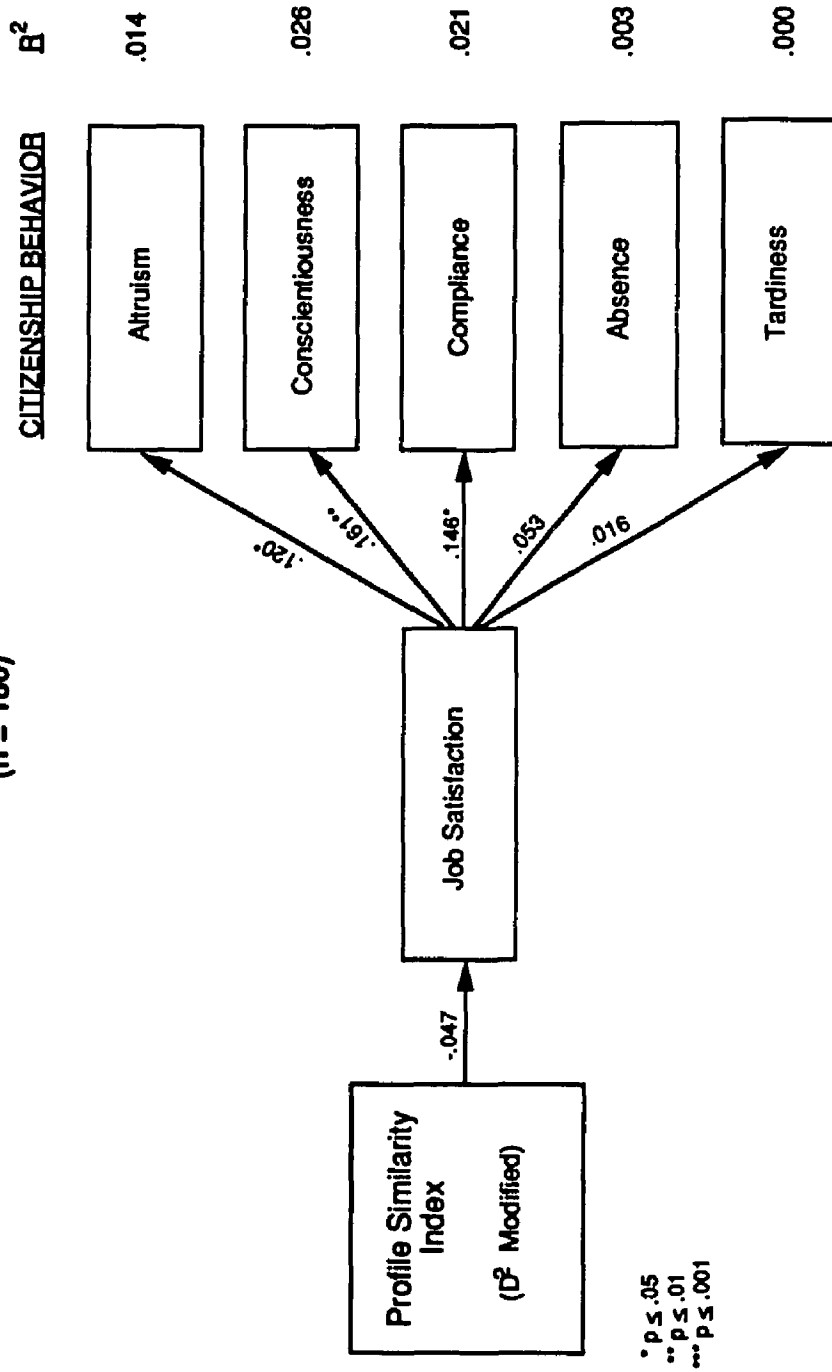
**FIGURE 2**  
**REVISED MODEL OF THE IMPACT OF PERSONALITY FIT ON ORGANIZATIONAL CITIZENSHIP**



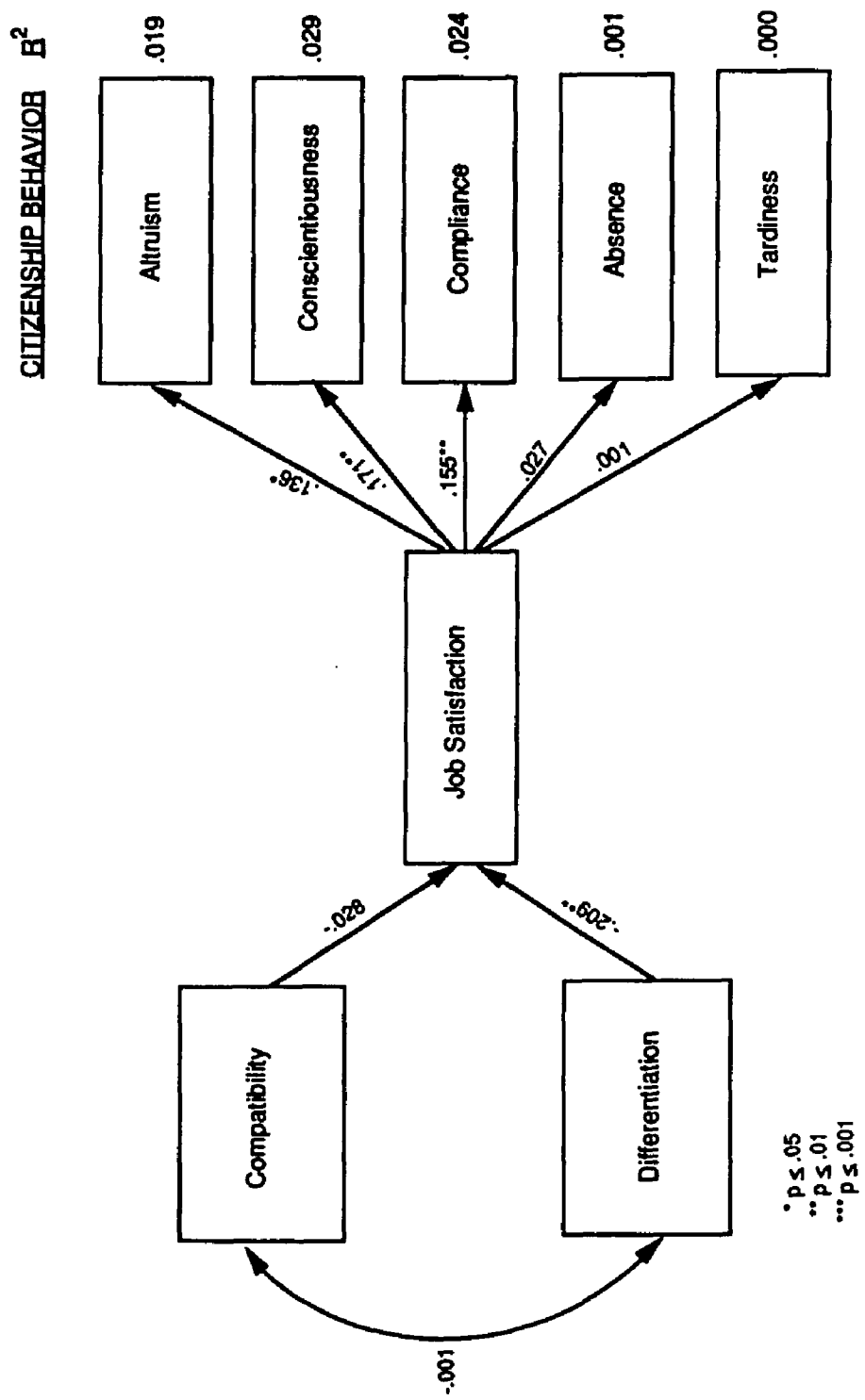
**FIGURE 3**  
**HYPOTHESIZED IMPACT OF PERSONALITY FIT ON ORGANIZATIONAL CITIZENSHIP**  
**STATISTICAL INTERACTION MODEL**  
**(n = 196)**



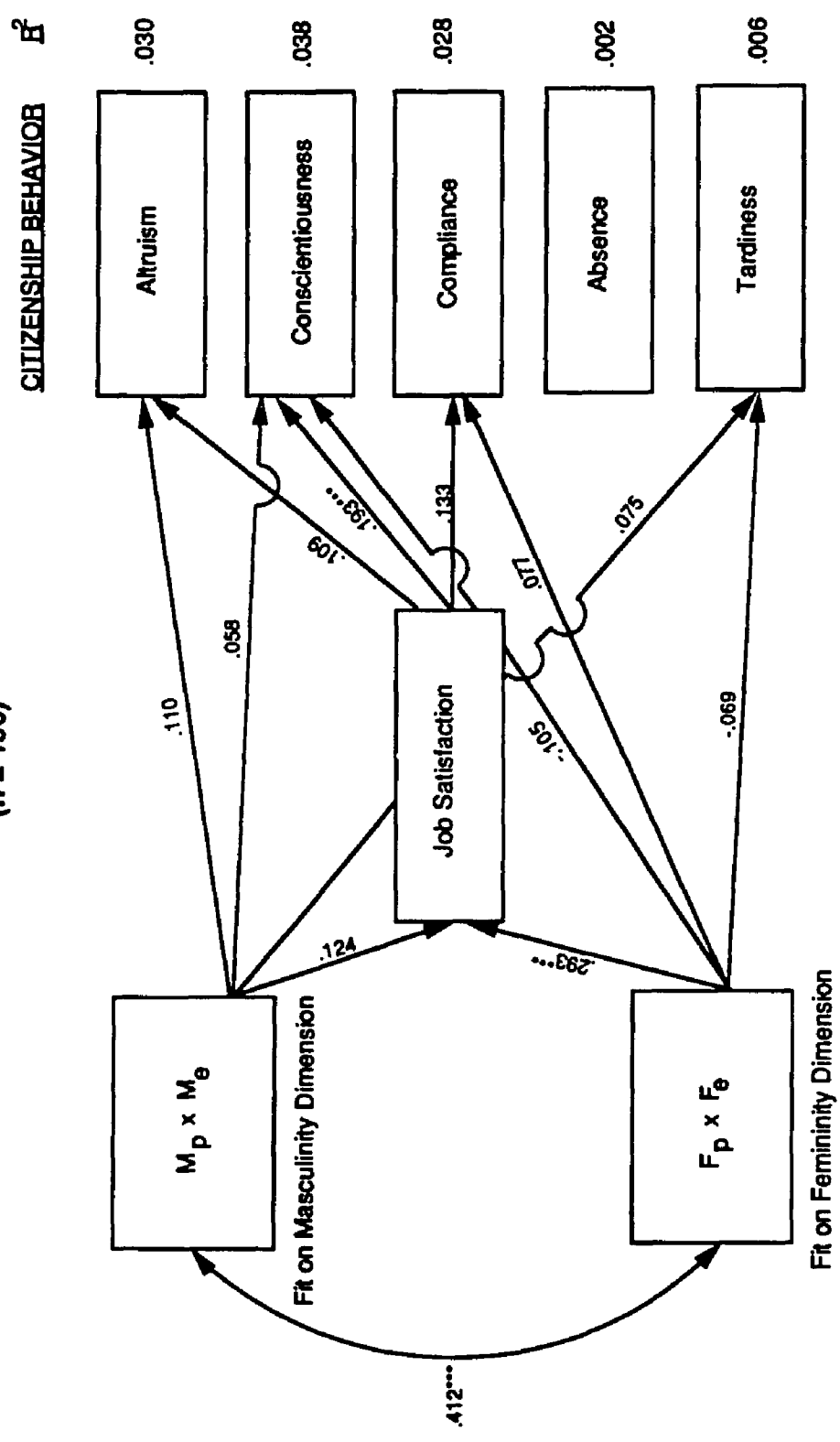
**FIGURE 4**  
**HYPOTHESIZED IMPACT OF PERSONALITY FIT ON ORGANIZATIONAL CITIZENSHIP**  
**PROFILE SIMILARITY INDEX (D<sup>2</sup> MODIFIED)**  
**(n = 186)**



**FIGURE 5**  
**HYPOTHESIZED IMPACT OF PERSONALITY FIT ON ORGANIZATIONAL CITIZENSHIP**  
**COMPATIBILITY-DIFFERENTIATION INDEX**  
**(n = 196)**



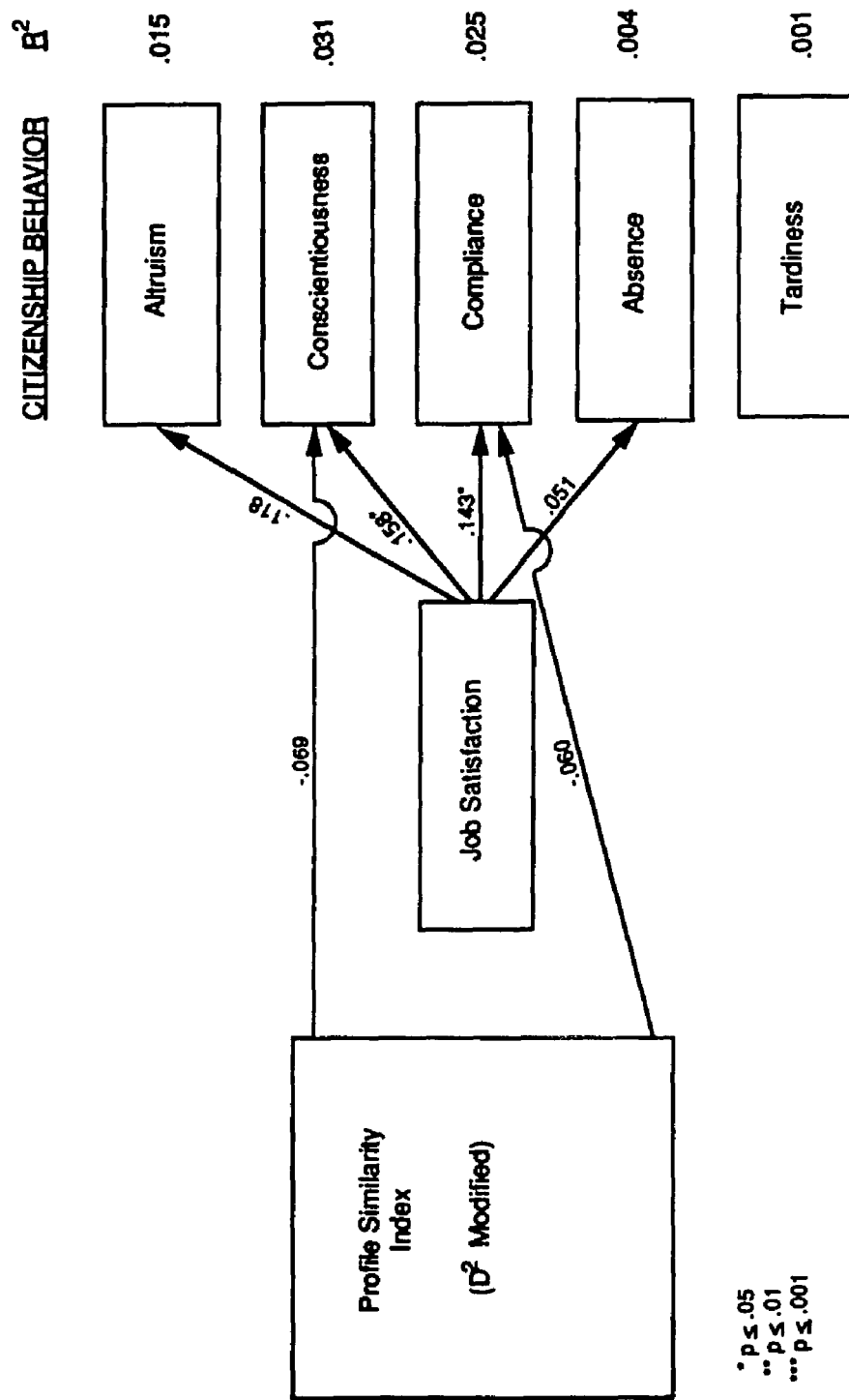
**FIGURE 6**  
**MODIFIED MODEL OF THE IMPACT OF PERSONALITY FIT ON ORGANIZATIONAL CITIZENSHIP**  
**STATISTICAL INTERACTION MODEL**  
**(n = 196)**



\* p ≤ .05  
 \*\* p ≤ .01  
 \*\*\* p ≤ .001

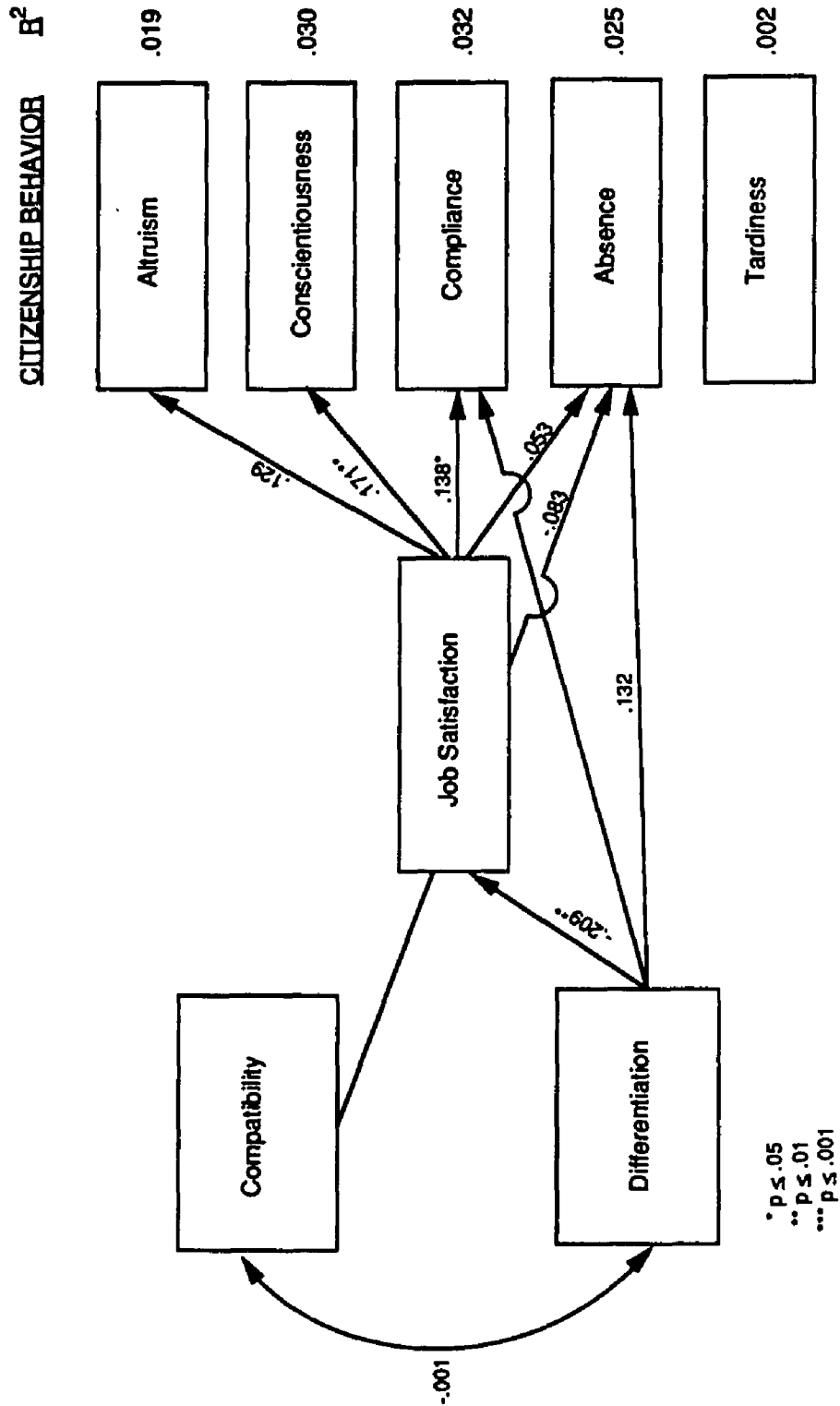


**FIGURE 7**  
**MODIFIED MODEL OF THE IMPACT OF PERSONALITY FIT ON ORGANIZATIONAL CITIZENSHIP**  
**PROFILE SIMILARITY INDEX (D<sup>2</sup> MODIFIED)**  
 (n = 186)



\* p ≤ .05  
 \*\* p ≤ .01  
 \*\*\* p ≤ .001

**FIGURE 8**  
**MODIFIED MODEL OF THE IMPACT OF PERSONALITY FIT ON ORGANIZATIONAL CITIZENSHIP**  
**COMPATIBILITY - DIFFERENTIATION INDEX**  
**(n = 196)**



APPENDIX A

-----Instructions-----

On the next page you will find listed a number of characteristics. We would like you to use those characteristics to describe yourself; that is, we would like you to indicate, on a scale from 1 to 7, how true of you each of these characteristics is. Please do not leave any characteristic unmarked.

For example, if the characteristic is sly:

Write a 1 if it is never or almost never true that you are sly.

Write a 2 if it is usually not true that you are sly.

Write a 3 if it is sometimes but infrequently true that you are sly.

Write a 4 if it is occasionally true that you are sly.

Write a 5 if it is often true that you are sly.

Write a 6 if it is usually true that you are sly.

Write a 7 if it is always or almost always true that you are sly.

Thus, if you feel it is sometimes but infrequently true that you are "sly", never or almost never true that you are "malicious", always or almost always true that you are "irresponsible", and often true that you are "carefree", then you would rate these characteristics as follows:

3 Sly

1 Malicious

7 Irresponsible

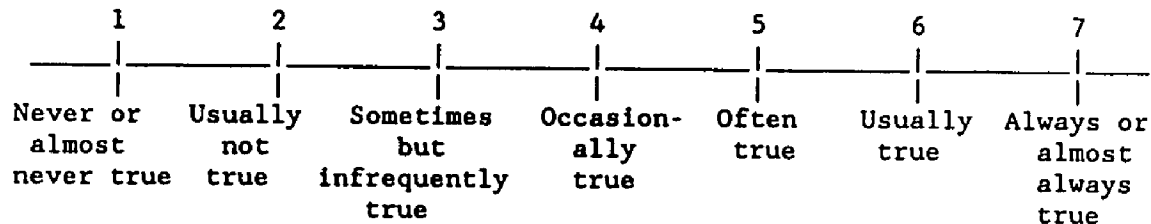
5 Carefree

Again, please mark every characteristic in the space provided next to the item. Do not leave any item unmarked.

---

Please go to the next page.

Use the scale below to describe YOURSELF.



- 
- |                                  |                                   |
|----------------------------------|-----------------------------------|
| ___ Defend my own beliefs        | ___ Have leadership abilities     |
| ___ Affectionate                 | ___ Eager to soothe hurt feelings |
| ___ Conscientious                | ___ Secretive                     |
| ___ Independent                  | ___ Willing to take risks         |
| ___ Sympathetic                  | ___ Warm                          |
| ___ Moody                        | ___ Adaptable                     |
| ___ Assertive                    | ___ Dominant                      |
| ___ Sensitive to needs of others | ___ Tender                        |
| ___ Reliable                     | ___ Conceited                     |
| ___ Strong personality           | ___ Willing to take a stand       |
| ___ Understanding                | ___ Cheerful                      |
| ___ Jealous                      | ___ Tactful                       |
| ___ Forceful                     | ___ Aggressive                    |
| ___ Compassionate                | ___ Gentle                        |
| ___ Truthful                     | ___ Conventional                  |

APPENDIX B

-----Instructions-----

On the next page you will find listed a number of characteristics which could be applied to a work group. We would like you to use those characteristics to describe your work group. That is, we would like you to indicate, on a scale from 1 to 7, how true of your work group you think each of these characteristics is. Please do not leave any characteristic unmarked.

For example, if the characteristic is lazy:

Write a 1 if it is never or almost never true that your work group is lazy.

Write a 2 if it is usually not true that your work group is lazy.

Write a 3 if it is sometimes but infrequently true that your work group is lazy.

Write a 4 if it is occasionally true that your work group is lazy.

Write a 5 if it is often true that your work group is lazy.

Write a 6 if it is usually true that your work group is lazy.

Write a 7 if it is always or almost always true that your work group is lazy.

Thus, if you feel it is sometimes but infrequently true that your work group is "lazy", never or almost never true that your work group is "malicious", always or almost always true that your work group is "irresponsible", and often true that your work group is "carefree", then you would rate these characteristics as follows:

3 Lazy

1 Malicious

7 Irresponsible

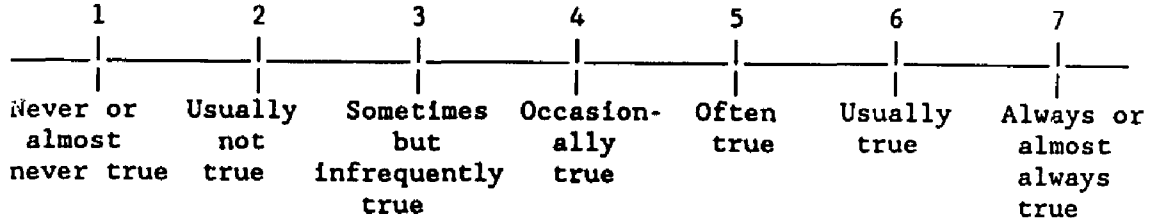
5 Carefree

Again, please mark every characteristic in the space provided next to the item. Do not leave any item unmarked.

---

Please go to the next page.

Use the scale below to describe your WORK GROUP.



- 
- |  |   |
|--|---|
| <p>___ Defend my own beliefs</p> <p>___ Affectionate</p> <p>___ Conscientious</p> <p>___ Independent</p> <p>___ Sympathetic</p> <p>___ Moody</p> <p>___ Assertive</p> <p>___ Sensitive to needs of others</p> <p>___ Reliable</p> <p>___ Strong personality</p> <p>___ Understanding</p> <p>___ Jealous</p> <p>___ Forceful</p> <p>___ Compassionate</p> <p>___ Truthful</p> | <p>___ Have leadership abilities</p> <p>___ Eager to soothe hurt feelings</p> <p>___ Secretive</p> <p>___ Willing to take risks</p> <p>___ Warm</p> <p>___ Adaptable</p> <p>___ Dominant</p> <p>___ Tender</p> <p>___ Conceited</p> <p>___ Willing to take a stand</p> <p>___ Cheerful</p> <p>___ Tactful</p> <p>___ Aggressive</p> <p>___ Gentle</p> <p>___ Conventional</p> |
|--|---|

APPENDIX C1

A.

**READ CAREFULLY**

In the next section, you will be asked to think about your workgroup. What I mean by your workgroup is the people with whom you work most often on your job at (xxxxxxx). For example, due to differences in work schedules, you may only work with 3 or 4 people on a regular basis. In answering the questions in the next section, you should think about those people with whom you work on a regular basis as a group, rather than as individuals. Then, answer the questions as honestly as possible. There are no right or wrong answers.

Now, please go to the next page.

Please go to the next page.

A.

**READ CAREFULLY**

In the next section, you will be asked to ignore the answers you gave regarding your workgroup. Now, we are interested in your thoughts about yourself. That is, by ignoring your previous answers about your workgroup, we want you to recognize the possibility that a workgroup may be made up of different types of people. Some people may be similar to their workgroup, some may not. Please answer the questions as honestly as possible. There are no right or wrong answers.

Now, please go on to the next page.

Please go to the next page.



APPENDIX C2

B.

READ CAREFULLY

In the next section, you will be asked to think about yourself. On the next pages you will find a number of characteristics. We would like you to use those characteristics to describe yourself; that is, we would like for you to indicate how true of you each of these characteristics is. Please answer the questions as honestly as possible. There are no right or wrong answers.

Now, please go on to the next page.

Please go to next page.

B.

**READ CAREFULLY**

In the next section, you will be asked to ignore the answers you gave regarding yourself. Now, we are interested in your thoughts about your workgroup. What I mean by your workgroup is the people with whom you work most often on your job at (xxxxxxxxx). For example, due to differences in work schedules, you may only work with 3 or 4 people on a regular basis. In answering the questions in the next section, you should think about those people with whom you work on a regular basis as a group, rather than as individuals. By ignoring your previous answers about yourself, we want you to recognize the possibility that a workgroup may be made up of different types of people. Some people may be similar to their workgroup, some may not. Please answer the questions as honestly as possible. There are no right or wrong answers.

Now, please go to the next page.

Please go to the next page.

APPENDIX C3

1. Did you have any problems describing your work group using the scale given to you?
  - a. If so, do you remember any particular characteristics that were difficult to assign values to?
2. Did it confuse you to have two similar measures?
3. Would it have been easier to have reversed the order in which you received the scales?
4. On a scale from 1 to 5, with 1 being "not at all similar" and 5 being "very similar", how similar do you think you are to your work group?

APPENDIX D

-----Instructions-----

The purpose of this section is to give you a chance to tell how you feel about your present job at (xxxxxxx), what things you are satisfied with and what things you are not satisfied with.

On the basis of your answers and those of hundreds of other (xxxxxxx) employees, we hope to get a better understanding of the things individuals like and dislike about their jobs.

On the following pages you will find statements about your present job at (xxxxxxx).

- o Read each statement carefully.
- o Decide how satisfied you feel about the aspect of your job described by the statement.

Keeping the statement in mind:

- if you feel that your job gives you more than you expected, check the box under "VS" (Very Satisfied);
- if you feel that your job gives you what you expected, check the box under "S" (Satisfied);
- if you cannot make up your mind whether or not the job gives you what you expected, check the box under "N" (Neither Satisfied nor Dissatisfied);
- if you feel that your job gives you less than you expected, check the box under "DS" (Dissatisfied);
- if you feel that your job gives you much less than you expected, check the box under "VDS" (Very Dissatisfied).

o Remember: Keep the statement in mind when deciding how satisfied you feel about that aspect of your job.

o Do this for all statements. Please answer every item.

Be frank and honest. Give a true picture of your feelings about your present job.

-----

Please go on to next page.

Ask yourself: How satisfied am I with this aspect of my job?  
 VS means I am very satisfied with this aspect of my job.  
 S means I am satisfied with this aspect of my job.  
 N means I can't decide whether I am satisfied or not with this aspect of my job.  
 DS means I am dissatisfied with this aspect of my job.  
 VDS means I am very dissatisfied with this aspect of my job.

-----  
 On my present job, this is how I feel about....

	VDS	DS	N	S	VS
1. The chance to do the kind of work that I do best. ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. The way my supervisor and I understand each other.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. The spirit of cooperation among my co-workers.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. The way I am noticed when I do a good job...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Being able to see the results of the work I do.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. The chance to work alone on the job.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. The chance to do different things from time to time.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. The chance to do work that is well suited to my abilities.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. The chance to be "somebody" in the community.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. The way my boss handles his or her people...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. The competence of my supervisor in making decisions.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. The chance to develop close friendships with my co-workers.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. The way I get full credit for the work I do.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Being able to take pride in a job well done.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Being able to do things that don't go against my conscience.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Ask yourself: How satisfied am I with this aspect of my job?  
 VS means I am very satisfied with this aspect of my job.  
 S means I am satisfied with this aspect of my job.  
 N means I can't decide whether I am satisfied or not with this aspect of my job.  
 DS means I am dissatisfied with this aspect of my job.  
 VDS means I am very dissatisfied with this aspect of my job.

-----

On my present job, this is how I feel about.....

	VDS	DS	N	S	VS
16. The chance to make use of my best abilities..	[ ]	[ ]	[ ]	[ ]	[ ]
17. The way my boss backs his or her people up...	[ ]	[ ]	[ ]	[ ]	[ ]
18. The way my job provides for steady employment.....	[ ]	[ ]	[ ]	[ ]	[ ]
19. The friendliness of my co-workers.....	[ ]	[ ]	[ ]	[ ]	[ ]
20. The recognition I get for the work I do.....	[ ]	[ ]	[ ]	[ ]	[ ]
21. Being able to do something worthwhile.....	[ ]	[ ]	[ ]	[ ]	[ ]
22. The chance to do things for other people.....	[ ]	[ ]	[ ]	[ ]	[ ]
23. The chance to tell people what to do.....	[ ]	[ ]	[ ]	[ ]	[ ]
24. The chance to do something that makes use of my abilities.....	[ ]	[ ]	[ ]	[ ]	[ ]
25. The way company policies are put into practice.....	[ ]	[ ]	[ ]	[ ]	[ ]
26. The way my boss takes care of complaints brought to him or her by his or her people...	[ ]	[ ]	[ ]	[ ]	[ ]
27. My pay and the amount of work I do.....	[ ]	[ ]	[ ]	[ ]	[ ]
28. The chances for advancement on this job.....	[ ]	[ ]	[ ]	[ ]	[ ]
29. The way my co-workers are easy to make friends with.....	[ ]	[ ]	[ ]	[ ]	[ ]
30. The freedom to use my own judgement.....	[ ]	[ ]	[ ]	[ ]	[ ]
31. The way they usually tell me when I do my job well.....	[ ]	[ ]	[ ]	[ ]	[ ]

Ask yourself: How satisfied am I with this aspect of my job?  
 VS means I am very satisfied with this aspect of my job.  
 S means I am satisfied with this aspect of my job.  
 N means I can't decide whether I am satisfied or not with this aspect of my job.  
 DS means I am dissatisfied with this aspect of my job.  
 VDS means I am very dissatisfied with this aspect of my job.

-----

On my present job, this is how I feel about.....

	VDS	DS	N	S	VS
32. The chance to do my best at all times.....	[ ]	[ ]	[ ]	[ ]	[ ]
33. The chance to try my own methods of doing the job.....	[ ]	[ ]	[ ]	[ ]	[ ]
34. The chance to make use of my abilities and skills.....	[ ]	[ ]	[ ]	[ ]	[ ]
35. The personal relationship between my boss and his or her people.....	[ ]	[ ]	[ ]	[ ]	[ ]
36. The working conditions.....	[ ]	[ ]	[ ]	[ ]	[ ]
37. The way my co-workers get along with each other.....	[ ]	[ ]	[ ]	[ ]	[ ]
38. The praise I get for doing a good job.....	[ ]	[ ]	[ ]	[ ]	[ ]
39. The feeling of accomplishment I get from the job.....	[ ]	[ ]	[ ]	[ ]	[ ]
40. Being able to keep busy all the time.....	[ ]	[ ]	[ ]	[ ]	[ ]

APPENDIX E

-----Instructions-----

Listed below are a number of behaviors an employee might engage in at work. Please circle the figure that best describes how characteristic each behavior is of the employee you are describing . Please do not skip any items.

Please clearly print the name of the employee you are describing:

\_\_\_\_\_

	<i>Very characteristic</i>	<i>Somewhat characteristic</i>	<i>Not at all characteristic</i>			<i>Does not apply</i>
1. Helps other employees with their work when they have been absent.	5	4	3	2	1	X
2. Exhibits punctuality in arriving at work on time in the morning and after lunch and breaks.	5	4	3	2	1	X
3. Volunteers to do things not formally required by the job.	5	4	3	2	1	X
4. Takes undeserved work breaks.	5	4	3	2	1	X
5. Takes the initiative to orient new employees to the department even though it is not part of his/her job description.	5	4	3	2	1	X
6. Exhibits attendance at work beyond the norm, e.g., takes less days off than most individuals or less than allowed.	5	4	3	2	1	X

Go on to next page.



	<i>Very characteristic</i>	<i>Somewhat characteristic</i>	<i>Not at all characteristic</i>	<i>Does not apply</i>	
7. Helps others when their work load increases (assists others until they get over the hurdles).	5	4	3	2	1 X
8. Coasts towards the end of the day.	5	4	3	2	1 X
9. Gives advance notice if unable to come to work.	5	4	3	2	1 X
10. Spends a great deal of time in personal conversations.	5	4	3	2	1 X
11. Does not take unnecessary time off work.	5	4	3	2	1 X
12. Assists me with my duties.	5	4	3	2	1 X
13. Makes innovative suggestions to improve the overall quality of the department.	5	4	3	2	1 X
14. Does not take extra breaks.	5	4	3	2	1 X
15. Willingly attends functions not required by the organization, but helps in its overall image.	5	4	3	2	1 X
16. Does not spend a great deal of time in idle conversation.	5	4	3	2	1 X

Please go on to next section.