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The Relationship of Person-Organization Congruence to Occupational Stress Symptoms and Perception of Violations of the Psychological Contract

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ABSTRACT

THE RELATIONSHIP OF PERSON-ORGANIZATION CONGRUENCE TO OCCUPATIONAL STRESS SYMPTOMS AND PERCEPTION OF VIOLATIONS OF THE PSYCHOLOGICAL CONTRACT

Carol C. Bocchino

This study examined relationships between two sets of variables: a Demographic Set (Person-Organization Congruence [P-OC], Age, Gender, Time with Company, and Time in Current Job) and an Employee Outcome Set (psychological contract violations [PCV] and occupational stress). The participants were 98 full-time working adults (52 men and 46 women) from a food flavoring company in the New York metropolitan area.

P-OC was measured with the Organizational Culture Profile (OCP; O'Reilly, Chatman, & Caldwell, 1991). PCV was measured with the Psychological Contract Questionnaire (PCQ; Rousseau, 1990a, 1995). Occupational stress was measured with the Personal Strain Scales of the Occupational Stress Inventory-Revised (PSS/OSI-R; Osipow, 1998). Along with a Demographic Data Sheet, participants completed these instruments during regular working hours.

Canonical correlation analysis identified two significant canonical roots ($F = 3.19$, $p = .0008$; $F = 2.73$, $p = .03$). The results showed the following:

Hypothesis 1 was supported: Lower levels of Psychological Contract Violation (PCV) are associated with higher levels of Person-Organization Congruence (P-OC). The first canonical variate was characterized by a high negative loading on PCV ($r = -.98$) along with high positive loading on P-OC ($r = .86$).

Hypothesis 2 was supported: Greater occupational stress is associated with lower P-OC. The second canonical variate was characterized by a high positive loading on Stress ($r = .99$) along with medium negative loading on P-OC ($r = -.30$).

The first canonical correlation indicates that there is no significant relationship between PCV and the demographic variables of Gender and Time with Company. However, there is a significant relationship between PCV ($r = -.98$) and Age ($r = -.43$) and Time in Current Job ($r = .32$). The second canonical correlation indicates that there is no significant relationship between occupational stress and Age. However, there is a significant relationship between occupational stress ($r = .99$) and Gender ($r = -.35$), Time with Company ($r = .76$), and Time in Current Job ($r = .69$).

Overall, the canonical variates suggest that certain undesirable employee outcomes (PCV and Stress) are associated in different ways with the demographic variables of P-OC, Age, Gender, Time in Current Job, and Time with Company. Specifically, employees who report a higher level of psychological contract violations are more likely to experience a lack of congruence between their own values and the organization's values, be relatively older, and have been in their current job for a relatively shorter length of time. Also, employees who report higher occupational stress symptoms are more likely to be male, to have been in the current job for a relatively longer length of time, and to have been with the company for a relatively longer length of time.

The implications of this research for counseling affect the way counselors have traditionally approached career counseling. This research also suggests some changes in typical management practices.

**THE RELATIONSHIP OF PERSON-ORGANIZATION CONGRUENCE TO
OCCUPATIONAL STRESS SYMPTOMS AND PERCEPTION OF VIOLATIONS OF
THE PSYCHOLOGICAL CONTRACT**

BY

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requirements of the Degree of Doctor of Philosophy
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2001

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Chapter I

INTRODUCTION

The world of work has undergone a radical transformation in the last two decades. Tornow (1988) summarizes what is happening, both inside and outside the organization: Outside the corporation, organizations are facing an uncertain economic future, the threat of hostile mergers-acquisitions, and global competition for customers and resources. Inside, organizations are downsizing, re-structuring, and re-engineering in an attempt to contain costs and stay competitive. From another perspective, Posner and Schmidt (1992) cite the extraordinary developments in information technology, lifestyle changes, and demographic trends that are modifying workforce values, skills, and expectations.

Despite these changes, today's workforce still retains some of the characteristics described by Whyte (1957) two generations ago: "... they talk of the 'treadmill,' the 'rat race,' of the inability to control one's direction" (p. 4). Although these complaints also typify many of the laments heard from today's employees (McLean Parks & Kidder, 1994), one distinguishing feature of Whyte's (1957) workforce was that it had "no great sense of plight; between themselves and [the] organization they believe they see an ultimate harmony . . ." (p. 4). By contrast, a distinct lack of harmony (or congruence) between organization and worker often characterize the nature of the employment relationship today. As both the organization and the workforce react in response to environmental changes, employee values are often incongruent with evolving organizational culture (Chatman, 1991).

Another result of environmental changes is a workforce that has become increasingly vigilant in monitoring the promises made to them by the organization

(Morrison & Robinson, 1997). The sum total of employees' perceptions of promises made to them by their organizations are contained in what has been termed the psychological contract (Rousseau, 1990a). By monitoring the terms of their psychological contracts, employees track their company's compliance with those terms. Unfortunately, the security and rules that once bound the psychological contract between employer and employee have become uncertain (DeMeuse & Tornow, 1990).

Morrison and Robinson (1997) believe that vigilance is most likely triggered in times of turbulence or dramatic changes in the environment. With the collective environmental, organizational, and demographic changes that have occurred, it is expected that vigilance will be increased. It is likely that perceived violations in the psychological contract will increase, as well (Morrison & Robinson, 1997).

This is not good news for organizations. Violation has been found to decrease employees' trust and loyalty toward their employers (Robinson, 1996), lower satisfaction with their jobs and organizations (McLean Parks & Kidder, 1994), and reduce perceived obligations to their employers (Robinson, Kraatz, & Rousseau, 1994). In extreme cases, violation has been found to result in acts of sabotage or violence (Robinson & Bennett, 1997).

It is immaterial that some organizations are forced, out of economic necessity, to change their values or renege on the terms of the psychological contract. Indeed, some changes in the organizational culture and violations of the psychological contract are inevitable if companies are to stay competitive (Morrison & Robinson, 1997). The fact remains, however, that changes in culture and attendant psychological contract violations

have caused the relationship between employee and employer to be dramatically altered. The implications of this for the individual can be serious.

Recently, researchers note an increase in health and disability claims (Kohler & Kamp, 1992) in which workers are reporting a variety of job-related stress symptoms. Some researchers believe that these stress symptoms are in response to overwhelming environmental and organizational changes that are beyond the employee's ability to cope (e.g., French, Caplan & Harrison, 1982; Harrison, 1985). Since these changes are believed to trigger a lack of congruence between individual values and organizational culture (Chatman, 1991), it is probable that employees who experience incongruence will experience stress symptoms as well. By the same token, since changes in the organization and the environment are also believed to heighten vigilance (Morrison & Robinson, 1997), it is conceivable that employees who experience incongruence will perceive more instances where their psychological contracts have been violated.

There is evidence that an organization whose culture is congruent with employees' values is more likely to be effective as measured along various financial dimensions (Denison, 1997). It would stand to reason that congruence between these same variables would have other positive outcomes as well, for example the health of employees and their satisfaction with their psychological contracts. This study will examine how congruence between organizational culture and employee values affects employees' perceptions of their psychological contract and their reported stress symptoms.

The rest of this chapter serves as an introduction to the present study, the purpose of which is to investigate the effects of congruence between organizational culture and

employee values. A statement of the problem highlights the impact of the environmental, organizational, and demographic changes that have taken place over the past decade. The consequences of these changes are cited, making clear the need for the study. Also included in this chapter are the hypotheses that serve as the premise of this investigation. After presenting a section setting forth conceptual and operational definitions of terms, the chapter considers the significance of the study, and outlines some limitation that may qualify some of its findings. The concluding section provides a summary of the chapter.

Statement of the Problem and Need for the Study

The collective impact of internal and external changes, breakthroughs in information technology, global competitive forces, and concurrent changes in the workforce has radically altered the nature of work (Tornow, 1988). As organizations realize the old ways of doing business no longer fit the current environment, many attempt to change the organization's culture to meet their goals. As a result, current employees struggle to determine whether they have a role in this changed culture, or whether they even want to stay with the organization. Also, before joining an organization, potential employees are finding it even harder to determine whether their values are congruent with its culture (Chatman, 1991).

Inextricably linked to the organization's culture are the psychological contracts that are created between the organization and its employees (Rousseau, 1995). Psychological contracts constitute the basis of what the employee and the organization expect to give and to receive in the working relationship (Rousseau, 1990a). Most researchers agree that the contract that historically defined these expectations has

irrevocably changed (e.g., Demeuse & Tornow, 1990; Tornow, 1988). At the same time, many organizations today are attempting to change their culture and influence workforce values in the face of powerful economic and technological forces.

Despite the general consensus that dramatic workplace change has taken place, the following have not been investigated: (a) whether these changes have an effect on an employee's feeling of congruence with the organization's culture; (b) whether employees who experience incongruence with their organization's culture perceive a greater number and more serious violations in their psychological contracts with the organization; and (c) whether employees who experience incongruence with their organization's culture report greater stress symptoms.

The impact of these missing pieces is critical for a number of reasons: The uncertainty created by these collective changes frequently results in negative consequences to both the organization and the workforce (Cartwright & Cooper, 1996). Robinson (1996) found that psychological contract violations were negatively related to a loss of workforce trust in their organizations. McLean Parks and Kidder (1994) report that employees withdraw or withhold contributions (including job performance) to the organization when their contracts are violated. Greenberg's (1990) study revealed that employee theft was often a response to pay cuts workers felt breached the terms of their psychological contracts.

The physical and emotional consequences to individuals in the workforce have been documented in studies on workplace stress and health disability claims. Kohler and Kemp (1992) report that among personal life problems, those caused by an employee's

job are the most potent. Their findings show that stress at work is strongly related to employee burnout and health and performance problems.

A study of employee burnout by the Northwestern National Life Survey of Working Americans on Workplace Stress (1991) shows that job stress is widespread: Four in ten private sector workers say they feel their job is very or extremely stressful, and they are three times as likely as workers reporting low stress to experience anxiety, hopelessness, ulcers, anger, sadness, or depression.

Many of the workplace interventions designed to deal with this uncertainty focus on either organizational (e.g., culture change initiatives) or individual (e.g., stress management programs) solutions (Cartwright & Cooper, 1996). This study recognizes that the negative consequences associated with current turbulence in the work environment are a factor of both organizational and employee variables. The purpose of this study is to examine the interactive relationship between the organization's culture and the individual's values, and how a lack of congruence between company culture and employee values affects how employees perceive violations in their psychological contracts and reported stress symptoms.

Definition of Terms

Organizational Culture

Cooke and Rousseau (1988) define organizational culture as the shared beliefs and values guiding the thinking and behavioral styles of members. They believe that the culture of an organization provides a defined and commonly shared environment to which the individual must adapt in order to fit in and to succeed. A lack of fit or

congruence with the organization's culture would, therefore, reduce the likelihood that an individual is successful in that organization.

Person-Organization Congruence (P-OC)

The term Person-Organization Congruence (P-OC) is used in this study to describe the relationship between an employee's values and the culture of the organization in which the employee works. The definition of P-OC has been blurred in the past because of the different ways that various studies have operationalized the concept. Another problem with the definition arises because, historically, P-OC has been confused with other concepts that describe the congruence or "fit" between people and their environments (Kristof, 1996). Holland (1985), for example, argued that satisfaction and performance are enhanced when the individual selects an occupation that is compatible with his or her traits and skills. Hackman and Oldham (1980) theorized about the fit between worker and job choice. Joyce and Slocum (1984) describe the fit between employee needs and organizational climate.

The term Person-Organization Congruence (P-OC) most suitably describes the harmony, balance, and compatibility between patterns of organizational values (i.e., the organization's culture) and patterns of individual values (i.e., what an individual values in an organization) (Chatman, 1991). Therefore, P-OC will be used in this study to define how well an employee's values fit with the culture of the organization in which the employee works.

There are two ways that Person-Organization Congruence (P-OC) can be measured: (a) Subjective P-OC (SP-OC), and (b) Objective P-OC (OP-OC). These alternative measurement methods require an expanded definition of P-OC.

Subjective P-OC (SP-OC)

Subjective P-OC refers to an individual's assessment of how well his or her own personal values match with the company's organizational values (i.e., its culture). This method of measuring P-OC is also referred to as "perceived fit" (Kristof, 1996). It is an individual's perception of how congruent his or her values are with that same individual's perception of what the organization's values are.

Objective P-OC (OP-OC)

Objective P-OC refers to an individual's assessment of his or her own personal values compared to a measure of the company's organizational values that was obtained independent of that individual's assessment (Kristof, 1996). The most typical way of obtaining this independent assessment of the organization's values is to survey a group of organizational leaders who are knowledgeable about the company's culture and values (e.g., Chatman, 1991). Through rank correlation of the organizational leaders' responses to each item on the survey, their scores are averaged to establish the culture profile for the organization (O'Reilly, Chatman, & Caldwell, 1991).

Psychological Contract

The psychological contract is an exchange concept providing a broad explanatory framework for understanding the mutual expectations that the organization and the employee have of each other (Shore & Tetrick, 1994). It should be noted that, although both the organization and the individual have an understanding of the terms of the psychological contract between them, their understanding of the terms may differ.

This study will focus on the psychological contract that defines the individual's understanding of the promises the organization has made to the employee. The promises

may be recorded or unrecorded, explicit or implied. The psychological contract, as defined in this study, covers the sum total of the employee's understanding of what has been promised to him by the organization (Rousseau, 1990a).

Occupational Stress

The theory of Person-Organization Congruence states that when an individual perceives a lack of congruence, it is a major cause of dysfunctional stress (Matteson & Ivancevich, 1987). Psychological stress was defined by Strelau (1995) as "a state characterized by strong negative emotions, such as fear, anxiety, anger, hostility, or other emotional states evoking distress, accompanied by physiological and biochemical changes that evidently exceed the baseline level of arousal" (p. 218).

Spielberger (1995) defined the stress process as follows: "The process is initiated by a situation or stimulus that is potentially harmful or dangerous (stressor). If a stressor is interpreted as dangerous or threatening, an anxiety reaction will be elicited. Thus, our working definition of stress refers to the following temporal sequence of events: Stressor → Perception of threat → Anxiety state" (p 17).

Strelau's (1995) definition of psychological stress and Spielberger's (1995) explanation of the stress process are used to understand the definition of stress proposed in this study: When an employee perceives a lack of congruence between individual values and the organization's values, the employee will experience certain negative emotions , defined as occupational stress.

Research Questions

The problem under analysis in this study raised a number of research questions:

1. How does a lack of congruence between an employee's values and the organization's values relate to an individual's perception of violations in the psychological contract?
2. How does a lack of congruence between an employee's values and the organization's values relate to an individual's reported stress symptoms?
3. Do demographic variables (e.g., Age, Gender, Tenure) have an effect on these relationships?

Hypotheses

The literature on Person-Organization Congruence (P-OC) (e.g., Blau, 1987; O'Reilly, et al., 1991) and Organizational Culture (e.g., Meglino, Ravlin, & Adkins, 1989; Rousseau, 1990c) suggests that congruence between worker values and organizational values is an important determinant of organizational and individual outcomes. Research has found that higher P-OC leads to more positive outcomes, whereas lower P-OC leads to more negative outcomes (e.g., O'Reilly, et al, 1991).

One critical outcome that today's organizations and employees are striving to achieve is to define the expectations of their psychological contracts, and assure that contract terms are not violated. However, in light of the environmental and organizational changes that have occurred, the potential for psychological contract violation has increased (Rousseau, 1995).

Therefore, the following hypothesis is proposed:

Hypothesis 1: Congruence between worker values and organizational values will be negatively related to an employee's perception of violations in the psychological

contract. Higher congruence is expected to be related to a lower perception of psychological contract violations.

Various studies have examined the effect of P-OC on the levels of stress reported by employees (e.g., Ivancevich and Matteson, 1980; Matteson and Ivancevich, 1982). Invariably, these studies follow Edwards' and Harrison's (1993) conceptualization of fit as either (a) the extent to which the rewards and supplies provided by the environment match the needs and preferences of the individual, or (b) the extent to which the demands and requirements of the environment match the skills and abilities of the individual. Misfit between the person and organization in either of those conceptualizations of congruence is expected to lead to psychological, physical, and behavioral strains (Caplan, 1987; French et al, 1982). It is reasonable to expect, then, that P-OC as defined in this study (i.e., the congruence between the organization's values and the individual's values) will be related to levels of occupational stress reported by individuals. Therefore, the following hypothesis is proposed to explain the relationship between Person-Organization Congruence and an employee's stress symptoms:

Hypothesis 2: Congruence between worker values and organizational values will be negatively related to an employee's reported stress symptoms. Higher congruence is expected to be related to lower reported stress symptoms.

Much of the research in the areas of P-OC, occupational stress and psychological contract violation (PCV) examines how certain demographic variables may affect employee outcomes (e.g., Posner, 1992; Scandura & Lankau, 1997; Sheridan, 1992; Vagg & Spielberger, 1998) However, there is little agreement across studies regarding the relationship of demographic variables to the important variables in the present study

(i.e., P-OC, occupational stress, and PCV). One way to test this is to account for these demographic variables in the present study. Therefore, these demographic variables will be tested to explain the relationship between P-OC, occupational stress, and PCV and the demographic variables, Age, Gender, Time with the Company, and Time in Current Job.

Background of the Problem

Theory of Person-Organization Congruence (P-OC)

The theory of Person-Organization Congruence (P-OC) evolved from empirical studies (e.g., Dawis & Lofquist, 1976) done concerning the Theory of Work Adjustment (TWA). The basic concept looks at a given person in a given environment and assumes that the person has certain requirements that can be satisfied by or through the environment. These requirements (or needs) can be biological (as needed for survival) and psychological (as needed for well being). The environment, too, has requirements or needs that can be met in part by particular persons. The basic tenet of the theory is that the person and the environment attempt to achieve and maintain correspondence with each other, so that the needs of each are met (Dawis & Lofquist, 1984).

The importance of congruence (also called "fit," in the literature), has long been recognized in psychology and organizational behavior (Nadler & Tushman, 1980). Vocational theorists (e.g., Holland, 1985; Super, 1957) argue that satisfaction and performance are enhanced when people select occupations that fit with their traits and skills. Tom (1971) studied the role of individual personality and organizational images in the recruiting process. Results indicated that the greater the similarity between an individual's self-concept and his or her image of an organization, the more that individual preferred that organization.

Allport (1937) was one of the first researchers to contend that people seek out situations that are congruent with their personalities. Empirical results have typically supported the hypothesis that congruence between individuals' personalities and the demands of their occupations are associated with positive affect (Mount & Muchinsky, 1978; Spokane, 1985) and a high likelihood of their staying in their jobs (Meir & Hasson, 1982). The studies of work adjustment conducted by Dawis and Lofquist (1976) (discussed above) employ a similar logic.

Lofquist and Dawis (1969) proposed that satisfaction results from a "harmonious relationship between the individual and his environment, suitability of the individual to the environment and vice versa" (p. 45). This harmonious relationship is thought to benefit both the individual and the organization. Organizations wish to hire persons who can meet the demands of the job, adapt to changes in job demands, and remain loyal to the organization. Prospective employees want to join organizations which make use of their particular abilities and meet their specific needs (Caplan, 1987). Achieving high levels of P-OC through hiring and socialization is believed to be critical in retaining the kind of workforce who can deal with the changes brought about by downsizing, restructuring, and environmental trends (Kristof, 1996).

Schnieder (1987) suggests that person and organization become connected through a cycle of attraction-selection-attrition (ASA). People are attracted to organizations with characteristics similar to theirs, and organizations select people whose attributes are needed to meet organizational goals. People who do not fit the organization tend to leave (voluntarily or otherwise). As a result of the ASA cycle, organizations end up with people who share many common characteristics. This workforce, in turn,

determines the internal environment that defines the organization. Ultimately, the kinds of people attracted to, selected by, and retained in organizations determine the culture and climate of the organization (Ostroff, 1993).

Organizational Culture as a Component of P-OC

The notion of culture is generally acknowledged as a fact of organizational life by managers and has become a critical focus of many organizational change programs (Cooke & Rousseau, 1988). The concept of organizational culture was developed through its similarity to the concept of national culture (Makin, Cooper, & Cox, 1996). It is generally accepted that different national and/or ethnic groups have distinct cultures which may be characterized by their beliefs, attitudes, and value system. This thought can be extended to suggest that distinct organizations can also have distinct cultures (Makin, Cooper, & Cox, 1996).

Organizational culture can be viewed as a set of cognitions shared by members of the organization. These are acquired through social learning and through the organization's socialization processes that expose individuals to an assortment of culture-bearing elements. Individuals observe these elements through the organization's activities and interactions, from information that is directly and indirectly communicated, and through various organizational "artifacts" (Cooke & Rousseau, 1988). For example, the decor and size of offices, the dress code, the manner in which people address each other, the written policies and procedures, the way the organization treats its members, all provide information about the organization's culture (Schein, 1990).

Two key features of culture are direction and intensity. Direction refers to the actual makeup or substance of the culture, reflecting the values, behavioral norms, and

thinking styles that are emphasized. Intensity is the strength of this emphasis (Cooke & Rousseau, 1988). For example, organizations that value innovation (pressure for creativity) versus stability (rules and order) have cultures that differ in direction. However, the influence the culture has on organization members will vary according to its intensity. Although intensity of cultures will vary across organizations, it is believed that there will be some basic consensus among members regarding what is expected in their particular organizations (Cooke & Rousseau, 1988).

There is evidence that culture is important from both the organization's and the individual's perspective. Many organizations believe that it is desirable to establish and maintain a strong corporate culture. This is based on two assumptions: (a) the values of an individual at work will have a direct effect on his or her behavior, and (b) positive outcomes and affect will result when an individual's values are congruent with those of the organization (Meglino et al., 1989).

From the individual's perspective, Schein (1990) expects job seekers to be concerned with organizational values and culture because work represents such an important aspect of their lives. Popovich and Wanous (1982) believe that joining a particular organization is a concrete, public expression of an individual's values. And, Judge and Cable (1997) proposed a system of hypothesized relations between personality and culture preferences, grouped according to the factors comprising the 5-factor model as construed by Costa and McCrae (1992).

One important aspect of culture is that it is closely related to the relationships that develop between employees and their organizations (Makin et al., 1996). This study will examine that relationship as it is understood in terms of the psychological contract.

Makin et al. (1996) believe that culture and the psychological contract are so closely related that it is impossible to say which one causes the other. They argue that the organization's culture determines how people relate, and how they relate determines what sort of contract exists between them. The notion of the psychological contract is discussed next.

Psychological Contract Theory

Early descriptions of the psychological contract (PC) were formulated by Argyris (1960) who looked at the "psychological work contract" (p.96), as a relationship that evolves between employees and their supervisors. Levinson (1962) introduced the concept of reciprocity in the PC by which employees and the company fulfilled expectations of each other. More recently, Rousseau (1990a) defined the PC as a set of expectations held by an employee that stipulates what the individual and the organization expect to give and receive in the working relationship.

Rousseau suggests these expectations develop from sustained interactions or patterns of behavior between the employee and the organization. Examples of such expectations include an understanding that no one will be fired except "for cause," or that promotion and career development opportunities will be available to employees who perform well in their jobs. Psychological contract agreements can be made explicitly (e.g., in personnel manuals or in formal written contracts), or implied by past behavior (e.g., an organizational history of no termination without cause).

The PC is based on perceptions, not necessarily facts. Another feature of the PC is that it is generally (but not necessarily) implicit and unwritten. Nonetheless, an effective

psychological contract, no matter how implicit, must be mutually understood by the individual and the organization and must satisfy each party's needs (Tornow, 1988).

The fact is, however, the employee and employer may each hold different beliefs regarding the existence and terms of a PC. Schein (1980) believes that the PC exists in the eye of the beholder, and it is the beholder's understanding of the terms of the PC that affect both attitudes and behavior. Mutual understanding of the terms of a PC is not a requirement for the existence of a psychological contract (Rousseau, 1990a).

In Argyris' (1960) and Levinson's (1970) time, the psychological contract was fairly simple and straightforward: hard work and loyalty in exchange for job security, fair pay, and promotional opportunities (Kotter, 1973). This contract, however was generated in a period of relatively high and stable employment. The current wave of mergers, acquisitions, and downsizings has caused a shift in expectations and responsibilities of both employer and employee. Organizations still expect employees to be hardworking and loyal, but are asking for more flexibility and more accountability from their workforce. At the same time, employers offer limited (or no) guarantees or expectations of employment security and career development opportunities. This, of course, has affected the terms and conditions of today's psychological contract (Rousseau, 1995).

Organizational Culture, Congruence, and the Psychological Contract.

The organizational and demographic changes just described may cause employees to feel a lack of congruence between their values and the organization's culture. The changes are also likely to lead employees to be vigilant in regard to the terms of their psychological contracts. Therefore, it is important for psychologists to consider the

influence that organizational culture has on the terms of the contract. Rousseau (1990a) suggests that strong organizational cultures, with high agreement on norms and values are more likely to have stable psychological contracts than weaker organizational cultures. Given this presumption, a greater understanding of the organizational culture's impact on the nature and health of psychological contracts is needed. The implication is that as organizations attempt to change their culture to respond to changing environmental conditions, the likelihood of a clash between the new culture and employees' values is increased. The incongruence resulting from this situation can have a significant affect on employees' perception of the terms of their psychological contract.

For example, organizations today are faced with increased competition, often from global markets where labor costs are significantly lower than in the U.S. To meet this challenge, many are relying more on a marketing and service-oriented culture to try to establish an organization's competitive advantage. (Rousseau, 1990a). In an organization whose culture was traditionally paternalistic and employee-focused, such a change is likely to cause incongruence between employees' values and the new organizational culture (Herriot, 1992). By the same token, the expectations organizations have of employees in a marketing and service-oriented culture are quite different than those in a more traditional culture. Since expectations are a prime component in psychological contract theory, this shift in culture is anticipated to affect the employee's perception of the terms of the psychological contract between him and the organization.

Besides its negative effect on the psychological contract, incongruence may have other adverse consequences, particularly for the employee. To the extent that there is a discrepancy between organizational culture and employee values, individuals may

experience dysfunctional stress outcomes and consequences (Matteson & Ivancevich, 1987).

Occupational Stress

As many organizations find themselves trying to function in rapidly changing internal and external environments, occupational stress is becoming a growing problem (Cartwright & Cooper, 1996). Karasek and Theorell (1990) report the annual cost of stress-related illness, loss of productivity, and associated medical compensation claims is estimated to be more than \$150 billion in the United States. Change itself, and the uncertainty that accompanies it, are harbingers of stress for today's workforce.

Some research evidence, however, indicates that most individuals do not cope well with organizational change and suffer long-term adverse effects to their mental health (Ashford, 1988; Cartwright & Cooper, 1993). In their study of middle managers affected by a merger, Cartwright and Cooper (1993) found that 19 percent of the managers in the study reported that they had coped badly with merger stress and had failed to develop any strategy for dealing with the situation.

The rapid advancements in technology that have occurred in the past two decades is another source of stress-provoking change. Sutherland and Cooper (1995) note that although automation has removed some of the physical strain of performing their jobs, in a rapidly changing work environment, workers' skills may quickly become obsolete. They suggest that the constant need to adapt to new equipment and systems has potentially stressful effects on employees. The stress is increased, they propose, when workers fear job loss due to technological changes.

Many organizations today are trying to change their culture to adapt to the technological and environmental changes occurring today (Chatman, 1991). For example, in an effort to be more responsive to customer needs, organizations may give employees more decision-making authority when dealing with customers. If, however, employees are not properly trained to handle new responsibilities, or do not feel emotionally equipped for such empowerment, the change is often stress-inducing (Sutherland & Cooper, 1995).

In response to environmental changes, Reilly, Brett, and Stroh (1993) report that many organizations have downsized their workforce and have become more aggressively competitive. They note that, consequently, individual workloads and fear of job security have increased, as well. These stressful work circumstances have been linked to a wide range of negative outcomes that hurt employees' and their organizations' effectiveness (Cartwright & Cooper, 1996).

Significance of the Study

It is expected that this research will provide a sharply focused study of the relationship between Person-Organization Congruence P-OC and two important variables: (a) perception of violations of the psychological contract, and (b) reported occupational stress symptoms. The major hypotheses in this study propose that lower P-OC is related to higher perceptions of psychological contract violations, and to higher levels of reported stress symptoms. If these hypotheses are supported, the consequences are likely to be detrimental to the employee as well as to the organization.

For example, the response of employees who believe their psychological contract has been violated can range from withholding contributions (such as job performance),

to more serious reactions, like destruction or theft of company property (Greenberg, 1990). Further, the findings of Kohler and Kemp (1992) showed that stress at work is strongly related to employee burnout and health and performance problems.

If the hypotheses in this study are supported, the results can lead to a better understanding of the relationship between organizational culture (as represented by its values) and employee values. Organizations can use this understanding to clarify and communicate their values in recruitment, selection, and socialization of employees. Career counselors can use this understanding to help employees identify and select organizations whose values are congruent with their own, avoiding the potential consequences of P-OC misfit.

Limitations of the Study

The need for a study to examine the effects of person-organization congruence on an employee's perception of psychological contract violations and employee stress symptoms is clear. However, this study has limitations. The first limitation is that this investigation describes the relationship of person-organization congruence to perception of violations in the psychological contract among a sample of members of one organization. Although this organization was selected because it has been affected by many environmental and organizational changes, the results of this investigation are limited to this organization and to the sample of its workforce who participated in the study.

The second limitation is that the data are based on employees' self-report. Self-report instruments are particularly vulnerable to subjects' attempts to create a favorable impression (Gynther & Green, 1982). The types of instruments used in this study,

however, were selected because their items are worded to give consideration to impression management issues.

Summary

This chapter introduced the purpose of this study which is to examine the relationship of lower person-organization congruence (P-OC) to two employee outcomes: (a) perception of violations in the employee's psychological contract with the organization; and (b) employee's reported stress symptoms (occupational stress).

The Background of the Problem and Need for the Study examined the environment in which the present study is being conducted: The collective force of organizational change, environmental change, and simultaneous changes in the workforce has created a turbulent workplace where uncertainty is the order of the day. As organizations try to transform their culture to adapt to these changes, employees often experience a clash between their values and the new values of the organization. This frequently produces feelings of disharmony or incongruence on the part of employees.

Compounding the lack of congruence between the organization's culture and employee values, workers often find that the contract they thought they had with the organization is no longer secure. The psychological contract, that is, what employees feel was promised them by the organization, has also been altered in response to organizational, environmental, and workforce changes. Employee responses to perceived violations in the psychological contract can range from lack of commitment to the organization to acts of violence and sabotage against the company. Even if employee behavior does not result in such negative consequences to the organization, the physical and psychological consequences to individuals who experience incongruence and

violations in their psychological contracts can result in an increase in turnover and health disability claims.

Two limitations of the study were discussed in this Chapter. Strategies were proposed to counter these limitations.

Chapter II

LITERATURE REVIEW

This study examines how a lack of congruence between an organization's culture and an employee's values affects two outcomes: (a) an employee's perceptions of psychological contract violations, and (b) an employee's reported stress symptoms. The review that follows summarizes research in each of these areas and is divided into four sections: (a) Organizational Culture, (b) Person-Organization Congruence, (c) the Psychological Contract, and (d) Occupational Stress. The final section in this Chapter will summarize and evaluate the results of the literature review.

Organizational Culture

Although the concept of organizational culture was discussed by social psychologists and management researchers as early as the 1940's, the importance of the concept to organizational life was not widely acknowledged until the early 1980's (Szumal, 1998). At that time, two works were published that popularized the notion of organizational culture: In Search of Excellence by Peters and Waterman (1982) and Corporate Cultures by Deal and Kennedy (1982). The success of these books generated others (e.g., Ott, 1989; Schein, 1985), and numerous studies of organizational culture were undertaken (e.g., Cooke & Rousseau, 1988; Klein, Masi, & Weidner, 1995; Lahiry, 1994; Sheridan, 1992).

Levels of Culture

Much of the writing on organizational culture has attempted to define a theory of organizational culture. Most of these theories view culture as having a number of layers

or levels which range from aspects of culture that are largely unobservable, to those aspects that are more overt (Rousseau, 1990c).

For example, Schein (1985) proposes four levels of culture: (a) basic assumptions among organization members about what the appropriate behaviors in a given situation should be, (b) values held by organization members which determine beliefs about how things ought to be and what is important in the organization, (c) norms which guide appropriate behavior in varying organizational situations, and (d) artifacts which are the externally visible symbols of the organization's culture, including observable behaviors and written policies and procedures of the organization.

Hofstede (1991) offers a slightly more complex view of culture which he derives from the notion of national culture. He, too, defines four layers of culture:

1. Symbols, which are the words, gestures, pictures and objects that are important and have special meaning only to those inside the culture. These include forms of dress, hairstyle, flags, and status symbols.

2. Heroes, which are persons, living or dead, real or imaginary, who possess characteristics that the culture values highly. These often include the founder of the organization or other people who are believed to have influenced the organization's history and development.

3. Rituals, which are considered socially essential within the culture and are, therefore, carried out simply for their own sake. These include forms of greetings (e.g., military salutes) or special ceremonies (e.g., retirement dinners).

4. Values, which Hofstede believes are at the core of the culture and are really what holds it together. Hofstede defines values as broad tendencies to prefer certain

states of affairs over others. He believes that cultural values will be held in common by most individuals who are part of the culture.

Others (e.g., Denison, 1997; Kotter & Heskett, 1992) present similar interpretations of levels of culture. Despite the inclination of most researchers to partition culture into separate and distinct levels, Kotter and Heskett (1992) point out that each level has a natural tendency to influence the other. For example, a commitment to customers (shared values) influences how quickly individuals in the organization tend to respond to customer complaints (norms of behavior). They suggest that causality can flow in the other direction as well. For example, when employees begin to interact with customers and see their problems and needs, they often come to value customer satisfaction more.

The level of culture noted most consistently across researchers' work is the one which examines values. The importance of values as a component of culture stems from the belief that organizational values underlie the beliefs, norms, behaviors, and other elements of culture in an organization (Hofstede, 1991). Further, organizational values and individual values can be directly compared to assess value congruence between the organization and its employees. For these reasons, this study will focus on the values component of organizational culture.

Kotter and Heskett (1992) note that a particular set of values can vary greatly in different companies. For example, in some organizations, cultural values support cooperation and employee well-being. In others, cultural values for technological innovation drive behavior. In still others, cultural values support competition and attainment of profit. The fact that the content of the culture may be dramatically different

across organizations relates to two other variables that have been examined in organizational culture research: direction and intensity of the culture.

Direction and Intensity of Cultures

Cooke and Rousseau (1988) define direction as the content of the culture, represented by the values, behavioral norms, symbols, and thinking styles it emphasizes. They define intensity as the strength of this emphasis. Cultures that vary in direction exhibit different values, behavioral norms, symbols, and thinking styles. Cultures that vary in intensity differ in the degree of consensus found among organization members regarding what the culture emphasizes.

Intensity of Organizational Culture

Despite the popularity of the organizational culture concept, not all organizations have a strong dominant culture. Cooke and Rousseau's (1988) study illustrated that organizations undergoing strategic or structural transition often have relatively flat profiles with no particularly characteristic culture style. They also found in many organizations a tendency toward subculturalization. Their results suggest that subcultures develop as a result of differences in rewards, goals, and values across levels, functions, and units within the same organization. Organizations with weak dominant cultures can have strong subcultures, as was found in Cooke and Fisher's (1985) study of the Federal Aviation Administration.

Hofstede, Neuijen, Ohayv, and Sanders (1990) conducted a study of 20 divisions within 10 different organizations in Denmark and the Netherlands. They found that shared perceptions of daily practices (e.g., conventions, customs, habit, mores, traditions, etc.) are the elements most often listed as the basis of an organization's culture.

However, their findings suggest employee values were at the core of the organization's culture and differed more according to nationality, age, and education than according to organizational membership, per se.

Direction of Organizational Culture

There are numerous ways to describe the content or direction of an organization's culture. There are two distinct, yet similar approaches, and much of the research that deals with organizational culture uses variations on these approaches. One approach assesses behavioral norms to determine the direction of culture; the other assesses organizational values.

Behavioral norms as direction of culture. Behavioral norms are the consciously-held beliefs shared by members of an organization that most directly influence their attitudes and behavior (Szumal, 1998). All members understand that certain behavioral norms are expected of them in order to fit in and succeed within their organization. As a component of culture, the behavioral norms of a particular organization can be identified and assessed to understand how the culture is shaped by the behavioral norms of its members.

Cooke and Lafferty (1986) developed an instrument, the Organizational Culture Inventory (OCI), which assesses a set of 12 behavioral norms that the authors suggest interpret the direction of an organization's culture. These behavioral norms are distinct but interrelated. They are placed around a circumplex, with their proximity reflecting their expected degree of association. The circumplex is divided into three clusters, each containing 4 of the 12 behavioral norms measured by the OCI. To assess behavioral

norms, respondents are asked questions about how people in their organizations are expected to carry out their work and interact with others.

Although the OCI is a widely used culture assessment tool, and has good levels of validity and reliability (Szumal, 1998), its focus on behavioral norms does not allow investigation of the values that underlie behavior. Further, the OCI suggests a pattern of behavioral norms that purport to identify the "ideal" organizational culture. If an organization's behavioral norms deviate from the "ideal" pattern, the authors of the OCI suggest that culture change initiatives be undertaken to shape behaviors (Cooke & Lafferty, 1986). This approach assumes that the behaviors of the "ideal" organizational culture should be the same across all organizations, which may not hold true for different types of industries.

In the OCI Interpretative and Development Guide, Szumal (1998) explicates how the OCI was designed to generate a picture of an organization's culture, characterized by three main culture patterns:

1. Constructive Cultures: Encourages employees to interact with others and approach tasks in ways that will help them meet higher-order satisfaction needs. The following behavioral norms dominate in Constructive cultures: (a) Achievement: members set challenging but realistic goals, establish plans to reach these goals, and enthusiastically pursue them; (b) Self-Actualizing: members value creativity, quality over quantity, and individual growth; (c) Encouraging: members are supportive, constructive, and open to influence in their dealings with one another, and (d) Affiliative: members place high priority on constructive interpersonal relationships and are friendly, open, and sensitive to the satisfaction of their work group (Szumal, 1998).

2. Passive/Defensive Cultures: Members believe they must interact with people in ways that will not threaten their own security. The following behavioral norms dominate in a Passive/Defensive culture: (a) Approval: conflict is avoided and interpersonal relationships are superficially pleasant. Members believe they must agree with, gain the approval of, and be liked by others; (b) Conventional: conservative, traditional, and bureaucratically controlled. Members believe they must conform, follow the rules, and make a good impression; (c) Dependent: hierarchically controlled and non-participative. Decision making is centralized, and members believe they must do as they are told and clear all decisions with superiors; and (d) Avoidance: emphasis is on punishment for mistakes rather than on rewards for success. The negative reward system leads to shifting responsibilities to others and avoiding any possibility of being blamed for a mistake (Szumal, 1998).

3. Aggressive/Defensive Cultures: Members are expected to approach tasks in forceful ways to protect their status and security. The following behavioral norms dominate in Aggressive/Defensive cultures: (a) Oppositional: confrontations prevail and negativism is rewarded. Members gain status and influence by being critical and opposing ideas of others; (b) Power: descriptive of non-participative organizations structured on the basis of hierarchy and position authority. Members are rewarded for taking charge, controlling subordinates, and being responsive to their own superiors; (c) Competitive: winning is valued and members are rewarded for out-performing one another. Members operate in a win-lose framework and believe they must work against (rather than with) peers to be noticed; and (d) Perfectionistic: perfectionism, persistence,

and hard work are valued. Members believe they must avoid all mistakes, keep track of every detail, and work long hours to attain narrowly defined objectives (Szumal, 1998).

Cooke and Rousseau (1988) used the OCI to determine if there are significant differences across organizations in the direction of their cultures with respect to norms and expectations. Data from three organizations and 1,085 individuals indicated that there was agreement within organizations regarding perceived norms and expectations and significant differences across organizations. The amount of intraorganization agreement, however, was not great and varied across cultural styles. For example, agreement was lower for the Aggressive/Defensive cultures, and relatively higher for Constructive and Passive/Defensive cultures. These results, therefore, suggest that the intensity of the cultures of the organizations in this sample varies; some have relatively strong cultures while others have very weak cultures. Furthermore, their results indicate that there was consensus across all organizations regarding the behavioral norms and expectations that members believe to be ideal: When asked what behavioral norms their organization should follow, members invariably agreed on norms that supported the Constructive culture style.

Organizational values as direction of culture. Organizational values are another aspect of organizational culture that researchers have used to define the direction of culture (Rousseau, 1990c). In fact, Hofstede et al. (1990) believe that one of the more fundamental and enduring aspects of organizational culture are the values which form the basis for social expectations or norms. As a component of culture, the values of a particular organization can be identified and assessed to understand how the culture is shaped by the values of its members (O'Reilly et al., 1991).

O'Reilly et al. (1991) conducted a study of organizational culture which suggests that, based on their values, individuals prefer particular organizational cultures, and these cultures can be defined. They used a more descriptive approach than Cooke and Lafferty (1986) did with the OCI. In their studies of organizational culture, O'Reilly et al. (1991) used a Q-sort procedure (Block, 1978). This method used cards with value statements written on them to develop a profile of values which describes respondents' organizations. The instrument they used is the Organizational Culture Profile (OCP; O'Reilly et al., 1991) which contains 54 value statements (e.g., quality, respect for individuals, flexibility, risk-taking) that they derived from a review of academic and empirical writings on organization values and culture (e.g., Deal & Kennedy, 1982; Schein, 1985). Respondents sort the 54 value statements into nine categories, placing fewer items in the extreme and more items in the middle categories. The question respondents were asked to keep in mind while sorting the cards was "How desirable is it for this attribute to be a part of my ideal organization's value system?" The requested distribution across the nine categories for the card sort is 2-4-6-9-12-9-6-4-2.

O'Reilly et al.'s (1991) research with the OCP resulted in eight interpretable patterns (direction) of organizational culture: (a) Innovation: cultures that value risk taking and experimentation rather than stability or security; (b) Attention to detail: cultures that value precision and analytical methods; (c) Orientation toward outcomes/results: cultures that value achievement, are demanding and results oriented, and promote high expectations; (d) Aggressiveness/Competitiveness: cultures that value aggressiveness and foster competition; (e) Supportiveness: cultures that value information sharing and praise good performance; (f) Emphasis on growth/rewards:

cultures that value high pay for performance and professional growth; (g) Team orientation: cultures that value teamwork and promote collaboration; and (h) Decisiveness: cultures that value predictability and low conflict.

The primary benefit of the OCP is that it focuses on values which, as Hofstede (1991) and others (e.g., O'Reilly, et al., 1991; Schein, 1985) believe are at the core of organizational culture and what holds it together. Further, values are interpretable at both the Organization (O) and the Person (P) level using the same instrument. Finally, values have been found to be relatively stable over time (Rokeach, 1973).

One possible limitation of the OCP is that it utilizes the Q-sort methodology (Block, 1978) which is not as familiar to respondents as the typical paper and pencil survey. This problem, however, can be eliminated with clear instructions for proper administration and use.

Research on Organizational Culture and Individual Outcomes

Despite general agreement that, in most instances, a corporate culture can be defined according to the values or norms of the organization, there is some disagreement with regard to what effect, if any, a particular type of culture has on organizational and individual outcomes. For example, Rousseau (1990b) studied whether certain types of organizational cultures are linked to organization success and individual satisfaction. Her population consisted of a cross-sectional sample of 32 geographically dispersed local units of a nationwide not-for-profit organization. She investigated differences in normative beliefs between high and low fund-raising units, and relationships between these beliefs and member attitudes and perceptions. Participants were permanent staff members in each unit from communities that raised the greatest amount of funds

annually. Performance was assessed by the dollar amount of funds raised annually, adjusted for community wealth (net personal income). Performance data were for the most recently completed fund-raising campaign.

Her findings indicated a significant and negative relationship between dollar amount of funds raised and Passive/Defensive cultures. Correlations between dollar amount of funds raised and Constructive cultures, on the other hand, were positive, but not statistically significant. At the individual level, Constructive cultures correlated strongly and positively with role clarity, fit, satisfaction, propensity to stay, and recommendation of the organization to someone like one's self. Constructive cultures correlated negatively with role conflict and accommodation. In contrast, Passive/Defensive and Aggressive/Defensive cultures correlated positively with role conflict and accommodation, and negatively with the more desirable member responses and perceptions.

Cooke and Szumal (1993) provide support for the belief that culture affects the satisfaction and performance of organization members. They reviewed the reliability and validity of the OCI using data provided by 4,890 respondents across a number of studies. Data from two samples showed that the type of organizational culture is related to the levels of satisfaction and stress reported by members of the organization: Constructive cultures were strongly associated with satisfaction and low stress, Passive/Defensive cultures were associated with dissatisfaction and high stress; and Aggressive/Defensive cultures were weakly related to dissatisfaction and stress.

Klein et al. (1995) examined how organizational culture styles directly impact perceptions of service quality and employee performance. Results showed a significant

and positive relationship between perceived quality and Constructive cultures. The relationship between perceived quality and Aggressive/Defensive cultures is both positive and statistically significant. The relationship between perceived quality and Passive/Defensive cultures is negative but not statistically significant.

With regard to the relationship between culture type and performance, a significant and positive relationship between performance and Constructive culture was shown. The relationship between employee performance and the Aggressive/Defensive styles was not statistically significant. A significant and negative relationship was evidenced between employee performance and Passive/Defensive culture. In summary, perceived quality of outcomes related strongly and positively to the Constructive culture. Perceived quality of service also related positively to the Aggressive/Defensive culture. Constructive cultures were associated with higher levels of employee performance, and Passive/Defensive cultures were associated with lower levels of employee performance.

One study, however, that refutes this point is Lahiry's (1994). This research used the OCI to assess the culture in a large company operating in India's public sector. This company had eight units operating under three divisions, and focused on a random, stratified sample of managers across the eight units. Statistical analysis of the aggregated data found no significant difference among the culture patterns of the three divisions, suggesting that the organization had a strong culture. Managers across divisions had similar perceptions of the organization norms and expectations for behavior. In short, work values were widely shared by members across all organizational divisions. Most of the norms and values supported by members of this company were those thought to be indicative of a Constructive culture.

Next, Lahiry examined the relationship between the Constructive culture type and various kinds of employee commitment:

1. Affective commitment refers to employees' emotional attachment to the organization. Employees with strong affective commitment remain with the organization because they want to do so.

2. Continuance commitment refers to the costs that employees associate with leaving the organization. Employees with strong continuance commitment remain with the organization because they need to do so.

3. Normative commitment refers to employees' feelings of obligation to remain with the organization. Employees with strong normative commitment remain with the organization because they feel they ought to do so.

The three divisions differed significantly in the level of commitment of their employees. Results showed that a Constructive culture pattern was not found to be related to commitment. This finding seems to contradict earlier research on links between positive outcomes and Constructive cultures. This result suggests that the circumstances that are likely to make an individual feel committed to an organization may be only marginally related to an organization's culture. The fact that Lahiry's study was conducted in India provides support for Hofstede's (1991) conclusion that employee values differed more according to nationality, age, and education than according to organizational membership, *per se*.

Perhaps the findings of Rousseau (1990c) explain possible reasons for the inconsistent results found in various studies. Rousseau suggests that organizational norms can vary in their impact on or benefit to the organization, depending on the

organization's strategy. For example, research on behavioral norms of high-risk organizations, such as nuclear power plants, military organizations, and air traffic control operations, suggests the norms promoting reliability (e.g., avoidance of error, high predictability) dominate norms promoting performance (e.g., growth, innovation) in these organizations.

However, Cooke and Rousseau (1988) postulate that in non-high-risk firms such as commercial businesses and service organizations, goals of growth and innovation better serve the organization's strategic objectives than concern with error avoidance and predictability. Indeed, their findings indicate that members of different organizations agree that the ideal cultures for their firms would promote achievement-oriented, affiliative, humanistic, and self-actualizing thinking and behavioral styles of the Constructive culture style.

Several other studies have shown a relationship between the direction of an organization's culture and employees' affective outcomes. Odom, Box and Dunn, (1990), Quinn and Spreitzer (1991), and Sheridan (1992) reported that organizational cultures characterized as people oriented, supportive, and personal were associated with positive affective outcomes including job satisfaction, organizational commitment, and intentions to remain in the organization. Odom et al. (1990) and Quinn and Spreitzer (1991) also report that innovation-oriented cultures may be associated with similar positive outcomes.

Current research on organizational culture has focused primarily on how the direction of culture (i.e., whether the culture favors one set of values, beliefs, or norms over another) affects organization and individual outcomes. Many studies (e.g., Cooke &

Szumal; 1993; Rousseau, 1990c) indicate that so-called favorable types of cultures (e.g., Constructive, Supportive, Innovative) promote favorable organizational and individual outcomes. However, several others (e.g., Klein et al., 1995; Lahiry, 1994) show mixed results. Further, Rousseau (1990c) suggests that presumed benefits of any particular culture type may depend more on the type of organization (e.g., nuclear power plants versus commercial businesses) than on the direction of the organization's culture.

Given this perspective, the present study will not try to assess if or how a particular type of culture is related to various outcomes. Rather, this study will focus on whether the congruence between an organization's cultural values and an employee's personal values is related to two affective outcomes: (a) perceptions of psychological contract violations and (b) reported stress symptoms.

Research on the positive effects of value congruence has shown conflicting results. Although there is some support at the theoretical level, empirical studies have not found incontestable support that value congruence leads to positive outcomes. Representative research on Person-Organization Congruence is discussed below.

Person-Organization Congruence (P-OC)

Person-Organization Congruence (P-OC) is broadly defined by most researchers as the compatibility between individuals and organizations (Kristof, 1996). Compatibility, however, may take a number of forms, according to Kristof. She summarized P-OC as occurring "when (a) at least one entity provides what the other needs, or (b) they share similar fundamental characteristics, or (c) both" (p. 4). Kristof further clarifies the P-OC concept to distinguish (a) supplementary versus complementary

fit and, (b) needs-supplies versus demands-abilities. These concepts can be illustrated in Figure 1, and are discussed below.

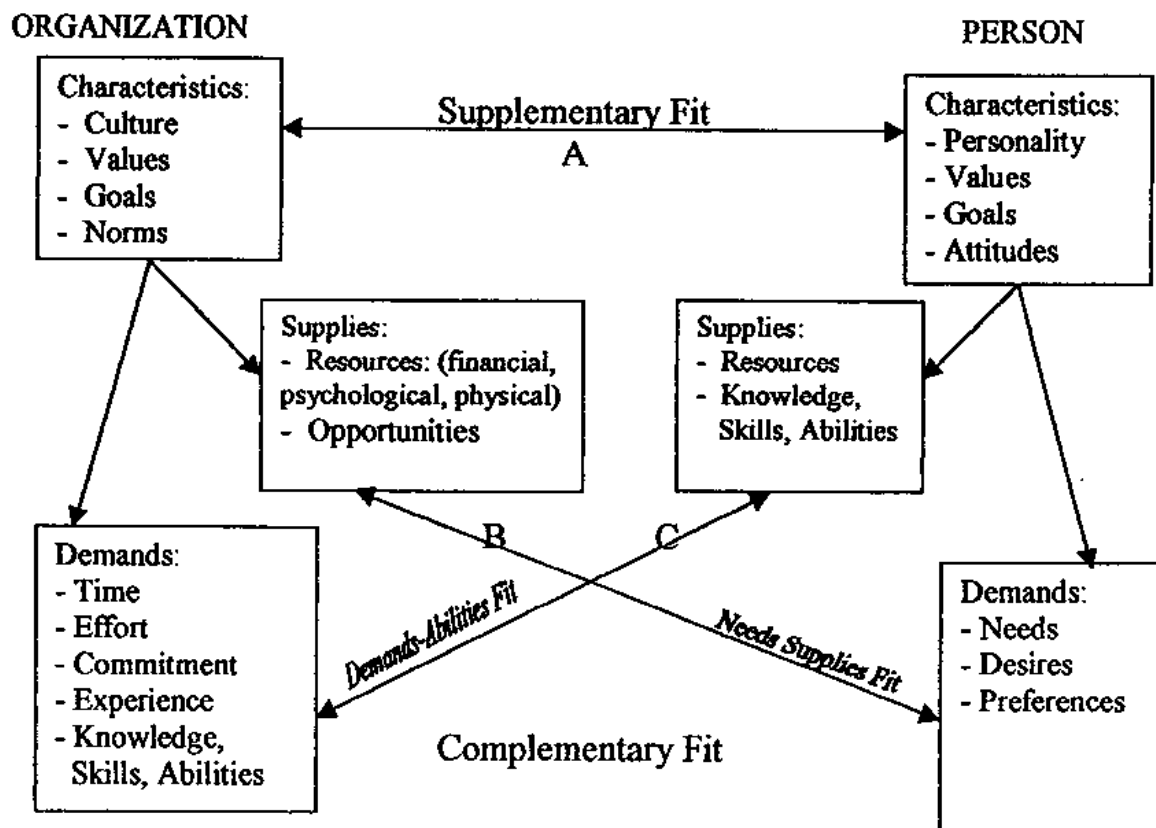


Figure 1: Conceptualizations of Person-Organization Congruence¹

¹From "Person-Organization Fit: An Integrative Review of its Conceptualizations, Measurement, and Implications," by Amy Kristof-Brown, 1996, *Personnel Psychology*, 49, p. 4. Copyright 1996 PERSONNEL PSYCHOLOGY, INC. Adapted with permission.

Supplementary Fit

Supplementary fit occurs when employees possess characteristics which are similar to those of the organization (Muchinsky & Monahan, 1987). Typical organizational characteristics include its culture, comprised of its values, goals, and

norms. Typical employee characteristics include individual values, goals, personality, and attitudes. Supplementary fit is said to exist when there is congruence between the organization and the employee on these characteristics, as illustrated by arrow A in Figure 1 (Kristof, 1996).

Complementary Fit, Needs-Supplies, and Demands-Abilities

Complementary fit occurs when a person's characteristics round out or add to the organization's characteristics to complete what is missing (Muchinsky & Monahan, 1987). With complementary fit, the distinction between needs-supplies and demands-abilities comes into focus. From the needs-supplies perspective, P-OC occurs when the organization has the financial, psychological, or physical resources and the opportunities for task-related or interpersonal growth that fulfill the employee's needs, desires, or preferences. The needs-supplies fit represents the perspective of the employee asking, "What can I get out of this job?" (Caplan, 1987, p. 250). At the same time, it represents the perspective of the organization asking, "What do I have to provide to keep this employee?" (Caplan, 1987, p. 250). The needs-supplies perspective of P-OC is represented in Figure 1 by arrow B.

From the demands-abilities perspective, P-OC occurs when the employee has the knowledge, skills, abilities, and other resources that the organization demands. These can include the organization's requirements for the employee's time, effort, commitment, or experience as well as specific employee knowledge, skills, and abilities. The demands-abilities fit represents the perspective of the employee asking, "What do I have to do to keep this job?" (Caplan, 1987, p. 250). At the same time, it represents the perspective of the organization asking, "What do I want of this employee?" (Caplan, 1987, p. 250).

The demands-abilities perspective of P-OC is represented in Figure 1 by arrow C. Both the needs-supplies and demands-abilities perspectives depict distinct dimensions on which complementary fit (or misfit) may occur (Kristof, 1996).

Kristof stresses that the various conceptualizations of P-OC represented in Figure 1 are not competing concepts, but rather different aspects of congruence which different researchers have chosen to measure. She suggests that optimum P-OC might only be achieved when the organization and the employee fulfill each other's needs and when they share similar characteristics. However, Bretz and Judge (1994) conducted one of the few studies to examine effects of multiple conceptualizations of fit. They looked at (a) value congruence between the organization and the employee (supplementary congruence); (b) individual personality and organizational image similarity (supplementary congruence); (c) the degree to which organizational reinforcement systems met individuals' needs (needs-supplies congruence); and (d) the extent to which employee knowledge, skills, and abilities met job requirements (demands-abilities congruence). Their results indicated powerful direct effects of multiple conceptualizations of P-OC on organizational satisfaction.

The bulk of the research on P-OC, however, examines just one or two conceptualizations of the construct, rather than all dimensions represented in Figure 1. Some recent studies on these conceptualizations are discussed below.

Research on Supplementary P-OC

Investigations of supplementary P-OC are concerned with measuring the similarity between particular characteristics of people and organizations as shown in Figure 1, arrow A. The most frequent operationalization of this perspective of fit is the

congruence between individual and organizational values (e.g., Chatman , 1991; O'Reilly et al., 1991; Posner, 1992). Value congruence is a significant form of fit because values are “fundamental and relatively enduring and because individual and organization values can be directly compared” (Chatman, 1991, p. 459). Furthermore, values are underlying components of organizational culture that direct employees’ behaviors (Schein, 1990). Determining P-OC between an employee’s values and the organization’s values involves a number of considerations. One consideration is the distinction between subjective versus objective fit, discussed next.

Subjective versus Objective Fit

Subjective fit involves measuring individuals’ perceptions of how well their values match with their organization’s values. Objective fit involves measuring how well individuals’ and organizational values actually do match (Kristof, 1996). Subjective fit operationalizes P-OC by correlating the scores obtained by asking the same respondents what values they believe their organization considers important, and their ideal preferences regarding these values. Objective fit, operationalizes P-OC by correlating the scores between a respondent’s profile of desired organizational values and an aggregate profile of the values as perceived by representative leaders of the organization who are presumed to be familiar with the organization’s values.

Researchers disagree over whether subjective or objective fit is the more valid measure of P-OC. Many researchers (e.g., Chatman, 1991) take the approach that P-OC should only be compared using the objective approach. This would necessitate establishing a profile of organizational culture on which there is agreement (but not

necessarily absolute unanimity) among the majority of organization members (Chatman, 1991).

In her study of eight large U.S. public accounting firms, Chatman (1991) used the Organizational Culture Profile (OCP; O'Reilly et al., 1991) to assess objective P-OC. OCP responses from a total of 128 managers across firms (M per firm = 16; SD = 2; average tenure = 8 years) were used to create a profile that represented each of the eight firms. Managers were asked to sort items with the question, "How much does this attribute characterize the organization you work in?" The category anchors for this question ranged from "most characteristic" to "most uncharacteristic." Managers' profiles within each firm were averaged to form the eight firm profiles.

Use of the OCP to assess objective fit assumes that a firm's cultural values can be represented in a single profile. To determine this, Chatman (1991) performed two statistical tests to estimate consensus in firm values. In the first, coefficient alphas were calculated to estimate how likely it is that the same profile would emerge if everyone in the firm, rather than this sample of managers, had responded to the OCP. The alphas ranged from .84 to .90 across firms, showing high internal consistency. In the second test, average interrater correlation was done to represent how similarly any two raters viewed their firm. Although she does not provide actual figures, Chatman states that average interrater correlation was significant in each firm. She suggests, that taken together, these two tests indicate consensus regarding organizational culture values within each of the eight firms in the sample.

To complete the study, Chatman (1991) asked a total of 171 junior audit staff members across firms to respond to the OCP. They were asked to sort items with the

question, "How desirable is it for this attribute to be a part of my ideal organization's values system?" The category anchors for this question ranged from "most desirable organizational values" to "most undesirable organizational values." The results of the sorting formed preference profiles for each individual respondent. Average person-organization fit scores calculated for the sample and each firm indicated that P-OC varies among individuals. For example, the highest P-OC score in Firm 1 was .61 and the lowest was -.36; in Firm 2, the highest was .44 and the lowest was -.29; and in Firm 8, the highest was .61 and the lowest was -.29. Chatman's results showed that P-OC correlated with normative commitment, intent to remain, and actual turnover.

The subjective approach to measuring P-OC (i.e., the individuals' response to what organization values are important to them and the individuals' response to what they perceive the organization values to be) has not been used as frequently as the objective approach to P-OC. However, Nisbitt and Ross (1980) point out that a primary reason for using subjective measures is that peoples' perceptions of reality drive their cognitive appraisal of and response to particular circumstances. Therefore, an individual's perception of organizational values may have a greater influence on individual variables such as stress or satisfaction, than actual (objective) fit. Kristof (1996) suggests this may be particularly true for P-OC on difficult-to-verify measures such as organization values.

One study that examines subjective P-OC was done by Harris and Mossholder (1996). They used respondents' assessment of their ideal culture versus what they perceived to be the current culture. They sought to investigate whether congruence studies could be done in organizations that do not have strong, dominant cultures or who

are undergoing transformation or culture changes. Their research was done with 226 managers and executives in a large Fortune 500 U.S. corporation which manufactures and markets consumer durables. The organization was in the process of transforming from a culture characterized as conservative, risk-averse, insular, and domestically oriented into a culture characterized as aggressive, innovative, market-oriented and globally-focused. Qualitative data collected confirmed that respondents agreed that the organization was, indeed, in a state of culture transformation.

Their results indicated that the discrepancy between individuals' assessments of the current culture and their ideal culture explained significant variance in organizational commitment and optimism about the organization's future. Although the congruence effects were not uniformly significant for job satisfaction, job involvement, and job turnover intention, Harris and Mossholder (1996) argue that the use of subjective assessment of P-OC may be best for organizations in transition, where an agreed-upon culture may be difficult to certify.

In their study examining the congruence between job applicants' personality and their organizational culture preferences, Judge and Cable (1997) looked at both subjective and objective measures of P-OC. They believe it is important to investigate the relationship between objective and subjective fit because, "although both concepts are meant to assess the same basic construct ('true' person-organization fit), there are many motivational and cognitive biases that may divorce fit perceptions from an objective assessment of fit" (p. 368). They believe that, despite the fact that objective and subjective fit may differ, they are related. They cite theoretical and empirical explanations for this belief: Schneider's (1987) attraction selection attrition (ASA)

model suggests that job seekers base their perceptions of fit on the congruence between their values and those of organizations they are considering joining. In her paper on interactional organizational research, Chatman's (1991) conceptual framework suggests that job seekers' objective fit with organizations should predict their subjective fit. In one of the few empirical studies of subjective versus objective fit, Cable and Judge (1996) found that objective P-OC significantly predicted subjective fit.

Judge and Cable's (1997) results indicate that there is a relationship between objective and subjective P-OC and the employee's attraction to the organization at the time of recruitment and hiring. Specifically, they found a significant relationship between objective fit and attraction ($\beta = .22, p < .05$) and a significant relationship between subjective fit and attraction ($\beta = .34, p < .01$). Further, hierarchical regression revealed that the relationship between objective fit and attraction becomes nonsignificant once subjective fit is controlled ($\beta = .09, ns$). These results suggest that although both objective fit and subjective fit are related to organization attraction, most of the relationship between objective fit and attraction is mediated by subjective fit.

Summary of Theoretical Research on P-OC

Person-Organization Congruence assesses the harmony or compatibility between individuals and organizations when (a) they provide for each others needs, (b) share similar characteristics, or (c) both (Kristof, 1996). Most studies of P-OC focus on (b) by examining the congruence between an individual's and an organization's values (e.g., Chatman, 1991; Posner, 1992; O'Reilly et al., 1991).

Both subjective and objective measures of P-OC can be assessed. Subjective P-OC (SP-OC) measures individuals' perceptions of how well their values match with their

organization's values. Objective fit measures how well individuals' and organizational values actually do match (Kristof, 1996). Judge and Cable (1997) believe it is important to investigate the relationship between objective and subjective fit because of the possibility of motivational and cognitive biases in measuring only subjective fit.

Individual and Organizational Outcomes of P-OC

The interest in P-OC stems, in part, from the assumption that higher levels of congruence is related to positive individual and organizational outcomes (O'Reilly et al., 1991). While this assumption is logically sound and widely studied, research has often shown conflicting results. For example, Posner et al. (1985) surveyed over 1500 managers across a spectrum of companies and industries about the effect of P-OC. Their results found a direct relationship with positive outcomes, however, their cross-sectional research design made it difficult to determine whether various individual or organizational characteristics might have better accounted for the relationships. Furthermore, neither the values of the managers nor the values of their organizations were directly measured. Instead, value congruence was assessed by asking managers whether they felt that their values were similar to those of their organization, and whether they felt that their personal principles had to be compromised to conform to their organization's expectations.

Another study that showed inconsistent relationships between P-OC and outcomes was done by Saks and Ashforth (1997). They conducted a longitudinal field study of job applicants' perception of fit prior to job entry and work outcomes after 4 and 10 months of work experience. Their population consisted of two successive graduating classes of an undergraduate business program ($N = 231$). These graduates completed

three questionnaires: one in their final semester, prior to starting a new job (Time 1), a second after 4 months on the new job (Time 2), and a third after 10 months on the job (Time 3). Perceptions of fit were measured at Time 1, and work outcomes were measured at Times 2 and 3.

Their results indicate that perceptions of P-OC were negatively related to intentions to quit and turnover at 4 and 10 months. However, P-OC was not significantly related to job satisfaction, organizational identification, or stress symptoms at either of these times. One reason for this could be the method by which the researchers in this study chose to measure P-OC. First, they used a single item measure of applicant perceptions of fit ("To what extent does your new organization measure up to the kind of organization you were seeking?") Participants responded to a 5-point Likert-type scale with anchors, 1 = To a very little extent, and 5 = To a very large extent. This brings into question the validity of the scores. Second, this single item measure was done prior to entry into the organization, and after acceptance of the job offer. Their perceptions of fit, therefore, might be colored by post-decisional justification. Further, the fact that perceptions of fit were measured prior to organizational entry calls into question the accuracy of assessments and the possibility that the assessment could change after entry to the organization and socialization experiences.

Sims and Keon (1997) studied a sample of 86 employed business students from two different universities. Approximately half were MBA students and the other half were undergraduate students. The researchers examined the congruence between the perceived ethical values of the organization and the ethical values of the employee, using a preferred work culture questionnaire, adapted from Victor and Cullen (1988). This

instrument includes 15 organizational descriptors such as "The most important concern is the good of all the people in the company as a whole" and "People are expected to comply with the law and professional standards over and above other considerations." They used a subjective assessment of congruence, asking students to complete the questionnaire first from a preferred work climate perspective, and again from the perspective of their perceptions of their present work climates.

They hypothesized that individuals with a fit between their present work culture and their preferred work culture would be more satisfied with their job. Results indicated that as the absolute difference between preferred and present culture increased, reported job satisfaction decreased, but only for some types of cultures. Out of the five different culture types, significant relationships existed between three out of the five.

Sims and Keon (1997) also hypothesized that individuals with a fit between their present work culture and their preferred work culture would have greater organizational commitment as measured by their intention to leave the company. However, the results found no significant relationship between congruence and organization commitment for any of the organizational culture types.

Part of the reason for their non-significant results may lie with their small sample size ($N = 86$), and the fact that half the population were undergraduate students. Although all were employed full-time, they may have thought their options to find work in other organizations limited due to their lack of a degree. If this was the case, they may have felt constrained to stay with their present employer until graduation.

Bretz and Judge (1994) hypothesized that P-OC positively predicts tenure and job satisfaction. Their study also provided a preliminary test that P-OC exerts a main effect

on career success as measured by salary level and job level. They surveyed 873 past graduates from two large industrial relations programs at two large universities, average age, 34.8 years. Their results indicate that P-OC significantly explained additional variance in tenure and job satisfaction beyond the effects accounted for by other variables such as demographic influences, and job and organizational characteristics. The same general pattern emerged between fit and measures of career success, although the results were not as strong. Those who fit were significantly different from those who did not fit on three of the four dependent variables. Respondents who fit better, on average, earned 22% higher salaries, worked at a job level 11.6% higher, and reported a 15% higher level of job satisfaction than those who fit less well than average.

Meglino et al.'s (1989) study hypothesized that employees would feel greater satisfaction and commitment, and display higher levels of performance when their individual work values were congruent with those of their supervisor and manager. They assessed production workers, supervisors, and managers at a plant that was part of a major division of a Fortune 200 company. Workers and supervisors completed a survey that contained measures of job satisfaction and organizational commitment, measures of their work values, and measures of the work values that they felt were emphasized by plant management. Their results provided support for the relationship between value congruence and both job satisfaction and organizational commitment. However, in this study, the object of congruence was not the cultural values of the organization, but rather the values of each worker's supervisor or manager.

Posner (1992) sought to remedy some of the shortcomings of other studies by investigating the impact of P-OC within a single organization, rather than across several

organizations. He also collected extensive demographic data to examine whether potential relationships between P-OC and work attitudes could be explained by the individual respondents' characteristics. Work attitudes were assessed by asking employees to respond to questions such as, "I feel inspired to do my very best when I'm at work," and "I would like to be working for this company 3 years from now." His results suggest that congruence between an individual's values and the values of the organization was significantly associated with positive work attitudes. In addition, no statistically significant differences were shown for the following demographic characteristics: age, gender, ethnicity, level in the organizational hierarchy, length of service with the company, or being in a management position. The only demographic variable that did show an effect was the respondents' functional area. Results showed that P-OC was significantly moderated by functional area: Those from the Finance department were somewhat overrepresented in the low P-OC group, while those from the Sales Department were somewhat overrepresented in the high P-OC group.

The absence of absolute support for the relationship between P-OC and various outcomes is not surprising because this issue is quite complex methodologically. Therefore, it is possible that some observed relationships will mistakenly appear to have a congruence effect. Edwards (1996), for example, cites the fact that many studies confound results because of differences in the dimensions along which they measure P-OC. Further, he objects to studies that use difference scores to operationalize P-OC. Edwards contends that these studies have reduced reliability and result in confounded effects of P and O.

Apparent effects for P-OC could also be the result of response artifacts. Because values are socially desirable constructs (Rokeach, 1973), if individuals respond to value questionnaires in a socially desirable way, this could inflate their scores.

Summary and Evaluation of P-OC Outcomes

Despite the variety of outcomes studied relative to P-OC, no empirical studies have adequately measured P-O values congruence and its relationship to employee stress outcomes. The present study will attempt to fill this void. Also, another outcome that has not been examined is the effect of P-OC on employees' perception of violations in the psychological contract. As a matter of fact, no known study has looked at the psychological contract (PC) as an outcome measure. Rather, empirical research to date has focused on the effects of PC violation on various outcomes such as trust and organization commitment. These studies are reviewed next.

The Psychological Contract (PC)

Psychological contracts (PC) are individuals' beliefs about the terms and conditions of a reciprocal exchange agreement between employee and employer (Rousseau, 1990a). This exchange agreement entails what employees believe they are entitled to receive because they perceive that their employer conveyed promises to provide those things (Robinson, 1996). The concept of the PC in the field of organizational psychology was first discussed by Argyris (1960). He referred to the "relationship [that] may be hypothesized to evolve between the employees and the foremen which might be called the 'psychological work contract'" (p. 96). Levinson (1962) was the first researcher to introduce the concept of reciprocity in regard to the PC. According to Levinson, reciprocity in the PC assumes that both the employee and

the organization fulfill each other's expectations. Employees have expectations such as salary, fringe benefits, work location, opportunity for advancement, and the nature of the work to be performed. Organizations, as well, have expectations of employees that are listed in their job descriptions, policies, procedures, and performance standards.

Building on Levinson's research, Kotter (1973) adapted a list of employee and organizational expectations in his study of the PC. His list of what employees expect from organizations included such things as a sense of meaning or purpose in the job, personal development opportunities, recognition and approval for good work, the amount of security in the job, and advancement opportunities. His list of what organizations expect from employees included such things as the ability to learn how to do the job, the ability to work productively with groups of people, the ability to supervise and direct the work of others, maintaining a good public image of the company, and taking on company values and goals as one's own (Kotter, 1973).

Most recently, Robinson and Rousseau (1994) looked at employee expectations and categorized the qualitative responses of participants in their study. Their coding scheme yielded 10 distinct classes of PC terms: (a) training and development, (b) compensation, (c) promotion, (d) nature of the job, (e) job security, (f) feedback, (g) management of change, (h) responsibility, (i) people, and (j) "other" which included such things as an accurate portrayal by the organization of its market or financial position.

Morrison and Robinson (1997) suggest, however, that employees and employers not only exchange promised goods and services, but that they also do so in the context of a set of values, beliefs, and norms. Therefore, they argue, if an employee believes that terms of the psychological contract were not met, and also believes that the organization

was deceptive in doing so, he or she is likely to feel greater anger and betrayal if, in the past, the organization promoted values such as integrity and concern for employees than if the organization was known for treating employees badly (Morrison & Robinson, 1997).

How PCs are Formed

Organizations and employees create PCs through interaction at critical points in the employment relationship. These include recruitment, job changes (e.g., promotion and lateral moves), and organizational changes (e.g., mergers, acquisitions, restructuring) (Rousseau, 1995). These formal events signal the need to define or review commitments and contributions required to fulfill terms of the contract (Rousseau & McLean Parks, 1992).

Psychological contracts may also emerge as a result of developmental and demographic changes in the employee (e.g., marriage, starting a family, getting older). Rousseau and McLean Parks (1992) suggest that PCs may, in fact, be continuously created and re-negotiated through such means as organizational socialization and the employee seeking feedback from supervisors and management (Rousseau & McLean Parks, 1992).

The field of cognitive psychology proposes that people form schemas and scripts (highly structured knowledge systems) to explain their world and to direct appropriate behaviors (Beck, 1976). Psychological contracts can be thought of as individuals' belief systems of what they expect to occur in the organization and what is expected of them (Shore & Tetrick, 1994). As such, PCs represent schemas having to do with mutual obligations between the individual and the employer. These may be fairly simple at the

time a person joins the organization, but they tend to become increasingly complex with tenure. PCs can serve as well-defined, consistent schemas for employees, providing some predictability and control in a complex employment relationship. (Shore & Tetrick, 1994).

How PCs Can Change

Virtually all empirical studies of PCs, examine the employee's perception of the employer's obligations. One exception that looked at both employee and employer obligations was conducted by Robinson et al. (1994). They carried out a longitudinal study of business school alumni to investigate employees' perception of changes in employment obligations. They factor analyzed respondents' answers and found that both employee and employer obligations can be categorized as either transactional or relational. Transactional contracts involve specific, quantifiable exchanges between employer and employee over a specified (often short) period of time. For example, competitive pay and the lack of a long-term employment commitment are characteristic of a transactional PC. By contrast, relational contracts involve open-ended, non-specific promises such as career development opportunities and a continued career with the same employer.

Their results indicated that during the first 2 years of employment, employees, in general, came to believe that their obligations to their organizations decreased, while believing that their organizations owed them more. This was true, even if the employee did not experience any PC violations on the employer's part. However, where employees did perceive violations of their PCs, there was a significant decline in employees'

willingness to work overtime, loyalty to the company, maintaining confidentiality of proprietary information, or staying a minimum amount of time with the employer.

Robinson and Rousseau (1994) used the same sample of respondents and found PC violations correlated positively with turnover and negatively with employee trust, satisfaction, and intention to remain with the organization. Robinson and Morrison (1995) studied this same cohort and found that employees whose PC had been violated were less likely to attend organizational functions that are not required, or to keep up with developments in the organization, two examples of organization citizenship behaviors.

How PC Violations Are Perceived

A violation occurs when one party in the relationship perceives the other to have failed to fulfill promised obligations (Rousseau, 1995). However, Morrison and Robinson (1997) argue that violation of the psychological contract is a subjective experience. They note that PC violations can and do occur in the absence of an actual violation.

A variety of events can initiate an employee's perception of PC violation: Rousseau and McLean Parks (1992) have found that employees will reassess their PC periodically when organizational (e.g., downsizing, re-organizing) or individual (e.g., marriage, family) changes take place. Guzzo, Noonan, and Elron (1994) cite economic downturns, changes in workforce composition, and management changes as events that can lead to a re-evaluation of the employment relationship. Brockner, Tyler and Cooper-Schneider (1992) suggest that layoff announcements, work structure changes, mergers and acquisitions, or just about any other personnel changes (wage freezes or pay cuts,

smoking ban, disciplinary actions, etc.) can trigger re-assessment of the PC. This re-evaluation may indicate to the employee that his or her PC has been violated.

Implications of Contract Violation

Robinson and Rousseau (1994) studied the incidence of PC violations among graduate management alumni who were surveyed once at graduation (immediately following job recruitment), and then again 2 years later. A majority of respondents (54.8%) reported that their PCs had been violated by their employers.

Violations of the contract can evoke especially strong feelings on the part of the employee (Schein, 1980). McLean Parks and Kidder (1994) found that employees who previously were committed to organizational goals may stop trying to attain them. They also suggest that formerly conscientious employees may neglect their responsibilities, and formerly trustworthy employees may steal from the organization in response to a violation of the PC. Other behaviors, freely offered by the employee before violation of the contract, may be withdrawn. They predict that organization citizenship behaviors -- an employee's willingness to participate in activities that promote organizational effectiveness but are not explicitly required by the organization -- will be the first response to be withdrawn when an employee is faced with a violated PC (McLean Parks & Kidder, 1994).

Shore and Tetrick (1994) believe that employee reaction to a PC violation will depend on the type of violation, the size of the discrepancy, and the degree that the employee assesses organizational responsibility for the unmet obligations. They propose five potential responses to violation: (a) voice, (b) silence, (c) retreat, (d) destruction, and (e) exit. Voice consists of attempts to improve conditions through discussions with

supervisor, management, or other higher authorities, and taking or suggesting actions to resolve problems. Silence is evidenced by the employee patiently and silently waiting for conditions to improve. Retreat occurs when employees who remain in the organization contribute less, for example, being frequently late or absent, slacking off on the job, and withdrawing previously offered behaviors such as participating in company fund drives (e.g., United Way) or on the company softball team. Destruction refers to sabotage, vandalism, as well as disparaging the company to outsiders. Exit refers to voluntary attempts to leave or actually leaving the organization.

The vast majority of the empirical studies that examine the outcomes of psychological contract violations focus on the employee responses of retreat and exit. For example, Brockner et al. (1992) studied 150 full-time employees who were survivors of a financial services organization that had undergone layoffs five to seven months prior to the study. Their results refuted the commonly accepted theory that high levels of commitment on the part of employees are generally beneficial to the organization. They define commitment as belief in the organization's goals or values, willingness to expend extra effort on the organization's behalf, and intention to remain with the organization. Brockner et al. (1992) hypothesized that employees would react especially negatively when they previously felt highly committed to the organization, but subsequently experienced violations of their psychological contract.

Results of their analysis showed that for those relatively low in their prior commitment to the organization, there was relatively little relationship between perceived fairness of the layoffs and survivors' reactions to the layoff. However, for those who felt strongly committed to the organization prior to the layoffs, the perceived fairness of the

layoffs was significantly related to survivors' reactions. Specifically, they observed that the highly committed survivors had more negative reactions (i.e., lower organizational commitment, and higher turnover intention) to the layoff if they perceived the layoffs to be unfair. They argue that among those highly committed to the organization, violations of the psychological contract do not simply involve broken promises, but are more generally related to their feelings of self-identity and self-worth.

There were some methodological issues, however, that may have confounded the results. First, the construct, perceived fairness, consisted of a one-item measure with unknown reliability or validity. Second, survivors were asked to indicate the extent to which their organizational commitment, work effort, and turnover intention had changed, relative to the time period prior to the layoff. This procedure relied on respondents' retrospective reports of change (from 6 to 8 months earlier), which they may have been unable or unwilling to report accurately. A much better procedure would have been to measure attitudes and behaviors prior to the layoffs, and again at the time of the study so that actual change in the variables could be computed.

One study whose results conflict with Brockner et al.'s (1992) is Robinson's (1996). She examined the relationships between employees' trust in their employers and their experiences of the organization's violation of their psychological contracts using data from a longitudinal field study of 125 newly hired managers. Robinson defines trust as "the expectation, assumption, or belief that the organization's future actions will be beneficial, favorable, or at least not detrimental to the employee's interests" (p. 576). Robinson posits that trust in one's employer influences an employee's identification and interpretation of, and reaction to PC violations. She collected data at three times over

a 2 ½ year period: after the employee accepted a job offer (Time 1); after 18 months on the job (Time 2); and after 30 months on the job (Time 3). Robinson hypothesized that an employee's initial trust in the employer at Time 1 would be negatively related to perceiving a contract violation at Time 2. She also theorized that perceived PC violation at Time 2 would be negatively related to performing prescribed job roles, engaging in organization citizenship behaviors, and remaining in the organization at Time 3. She argued, however, that a loss of trust would mediate the relationship between PC violation at Time 2 and employees' contributions to the firm at Time 3. Her last hypothesis stated that prior trust will moderate the relationship between PC violation and subsequent trust such that those with low prior trust at Time 1 will experience a greater decline in trust at Time 3 after a perceived violation at Time 2 than will those with high prior trust at Time 1.

Results showed that PC violation was negatively related to three forms of employee contributions: job performance, organization citizenship behavior, and intentions to remain with the organization. One role that trust played in this study was as a factor influencing the likelihood that PC violation would be perceived. Results showed that initial trust in the employer was found to be negatively related to the perception of PC violation one year later. Trust was also shown in this study to be a mediator of the relationships between PC violation and employees' subsequent contributions (job performance, organization citizenship behaviors, and intent to remain). The study empirically supported the assumptions that a loss of trust is the critical ingredient in the relationship between PC violation and subsequent employee reactions, and that the

impact of PC violation comes from something more than just the loss of promised benefits .

Further, results showed that prior trust moderated the relationship between PC violation and subsequent trust: employees with low initial trust in their employer experienced a greater decline in their trust following a perceived violation than did employees with high initial trust in their employer.

Robinson's study provided a more comprehensive examination of the relationship between PC violation and employee contributions because it considered three different aspects of employee contributions (job performance, organization citizenship behaviors, and intent to remain). Further, it used a validated, multi-item measure of PC violation, rather than relying on a single-item, global measure (e.g. Robinson & Rousseau, 1994). And lastly, the study was longitudinal and statistically controlled for alternative explanations of results.

Summary and Evaluation of PC Research

A review of the empirical research on PCs reveals two intriguing facts: (a) almost all of the studies focus on the early stage of PC development, when the employee first enters the organization, and (b) there has been much research on the effect of PC violation, but virtually none on its antecedents. One possible antecedent of PC violation is a lack of congruence between the employee's values and the organization's culture. This study will attempt to contribute to the empirical research by examining whether lower P-OC will increase the likelihood that the employee will perceive violations in their PCs. Also, this study will examine a population who has a history with its present organization, and is beyond the traditionally-studied stage of organization entry.

Quick, Quick, Nelson and Hurrell (1997) claim that current work realities are revising the psychological contracts between individuals and organizations. These researchers believe that changes in the PC must be managed in order to prevent undesirable organizational and individual outcomes. One undesirable organizational outcome is that employees view changes to their PCs as violations. This could lead to more serious outcomes such as withholding performance or leaving the organization. It is the belief of this investigator that a lack of P-OC between the organization's cultural values and an employee's values is likely to lead to increased perception of PC violations.

This study also looks at one undesirable individual outcome that may be related to a lack of P-OC: occupational stress. Current research on occupational stress is reviewed next.

Occupational Stress

Stress in the workplace has become a focal point for stress researchers (Matteson & Ivancevich, 1987). Some studies have examined specific occupations thought to be highly stressful (e.g., Rose's 1978 research on air traffic controllers; Sager's 1991 research on sales managers). Others have focused on the effect of particular types of stressors including workload, poorly designed work environments, interpersonal conflict with supervisors, colleagues, customers, or suppliers (Murphy, 1995). The focus of the Person-Organization Congruence (P-OC) approach to stress is on the lack of fit between the person and the organization that is likely to produce psychological, physiological, and behavioral outcomes that ultimately affect well-being and increase mortality (Edwards & Harrison, 1993). The P-OC view of stress is the focus of the present study.

The P-OC/stress studies conducted over the past two decades took one of three approaches: (a) the Vocational Fit approach which examines the congruence between the vocational requirements of the job (as determined by Holland's theory of careers [1985]) and an individual's personality; (b) the Needs-Supplies (N-S) approach which examines the congruence between certain characteristics of the job (e.g., job complexity, role ambiguity, responsibility for persons, workload, overtime, and income) and people's preferences for these characteristics ; or (c) the Demands/Abilities (D-A) approach which examines the congruence between the demands of the job and employee abilities (e.g., skill; knowledge; physical, emotional, intellectual capabilities) to fulfill these demands. Representative research for each of these congruence/stress studies is discussed next.

Vocational Fit Approach

The most extensive examination of the relationship between congruence and stress occurs in the vocational fit approach, based on Holland's theory of careers (Holland, 1985). Although this perspective of congruence is really a variation of the P-OC construct examined in the present study, it is reviewed here because both spring from a common source, the Theory of Work Adjustment (Lofquist & Dawis, 1969).

Holland's (1985) congruence hypothesis states that career satisfaction, stability, and success depend on the fit between an individual's personality and the environment the individual works in. The core of Holland's model is the hexagonal classification of six basic personality types – Realistic (R), Investigative (I), Artistic (A), Social (S), Enterprising (E), and Conventional (C) -- and the assertion that work environments can be classified according to which personality types are most congruent with this classification. Therefore, someone who is primarily Social, and to a lesser degree

Enterprising and Artistic, may be described by the Holland code, SEA. The theory states that, all things being equal, a person with an SEA code will be most content in a job that satisfies the interests, values, and preferences associated with the SEA personality.

Holland's conception of P-OC, although more narrowly defined than in the Theory of Work Adjustment (Lofquist & Dawis, 1969), makes similar predictions about the relationship between congruence and work outcomes. Holland (1985) sees P-OC as an important factor in feelings of worker satisfaction and well-being. Conversely, lack of P-OC has the opposite effect.

In 1987, Assouline and Meir conducted a meta-analysis on findings from 41 studies that examined the correlation between measures of personality-environment congruence and well-being. The studies used 16 different methods to measure personality-environment congruence. Each method looked at congruence between some aspect of the individual's Holland codes and concomitant environment codes (Holland, 1985). The construct of well-being was operationalized as satisfaction, stability, or achievement.

Results of their meta-analysis showed relatively high congruence/well-being correlations for three groups of studies for which satisfaction was the dependent variable. However, relatively low correlations were found in studies where either stability or achievement was the dependent variable. Along with the dependent variable (satisfaction, stability, or achievement) measured, they found that environmental reference (i.e., occupation, specialty within occupation, others' personality types, major studies, educational institution, educational or vocational intentions) and congruence measurement methods (e.g., comparison of subject's first letter code on hexagon with the

environment's first letter; various levels of similarity between subject's first three letter codes and the environment's first three) accounted for almost all variance among studies which could not be attributable to sampling errors alone (Assouline & Meir, 1987).

Another study that used Holland's (1985) vocational theory to examine congruence was Cluskey and Vaux's (1997). They suggest that people search for work environments that allow them to exercise their skills and abilities and to express their attitudes and values. They studied 188 management accountants and hypothesized that vocational misfit, as defined by Holland's (1985) criterion, would be negatively associated with job satisfaction, good health, and self-esteem.

They measured vocational fit using the Iachan index (Holland, 1985). This index compared Holland codes for an individual's vocational personality and current job position, yielding a vocational fit score ranging from 0 to 28 (scores closer to 0 represent greater misfit). Their results showed that management accountants whose vocational personality was a poor fit for their current position reported experiencing more role ambiguity and conflict, more work pressure, poorer work relationships, and more career progress problems, as well as more job dissatisfaction, lower work self-esteem, poorer health, and greater intent to leave the organization.

Similarly, Sutherland, Fogarty, and Pithers (1995) examined the relation among nine measures (e.g., Iachan index, Zenner-Schnuelle index) of Holland's concept of congruence and the relation of these measures to occupational stress. They administered Holland's Self-Directed Search (Holland, 1985) and the Occupational Stress Inventory (Osipow & Spokane, 1987) to 154 full-time employees. As with similar studies, their results suggested that there is a small but significant relationship between congruence and

stress, but it is largely dependent on the method used to measure congruence. Although the nine congruence measures tested by Sutherland et al. did not examine congruence from a P-O values perspective (as proposed in the present study), the results of such an approach are likely to yield similar results.

Needs-Supplies (N-S) and Demands-Abilities (D-A) Approaches

From the needs-supplies (N-S) perspective, P-OC occurs when the organization has the financial, psychological, or physical resources and the opportunities for task-related or interpersonal growth that fulfill the employee's needs, desires, or preferences. From the demands-abilities (D-A) perspective, P-OC occurs when the employee has the knowledge, skills, abilities, and other resources that the organization demands (Kristof, 1996).

In an early study of P-OC and stress, French et al. (1982) looked at both N-S and D-A. They conducted an intensive analysis, using eight job variables to assess N-S and D-A congruence, and eighteen dimensions to assess psychological and physiological stress. Job variable measures included indices for job complexity, role ambiguity, workload, responsibility for persons, overtime, income, education and length of service. Psychological measures included indices such as job dissatisfaction, boredom, depression, anxiety, and irritation. Physiological measures included indices such as blood pressure, heart rate, and serum cholesterol levels.

Their results showed significant correlations between the job variables job complexity, role ambiguity, workload, length of service and education, and the occupational stress symptoms of job dissatisfaction, workload dissatisfaction, boredom, and depression. There were mixed results for correlations between other job variables

such as responsibility for persons, overtime, and income, and occupational stress symptoms of anxiety, irritation, and somatic complaints. Results for physiological symptoms such as heart rate, blood pressure, and serum cholesterol levels were especially inconclusive.

More than a decade later, Edwards and Harrison (1993) re-analyzed French et al.'s (1982) data using a three-dimensional approach called polynomial regression. These researchers believe that their approach overcomes some of the methodological issues raised by French et al.'s study which operationalized P-OC using various transformations of the algebraic difference between O and P. Edwards and Harrison believe that this methodology limits the conclusiveness of the earlier study. Further, they propose that the methodology used by French et al. (1982) confounds the separate relationship of O and P with occupational stress. For some of the job variables that French et al. (1982) measured, only O or P indices were significantly correlated with occupational stress. Edwards and Harrison (1993) say this suggests that relationships for the corresponding congruence measures may have reflected the influence of only O or P.

Another problem that Edwards and Harrison (1993) cite with the previous study is that they believe the relationship between O, P, and occupational stress is inherently a three-dimensional one, whereas French et al.'s (1982) methodology reduces it to two dimensions. To overcome these and other purported problems, Edwards and Harrison use a procedure (polynomial regression) that regresses stress on O, P, and some higher order terms, for example, the square of O and P, and their product. They use O and P as separate predictors of stress to avoid confounding the effects and to preserve the three-dimensional relationship they believe exists between O, P, and stress. Their results

yielded an increase of adjusted squared multiple correlations from an average of .024 to .059, more than doubling the proportion of explained variance in French et al.'s (1982) study. Further, their results clarified some of the ambiguities reported by French et al. permitting more reliable inferences regarding the relationship between O, P, and stress. For example, French et al. (1982) determined that workload dissatisfaction increased as workload/O deviated from workload/P, particularly when O exceeded P. Edwards' and Harrison's (1993) results also supported this conclusion but further determined that at low levels for O and P, workload dissatisfaction was lowest when O slightly exceeded P, whereas at high levels of O and P, workload dissatisfaction was lowest when O was notably less than P.

Edwards (1996) used this same methodology in his study of stress related to N-S and D-A measures of congruence. His purpose was to compare each approach to determine their relative conceptual merits and to ascertain which form best depicts the relationship between congruence and stress.

Edwards (1996) contends that the relationship between P-O misfit and stress is stronger for N-S misfit than for D-A misfit. He argues that D-A misfit will produce stress only if failure to meet demands creates N-S misfit on other dimensions. Edwards also maintains that D-A misfit will produce stress only if meeting the demand itself is internalized as a value by the individual. For example, if the employee's skills are not sufficient to meet the demands of the job, stress is not likely to result unless the situation also causes the employee's self-image to suffer.

Edwards (1996) further believes that a significant moderator of the relationship between N-S and D-A congruence and stress is importance, defined as "the degree to

which the dimension along which fit is cognitively evaluated is considered central to one's overall job or life" (p. 296). Edwards hypothesized that importance strengthens the effects of N-S and D-A congruence on stress so that misfit on dimensions more important to the individual will produce greater stress than misfit on less important dimensions.

Edwards (1996) empirically tested his hypotheses examining P-OC on the dimension of managerial task activities. This dimension was chosen because it could appropriately reflect both N-S and D-A approaches to P-OC. His results, however, showed limited support for his hypotheses. Regarding N-S fit, only some of the management tasks examined for P-OC showed significant relationships to one measure of stress (job dissatisfaction). With respect to D-A fit, only some of the management tasks showed significance in relation to one measure of stress (tension). Further, the significant moderating effects of importance were found to predict job dissatisfaction with N-S fit, however, with D-A fit, importance did not moderate the relationship of D-A misfit and stress.

Edwards (1996) also reported results regarding the relative strength of the relationship between P-O misfit along N-S dimensions versus P-O misfit along D-A dimensions. He found that P-O misfit along N-S dimensions had a stronger effect than D-A misfit on job dissatisfaction, but that D-A misfit had the stronger effect on tension. Overall, results indicated that N-S fit was linked primarily to job dissatisfaction, whereas D-A misfit was related primarily to tension.

Most recent congruence/stress research has focused primarily on either (a) vocational fit; (b) characteristics of the job (e.g., job complexity, workload, overtime) and

people's preferences for these characteristics; or (c) job demands and employee abilities. While interesting aspects of congruence, none of these addresses the broader implications that a misfit between an organization's cultural values and an employee's personal values may be related to employees reporting a higher incidence of occupational stress. The present study will address this relationship.

Overall Summary and Evaluation of the Literature

Kristof (1996) suggests that Person-Organization Congruence (P-OC) occurs when (a) one or both entities in the relationship provides what the other needs, (b) the person and the organization share similar basic characteristics, or (c) both. Because of its rather broad definition, P-OC has been conceptualized by researchers in several different ways. Three of the most prevalent conceptualizations are (a) congruence between one's personality and one's job or profession, related to Holland's (1985) notion of vocational fit; (b) congruence between the behavioral norms of the organization and an employee's fit with these norms (Cooke & Lafferty, 1986); and (c) congruence between the organization's values (as expressed by its culture) and an employee's values (O'Reilly et al., 1991).

Vocational fit (Holland 1985) has been the most prolific area for congruence research, particularly with relation to employee affective outcomes (e.g., Cluskey & Vaux, 1997; Sutherland et al., 1995). However, this is a much narrower view of congruence, which focuses at the level of the job or profession of the individual. Research on behavioral norms, while a broader perspective, has focused more on how the direction of a particular culture type affects outcomes related to the organization, such as organization success or profitability, rather than on employee outcomes. Moreover,

studies of the effects of a lack of congruence between organizational norms and an individual's preferences for these types of norms is generally lacking.

The most promising avenue for research seems to be the area of values congruence: Values are "fundamental and relatively enduring" and "individual and organization values can be directly compared" (Chatman, 1991, p. 459). Also, values are at the heart of organizational culture and direct an employee's behaviors (Schein, 1990).

Theoretically, Person-Organization Congruence is generally thought to be related to a number of positive organization and individual outcomes. However, incontestable support for this belief has not been found in the empirical research (e.g., Posner et al., 1985; Saks & Ashford, 1997; Sims & Keon, 1997). Much of the cause for inconsistent results across studies seems to be due to methodological issues (Edwards, 1996). Edwards and his colleagues (e.g., Edwards & Cooper, 1990; Edwards & Harrison 1993) suggest that the common practice of relying on difference scores to define P-OC introduces numerous methodological problems. However, the alternative three-dimensional measurement procedures they propose are extremely difficult to compile and analyze, and as such, have not been generally accepted by those who study P-OC (Kristof, 1996).

Rationale for Current Study

There are two possible outcomes of P-OC that have been overlooked in previous research: (a) an employee's perception of violations of the psychological contract (PCV), and (b) occupational stress symptoms. With regard to PCV, no studies have been done on P-OC as a possible antecedent to an employee perceiving violations of the PC. Psychological contract violation has always been looked at as an independent variable

having an effect on various outcomes such as turnover, performance, or organizational commitment. With regard to reported stress symptoms, only studies of the vocational fit perspective of P-OC have examined stress symptoms as a possible outcome of misfit. The organization culture/individual values perspective of P-OC has not been examined as a possible source of employee stress symptoms. The present study will explore both perception of PCV and occupational stress symptoms as potential outcomes of a lack of P-OC.

Psychological contracts have been discussed in the literature since the early 1960s (Argyris, 1960). Current research explores the effects of employees' perceptions of violations of their PCs. Outcomes shown to be related to PC violations include loss of trust, job dissatisfaction, decreased performance, and increased turnover (e.g., Brockner et al., 1992; Robinson & Rousseau, 1994).

Morrison and Robinson (1997) believe that PCs are formed in the context of a set of values, beliefs and norms. Therefore, it is reasonable to expect that when employees perceive violations of the PC, they will be aware of the organization's values, their own values, and the fit between the two (P-OC). In fact, Morrison and Robinson propose a comprehensive theory of how PC violations develop. They suggest that one factor that may influence perception of PC violation is incongruence due to "cultural distance" (p. 236) between the individual and the organization.

Another outcome of a lack of congruence has been shown to be occupational stress. Occupational stress has become a major problem in the United States, with the annual cost of stress-related illness, loss of productivity, and associated medical compensation claims estimated to be more than \$150 billion (Karasek & Theorell, 1990).

The P-OC view of stress posits that a misfit between the person and the environment is likely to produce negative psychological, physiological, and behavioral outcomes. Of the three approaches taken by P-OC/stress research, the most extensively studied is the vocational fit approach, based on Holland's theory of careers (1985). In general, these research findings show a small but significant relationship between congruence and occupational stress, but the method used to measure congruence is a major factor in determining the effect size, or even whether there is an effect (Sutherland et al., 1995). This is true, as well, for the two other approaches to POC/stress, the needs-supplies approach and the demands-abilities approach.

This review of the literature produced no empirical studies that specifically tested the P-OC/stress relationship using organizational culture values and individual values to assess P-OC. Nor did the review find empirical research on the psychological contract that used P-OC misfit as a potential antecedent to perceptions of PC violations. This study will build on past research designs to examine how the fit between the organization's values (as represented by its culture) and the values of the individual is related to occupational stress outcomes and perceptions of violations of the PC.

Chapter III

METHODOLOGY

This chapter contains five sections which provide detailed information about the design and methodology used in this study: The Participants section reports the general characteristics of study participants along with ethical and design considerations. The Instruments section describes each of the measures used in the study: the Organizational Culture Profile (OCP); the Personal Strain Scales (PSS) of the Occupational Stress Inventory-Revised (OSI-R); and the Psychological Contract Questionnaire (PCQ). This section also includes information on validity and reliability data for each instrument. The Procedures section outlines the techniques and materials used in the selection, testing, group assignment, and statistical evaluation of study participants. The Hypotheses and Statistical Analyses section lists the two research hypotheses and provides a brief description of the analytic procedures to be employed in testing the hypotheses. Lastly, the Summary section provides a synopsis of the chapter.

Participants

One hundred and eight full-time working adults participated in this study: 58 males (54%) with a mean age of 43.3 years ($SD = 8.2$) and 50 females (46%) with a mean age of 40.2 years ($SD = 9$). Their job categories ranged from Production Supervisor to Senior Analytical Chemist and all were employed in their current jobs for at least one month. Length of service with the organization ranged between 5 months and more than 408 months ($M = 113.8$; $SD = 101.9$).

Because of improperly completed protocols, 10 participants' data were dropped from the analysis. Therefore, a total of 98 cases were used to analyze the data, representing 91% of respondents.

The Organization in which the study was conducted is the United States subsidiary of a German-based company that manufactures fragrances, flavoring, and fillings for food products worldwide. This industry is a complex and competitive one which has experienced a great deal of restructuring during the last decade as a result of acquisitions, mergers, diversification, and joint ventures. During this time period, the leading 10 companies in this industry have absorbed at least 40 other companies, and four of these are, in turn, owned by larger corporations (Somogyi, Cometta, & Takei, 1998).

Recent technical developments allowing substances to be rapidly identified by ultraviolet, infrared and nuclear magnetic resonance have supplanted the reliance on the human senses of taste and smell. In the manufacturing area, this industry has invested heavily in computerization as a means of increasing productivity and efficiency over manual production (Somogyi et al., 1998).

This organization was selected to participate in this study because it typifies many of the characteristics described above: They are part of a merger that took place between two multinational firms. They, like their competition, have invested heavily in computerization and technological advancements. McLean Parks and Kidder (1994) suggest that these types of changes in the business environment and the resultant lack of job security have led to a re-evaluation of the employment relationship by employees and organizations alike. Furthermore, when organizations respond to change by attempting

to change their culture, occasions for a clash of values may be increased (DeMeuse & Tornow, 1990).

Recruitment of Participants

Organization managers identified all employees who met the required demographic profile, that is, have been with the company for at least 4 months. A solicitation letter was developed by the researcher, and sent out to these employees. As an incentive to participate, participants were told that their names would be entered in a drawing for a prize (gift certificate to an electronics store). The recruits were asked to participate, on Company time, in a study of Organizational Culture. (A copy of the solicitation letter is in Appendix A.)

There were six data-collection sessions. Time commitment from each participant averaged approximately 60 to 75 minutes to complete all instruments. In conducting this research, the investigator followed guidelines put forth by the American Psychological Association (APA) in their Ethical Principles of Psychologists and Code of Conduct (1992). These include obtaining informed consent from all participants, and advising them of their right to decline participation in, or to withdraw from, the study at any time. (A copy of the Informed Consent Form is in Appendix A.)

Design

Participants were randomly recruited from a specific population within one organization, measured on the independent variable, Person-Organization Congruence (P-OC), and then measured on the dependent variables, psychological contract violation (PCV) and occupational stress symptoms.

This study used a canonical correlational design. An analysis was done to determine how congruence between individuals' values and the values of the organizations in which they work is related to perceived violations in their psychological contracts and reported stress symptoms. Although the research does not conclusively identify important demographic variables relevant to this study, these variables could alter the direction or strength of the relationship between person-organization congruence and the dependent variables (psychological contract violation and occupational stress symptoms). Therefore, age, gender, and tenure were also assessed to determine their influence on the dependent variables.

Lastly, the order in which the measures were administered was varied. This was done to eliminate order effects.

Instruments

Participants completed a Demographic Data Sheet to collect information about age, gender, tenure (time with the company; time in the current job), job title, and department. As described above, three demographic variables (age, gender, and tenure) may have an effect on the dependent variables (psychological contract violation and reported stress symptoms), and were, therefore, analyzed to determine such a relationship. All other demographic variables in the Demographic Data Sheet were collected for descriptive purposes only, and their inclusion did not imply that they are important subject variables. A copy of the Demographic Data Sheet is in Appendix B.

In addition to the Demographic Data Sheet, three other instruments were used to collect data in this study: (a) the Organizational Culture Profile (OCP; O'Reilly et al., 1991), (b) the Personal Strain Scales (PSS) of the Occupational Stress Inventory-

Revised (OSI-R; Osipow, 1998), and (c) the Psychological Contract Questionnaire (PCQ; Rousseau, 1990a). Each instrument is discussed below, and details regarding validity and reliability are provided.

Organizational Culture Profile (OCP; O'Reilly et al., 1991)

The OCP (O'Reilly et al., 1991) was used in this study to measure person organization congruence (P-OC). The OCP contains a list of value statements (e.g., "being socially responsible," "respect for individuals," "flexibility," "risk-taking") that emanated from O'Reilly's and his colleagues' review of academic and practitioner writings on organizational culture and values (e.g., Davis, 1984; Deal & Kennedy, 1982; Peters & Waterman, 1982; Schein, 1985). O'Reilly et al. (1991) used the following criteria to select value items to include in the OCP: (a) generality: the item could be used to describe any person or organization, (b) discriminability: the item would not be equally characteristic of all people or organizations, and (c) readability: the item would be easy to understand. Out of this review came an initial list of 110 values. They asked 38 Business Administration majors (all Seniors) and four business school faculty members to screen the list for items that were redundant, irrelevant, confusing, or omitted. A similar review was done with another set of respondents from a number of accounting firms. After several iterations, the authors kept a final set of 54 values in the OCP (O'Reilly et al., 1991). Appendix B contains a copy of the OCP items and instructions used in this study.

The methods used in administering and scoring the OCP are based on the Q-sort profile comparison process (Block, 1978; Stephenson, 1953), a well-established assessment technique. In a typical Q-sort procedure, respondents are presented with a

large number of items, and asked to sort the items into categories (customarily nine) according to some criterion (usually the extent to which the item is characteristic of them). Constraints are typically instituted so that respondents must place fewer items in the extreme categories and more items in the middle categories.

Although the Q-sort method has most often been used to assess personality characteristics (Block, 1978), Chatman and Jehn (1994) cite several advantages of assessing organizational culture with the Q-sort approach: (a) The outcome of a Q-sort creates a realistic profile of the relative importance of each item to each other item; (b) the 54 items can be arranged to create a large number of alternative profiles; (c) P-OC can be assessed by examining the similarity or difference between individual and mean profiles, using reliability coefficients and interrater correlations; (d) the intensity with which values are held can be determined by examining the most extreme items; and (e) meaningful comparisons across organizations, and between individuals and organizations, are possible (Chatman & Jehn, 1994).

Further, Caldwell and O'Reilly (1990) cite an advantage of the OCP is that it uses common measures that equally describe both the person (P) and the organization (O). They argue that the use of commensurate measures permits a direct comparison of (P) and (O), and allows more specific conclusions than when separate measures are used.

Scoring the OCP

The OCP has two parts: Part 1, My Organizational Values, asks each respondent to rate "How important is it to you that a particular value be part of the value system of any company you work for?" From the list of 54 organizational values, respondents sort their answers into nine categories, from 1 (least important) to 9 (most important). Part 2,

My Company's Organizational Values, asks respondents, "How characteristic is a particular value of the value system of the company you currently work for?" From the same list of 54 organizational values, respondents sort their answers into nine categories, from 1 (least characteristic) to 9 (most characteristic). The Pearson Product Moment correlation for these two rankings are computed yielding the OCP score for the individual. This procedure is further elaborated in the next section. Appendix B contains a copy of the OCP, Part 1 and Part 2.

Calculating Person-Organization Congruence

An implicit assumption in using the OCP is that an organization's culture can be represented in a single profile (Chatman, 1991). To do this, a group of organization leaders (the Executive Group) who are knowledgeable about the company's culture and values complete OCP Section 2 (My Company's Organizational Values). Through rank correlation of responses to each item, their OCP scores are averaged to establish the culture profile for the organization (O'Reilly et al. 1991). This culture profile serves as a baseline for comparison to a group of employees (the Employee Group) from the same company who complete OCP Section 1 (My Organizational Values). In this way, objective fit (i.e., individual employees' assessment of their personal values compared to the composite profile established from the Executive group) can be measured (Chatman, 1991; O'Reilly et al., 1991).

To fully understand Person-Organization Congruence (P-OC), however, Kristof (1996) recommends assessing both subjective and objective fit. Therefore, to measure subjective fit (i.e., the individual's assessment of how personal values compare to that individual's perception of the company's organizational values), each person from the

Employee Group also completes OCP Section 2 (My Company's Organizational Values). Scores from OCP Section 1 and OCP Section 2 are then compared for each individual from the Employee Group.

Reliability of the OCP

The reliability of the OCP has been tested by researchers in a variety of ways. For example, Chatman (1991) assessed test-retest reliability of individual preferences for the OCP value statements in her study of MBA students from a large West Coast university. Participants were asked to sort the 54 OCP value items twice: once in February of their first year, and again 12 months later. She found correlations over the year to be quite high (average $r = .73$; range = $.65 - .87$) suggesting stable preferences among this group.

To test inter-rater reliability of the OCP, Chatman (1991) created an organizational culture profile for each of eight accounting firms, by averaging the responses of the raters within each firm. There was a mean of 16 accountants per firm with an average tenure of 8 years. Through a variation of the Spearman-Brown general prophecy formula, Chatman assessed the extent to which individuals in a particular firm described it in a consistent fashion. The eight profiles showed substantial reliability, with an average alpha of $.88$. This represented a range of $.84$ to $.90$, indicating relatively high levels of agreement among the raters in each firm. The similarity of the cultures of the eight firms was also assessed by correlating the overall firm profiles with one another. Chatman's findings suggested substantial variability in the extent to which any two firms had similar cultures (r ranged from $.29$ to $.85$).

In addition, O'Reilly et al. (1991) addressed the concern that OCP items may lead respondents to place them in categories according to how socially desirable each item is rather than according to how much they prefer it or judge it to be characteristic of their organization. To avoid this social desirability bias, the authors cast OCP items in neutral terms, and asked eight organizational behavior doctoral students to Q-sort the 54 items into the nine categories using as their anchors "least socially desirable" to "most socially desirable." The social desirability profile that was created from this Q-sort was compared to the eight firm profiles, and were not found to be significantly correlated (median correlation = .18). Therefore, it appeared that firm members did not sort the OCP items in a way to make their firm look like good places to work.

Validity of the OCP

In addition to their efforts to compile and empirically test OCP items that reflect organizational culture value constructs, O'Reilly et al. (1991) examined the validity of the OCP in three other ways. First, they tested whether the OCP discriminates among individuals and organizations in terms of their central value systems. They conducted separate factor analyses of individuals' ($N = 395$) and organizations' ($N = 826$ respondents from seven firms) OCP profiles to determine the dimensionality underlying the OCP. To be useful, the dimensions of individual preferences and organizational cultures should correspond. If such correspondence is shown to exist, it would indicate that the types of cultures individuals say they want, in general, are comparable to the cultures organizations offer. A lack of comparability would reduce the meaningfulness of P-OC. Results of O'Reilly et al.'s (1991) factor analyses indicate that overall, there appears to be good comparability between cultures as defined by individual preferences

and actual organizational descriptions. This suggests that the OCP can provide a reasonable mapping of organizational culture.

Second, convergent validity was shown by comparing distinct preferences for different organizational cultures among respondents with characteristically different personality attributes. O'Reilly et al. (1991) correlated scores participants obtained on the Adjective Check List (Gough & Heifbrun, 1980), a widely used measure of personality, with the same participants' OCP profiles, indicating their preferences for certain types of organizational cultures. Their results demonstrate easily interpretable patterns of personality and cultural preferences. For example, individuals with high achievement needs showed a significant preference for aggressive ($r = .24, p < .01$), outcome-oriented ($r = .25, p < .01$) cultures. Individuals with high autonomy needs favored innovative cultures ($r = .33, p < .01$) and rejected those that emphasized supportiveness ($r = -.22, p < .01$) and teamwork ($r = -.21, p < .05$).

Third, in another study, the authors established convergent validity through the significant positive correlation ($r = .28, p < .05$) between OCP scores and normative commitment, defined as attachment to an organization based on value congruence (Caldwell, Chatman, & O'Reilly, 1990).

Personal Strain Scales (PSS) of the Occupational Stress Inventory-Revised (OSI-R; Osipow, 1998)

The OSI-R (Osipow, 1998) operationalizes the original authors' model of work stress (Osipow & Spokane, 1987). They based their model on an extensive review of the stress literature, and as a result, focused on constructing measures of three distinct but related domains: (a) stress-provoking work roles (e.g., role overload, role ambiguity); (b)

the strain (e.g., anxiety, withdrawal, development of sleep or eating disorders) that may result from experiencing these stress-provoking roles; and (c) coping behaviors (e.g., social support systems, recreational activities) used to distract from stressful events.

Because the present study focuses on the strain that may develop as a result of a lack of value congruence between the individual and the organization, only the Personal Strain Scales (PSS) of the Occupational Stress Inventory-Revised (OSI-R, Osipow, 1998) will be administered to assess occupational stress. Although the publishers suggest administering the entire instrument so that the authors' model of work stress is validated, several studies have been conducted using only one or two of the scales (e.g., Higgins, 1986; Pickens, 1985). Also, Osipow (1998) advises against interpreting the total Organizational Role Questionnaire, Personal Strain Scales, and Personal Resource Questionnaire scores because the individual scales provide a detailed view of each domain and allow a more exact analysis of current stresses, strains, and resources. Therefore, it is appropriate to use only the PSS in this study.

The PSS is designed to measure affective, subjective responses regarding four types of occupational stress symptoms:

1. Vocational Strain (VS): Measures the extent to which the individual experiences problems in work quality or output; also measures attitudes toward work.
2. Psychological Strain: Measures the extent to which the individual experiences psychological and/or emotional problems.
3. Interpersonal Strain: Measures the extent to which the individual experiences disruption (e.g., withdrawal or aggressiveness) in interpersonal relationships.

4. **Physical Strain:** Measures the extent to which the individual complains about physical illness, and/or reports poor self-care habits.

The PSS contains forty items (ten per scale) with five response options: (a) rarely or never true, (b) occasionally true, (c) often true, (d) usually true, and (e) true most of the time. Responses are recorded on a two-part, carbonless rating form that is hand-scored. The raw scores are plotted on a Profile Form which provides a profile of the individual's personal strain along the four dimensions represented by the subscales.

Raw scores for the PSS are converted to T-scores. T-scores are linear transformations of raw scores, derived to have a mean of 50 and a standard deviation of 10. High scores on any subscale suggest significant levels of occupational stress. Only about 2% of the normative population scored at or above a T score of 70, suggesting debilitating stress. T-scores with a range between 60 and 69 suggest mild levels of maladaptive stress. T-scores with a range between 40 to 59 are within one standard deviation of the mean and are interpreted to be within normal range. T-scores below 40 indicate a relative absence of occupational stress. Appendix B contains sample items from the OSI-R/PSS.

Normative data for the OSI-R were obtained from a sample of 983 participants whose mean age was 36.3 years. The participants were comprised of 63% males, 53% married, 85% Caucasian, and reflected a wide variety of work settings. OSI-R scale score norms are available according to gender, occupational group, and educational level (Osipow, 1998). In selecting participants for the study, these demographic data were taken into consideration.

Validity and reliability of the PSS/OSI-R

The OSI-R (1998) is a revision of an earlier version of the instrument (Osipow & Spokane, 1987). In order to compare the two OSI versions, data were collected on a sample of 45 highway patrol cadets using both the OSI and OSI-R. The resulting correlations were all statistically significant at the .01 level, and reflect considerable agreement between the two forms. Specifically, the correlations between the PSS scales on each version ranged from .64 to .84 for the four sub-scales. Therefore, validity studies for the original OSI (Osipow & Spokane, 1987) are included in the validity review that follows.

Concurrent validity between the PSS scales and the Employee Assistance Program Inventory (EAPI; Anton & Reed, 1994) was found. In particular the Psychological Strain sub-scale correlates significantly with the Anxiety ($r = .67$) and the Depression ($r = .70$) subscales of the EAPI (both, $p < .01$). Also, other significant correlations were found between the Physical Strain sub-scale and several of the EAPI subscales. Comparable findings of the relationship between Interpersonal Strain and Vocational Strain PSS sub-scales and the EAPI scales were found, as well.

Significant positive relationships were found, too, between the PSS scales and the Career Attitudes and Strategies Inventory (CASI; Holland & Gottfredson, 1994). Specifically, Psychological Strain ($r = .53, .59$), Interpersonal Strain ($r = .54, .53$), and Physical Strain ($r = .60, .45$) subscales of the PSS correlated significantly with the Career Worries and Interpersonal Abuse CASI scales ($p < .01$).

Several correlational and multivariate studies have examined the relationship between different variables and PSS sub-scales. Representative outcomes from these studies are discussed below.

For example, Golec (1983) reported that job satisfaction was negatively related to Vocational Strain ($r = -.63$), Psychological Strain ($r = -.45$), Interpersonal Strain ($r = -.41$), and Physical Strain ($r = -.36$). Missbach (1984) reported similar relationships between intrinsic satisfaction and the PSS subscales (range: $r = -.39$ to $-.60$), and between extrinsic satisfaction and the PSS subscales (range: $r = -.33$ to $-.47$). In a study of burnout, Higgins (1986) reported significant positive relationships between the PSS subscales and the frequency and intensity of emotional exhaustion and depersonalization (range: $r = .30$ to $.69$). This same study reported significant negative relationships between the PSS subscales and the frequency and intensity of personal accomplishment (range: $r = -.30$ to $-.53$). Taken together, these studies show moderate to strong support for the concurrent validity of the PSS subscales.

The internal consistency reliability of the entire PSS is reported at .93, and coefficients for individual scales ranged from .70 to .89 (Osipow, 1998). Test-retest reliability with a sample of 62 Air Force Cadets for a two-week interval ranged from .55 to .74 for each of the four PSS subscales, significant at the .01 level (Osipow, 1998).

Psychological Contract Questionnaire (PCQ)

The Psychological Contract Questionnaire (PCQ) was used to measure employees' perception of violations of their psychological contract with the organization. The PCQ is based on the work of Rousseau (1990a, 1995), who developed a list of promises that organizations typically make to prospective employees

during recruitment. For her initial list, she solicited input from personnel and human resource managers from over a dozen firms in different industries (e.g., engineering, accounting, manufacturing). All were asked to describe the kinds of commitments their firms attempted to secure from recruits before hiring them, and what promises their firms, in turn, made to new hires (Rousseau, 1990a). This list was refined and supported in subsequent research through participant surveys and open-ended responses from employees who worked in a variety of organizations (e.g., Robinson, 1996; Robinson & Morrison, 1995; Robinson & Rousseau, 1994; Robinson et al., 1994). Appendix B contains a copy of the PCQ items and instructions used in this study.

The PCQ has two sections: The first captures information on the importance of 15 specific components of the psychological contract. In their model of how psychological contract violation occurs, Morrison and Robinson (1997) suggest that the salience of any unfilled promise to the individual is a critical factor in determining whether an individual will, in fact, perceive a violation in the psychological contract (PC). Therefore, respondents were asked to assess each PC component on a scale ranging from 1 (Not Important to Me) to 5 (Extremely Important to Me). The 15 components have been identified by previous research as typical organizational obligations contained in the psychological contract between employees and their work organizations (Guzzo et al., 1994; Robinson & Rousseau, 1994; Rousseau, 1990a). The list of PCQ promises used in this study include such items as high pay, promotion, training, and regular feedback.

The second section of the PCQ captures information on the magnitude of specific psychological contract violations. For each item promised, respondents were asked to

assess their perception of how well the organization has fulfilled its obligations with respect to the 15 components of the psychological contract. The ratings were assessed on a 5-point scale ranging from 1 (Receive Much Less Than Promised) to 5 (Receive Much More Than Promised). If there were items that their employer had never promised to fulfill, respondents were instructed to place an X next to the item, in addition to rating it.

Scoring the PCQ

Scores for the PCQ can range from -150 (very low PC violation score) to +150 (very high PC violation score). The importance ratings for each promise on the PCQ (Part 1) range from 1 (not important) to 5 (extremely important). The magnitude of violation of each promise (Part 2) is also rated on a 5-point scale ranging from 1 (Receive Much Less Than Promised) to 5 (Receive Much More Than Promised). The responses were then rescored to range from -2 (Receive Much More Than Promised) to +2 (Receive Much Less Than Promised). To obtain a score for psychological contract violation, the magnitude of violation of each promise (Section 2 responses) was multiplied by the importance of that promise (Section 1 responses) and summed across all 15 components. Thus, higher scores will indicate a greater degree of psychological contract violation. At one extreme, if an item is perceived to be Extremely Important (score of 5) and the employee perceives that he received Much Less Than Promised (score of +2) it results in the highest PC violation ($5 \times 2 = 10$). At the other extreme, if an item is perceived to be Extremely Important (score of 5) and the employee perceives that he received Much More Than Promised (score of -2) it results in the lowest PC violation ($5 \times -2 = -10$).

Reliability and validity of the PCQ

In addition to Rousseau's (1990a) original work that established content validity of the PCQ, reliability and validity issues were addressed in a number of other studies. Robinson et al. (1994) assessed the reliability of the PCQ by conducting a test-retest analysis. They administered the PCQ to 79 full-time employed MBA students on two occasions, two weeks apart. They correlated the responses to the same items on the two occasions. Pearson product correlations ranged from .72 to .91, with a mean of .80, suggesting a moderate to high level of reliability for these measures.

In their study of alumni of an MBA program at the Management School of a large Midwestern university, Robinson and Rousseau (1994) examined responses to open-ended questions regarding ways in which psychological contract violations are experienced by employees. One hundred and twenty-three respondents described specific types of psychological contract violation by their employers. Two coders categorized the responses into categories, with an interrater reliability ranging from 95 to 100 percent for each category. The coding scheme yielded ten distinct categories of violations which served as a basis for item development of the PCQ.

Robinson (1996) found additional support for Rousseau's measure in a survey of full-time employed, evening MBA students. She asked respondents to describe what their employer was obligated to provide them. Based on their responses, she compiled a list of the most commonly reported obligations and gave it to another set of students ($N=75$). The second group of students rated the extent to which these obligations were promised to them at the time of hire. Results showed that the obligations used in

Rousseau's (1990a) measure were those most frequently reported as belonging to the psychological contracts of this sample.

Procedures

A power analysis (Lipsey, 1990) was completed to determine the minimum number of participants required to detect a medium effect size (.50) at a .05 alpha level. It was determined that approximately 100 participants would be required to meet these parameters.

Data Collection

All instruments used in this study are suitable for self-administration. The research design called for data collection from two distinct groups: The Executive Group is made up of eight organization leaders who have been with the company for at least one year so that they are familiar with the existing value system. They were told that they are participating in a study of organizational culture. They were given standardized instructions on how to complete Part 2 (My Company's Organizational Values) of the Organization Culture Profile (OCP). Their OCP scores were averaged to establish a culture profile for the organization. The degree to which the organization's values are consistently shared were evaluated by calculating a reliability coefficient for the mean organization profile using Cronbach's alpha (Nunally, 1978).

Chatman (1989) argues that to aggregate individual ratings of culture to represent an organizational level construct, a certain level of agreement among raters is necessary. She maintains that a strong organizational culture would be indicated by a high reliability coefficient which shows that organization members similarly perceive the content and ordering of organizational values. In her research, Chatman (1989, 1991, 1994) uses a

variation of the Spearman-Brown general prophecy formula and follows Nunnally's (1978) suggestion for a reliability coefficient above .70 .

A second group within the company, the Employee Group, also completed the OCP. The Employee Group was made up of a sample of 108 employees who had been with the organization for a minimum of 4 months. The Employee Group completed both OCP Part 1 (My Organizational Values) and OCP Part 2 (My Company's Organizational Values).

In addition to completing both OCP Sections, the Employee Group also completed the Personal Strain Scales of the Occupational Stress Inventory-Revised (PSS/OSI-R) and Parts 1 and 2 of the Psychological Contract Questionnaire (PCQ). The Employee Group was told that they were participating in a survey on organizational values, and given standardized instructions on how to complete the forms. The author collected all data for this study. It took approximately 60-70 minutes for participants to complete all instruments used in this study.

Hypotheses and Statistical Analyses

In this study, two hypotheses were tested to assess whether they were supported by the data. Hypothesis 1 states that congruence between worker values and organizational values will be negatively related to an employee's perception of violations in the psychological contract. Higher congruence is expected to be related to lower scores on the Psychological Contract Questionnaire (PCQ), and lower congruence is expected to be related to higher scores on the PCQ.

Hypothesis 2 states that congruence between worker values and organizational values will be negatively related to an employee's reported stress symptoms. Higher

congruence is expected to be related to lower scores on the Personal Strain Scales (PSS) of the Occupational Stress Inventory –Revised (OSI-R), and lower congruence is expected to be related to higher scores on the PSS/OSI-R.

The statistical analysis of variables in this study used a canonical correlation model (Tabachnick & Fidell, 1996) whose purpose was to determine the relationship between the independent variables (P-OC; age; gender; time in current job; time with company) and the dependent variables (reported stress symptoms; reported violations of the psychological contract). In particular, the canonical correlation analysis will identify the canonical variates, that is, the linear combinations of independent variables, and the linear combination of dependent variables that best predict the relationship between the independent and dependent variables.

Summary

This chapter provided detailed information about the design and methodology that were used in this study: Data were collected from one hundred eight participants to use in the analysis of two major hypotheses. Participants were drawn from one organization, a division within a large, multi-national corporation. The responses of one group of participants, the Executive Group, were used to create a culture profile for the Organization. A second group of participants, the Employee Group, was asked to complete a demographic data sheet and three instruments.

There were five independent variables analyzed in this study: Person-Organization Congruence (P-OC), age, gender, time in current job, and time with company. The instrument that was used to measure P-OC was the Organizational Culture Profile (OCP; O'Reilly et al., 1991), Parts 1 and 2. To determine P-OC, the rank-

ordered responses from OCP Section 1 (My Organizational Values) and OCP Section 2 (My Company's Organizational Values) were compared for every individual in the Employee Group.

The two dependent variables analyzed in this study were (a) occupational stress, and (b) psychological contract violations. The Personal Strain Scales (PSS) of the Occupational Stress Inventory-Revised (OSI-R; Osipow, 1998) were used to measure occupational stress, and the Psychological Contract Questionnaire (PCQ; Rousseau, 1990a) was used to measure psychological contract violations.

Validity and reliability data for each instrument were presented in this chapter, as well. All three instruments showed acceptable validity and reliability for their intended purposes.

Chapter IV

ANALYSIS OF DATA

This chapter presents the statistical analysis of data that determined the relationship of occupational stress symptoms and perceived Psychological Contract Violations (PCV) to Person-Organization Congruence (P-OC) and demographic variables: Age, Gender, Time with Company, and Time in Current Job. The first section describes the participants in the study; the second section describes the data that were analyzed; the third section describes the results of the exploratory analysis of these data; and the fourth section describes the tests of hypotheses and the results of the data analysis. Finally, a summary of results is presented in the last section

Participants

One hundred and eight full-time working adults participated in this study. Seven participants either did not complete the Organizational Culture Profile (OCP) at all, or did not properly complete it; one did not complete the Psychological Contract Violations (PCV) instrument; and two did not complete the Occupational Stress Inventory-Revised (OSI-R). Therefore, a total of 98 cases were used to analyze the data which represents 91% of all respondents. An analysis of the power charts in Lipsey (1990) confirms that this size population is sufficient to detect a medium effect size (.50) at a .05 alpha level.

Fifty-two men (53%) and forty-six women (47%) participated in the study. The mean age for men was 43.3 years ($SD = 8.2$); the mean age for women was 40.13 ($SD = 9$). At the time of data collection, all participants were in their current job for at least one month ($M = 54.7$ months; $SD = 60$). Length of service with the organization ranged

between 5 months and 408 months ($M = 113.8$; $SD = 101.9$). Representative job titles included Production Supervisor, Senior Analytical Chemist, and Account Executive.

Data Description

Four types of data were collected and analyzed in this study: (a) demographic data which included age, gender, department, job title, time with the company, and time in current job; (b) Person-Organization Congruence (P-OC) which measures the correspondence between an individual's values and the values of the company that individual works for. The Organizational Culture Profile (OCP; O'Reilly et al., 1991) was used to collect P-OC data; (c) occupational stress symptoms, as measured by the Personal Strain Scales (PSS) of the Occupational Stress Inventory-Revised (OSI-R; Osipow, 1998) and (d) psychological contract violations, as measured by the Psychological Contract Questionnaire (PCQ; Rousseau, 1990a, 1995).

The variables analyzed in this study were divided into two sets. The first set (independent variables) were called the Demographic Variables, comprised of P-OC, Age, Gender, Time with Company, and Time in Current Job. The second set (dependent variables) were called the Employee Outcome Variables, comprised of PCV and Occupational Stress. The results of data analyses on these variables are reported next.

Descriptive Statistics

Demographic Data

Screening of all data was performed as recommended by Tabachnick and Fidell (1996), and accuracy of data input was confirmed. Two of the demographic variables (Age and Time in Current Job) had outliers which were more than three standard deviations from the mean. Specifically, one participant was 72 years old, and another

had been in her current job for 317 months. After ascertaining that these scores were entered correctly, a decision was made to use Tabachnick and Fidell's (1996) recommended procedure to reduce the influence of the outliers: The outlying cases were assigned a raw score that is one unit smaller than the next most extreme score in the distribution. Specifically, the maximum age score was changed to 62, and the maximum time in current job score was changed to 241 months. This eliminated the problem for the Age variable, but not for Time in Current Job. Further transformation of this variable, therefore, was undertaken, as described below.

In screening for normality, Time in Current Job and Time with Company failed to meet required significance levels ($D = .247, .150$, respectively; $p < .05$). A logarithmic transformation (Tabachnick & Fidell, 1996) of Time in Current Job brought this variable within normal distribution ($D = .075$; $p > .200$). Time with Company, however, could not be brought within normal distribution despite two attempts using logarithmic and square root transformations (although the distribution was improved toward normality). In light of this, two preliminary canonical correlation analyses were done, one dropping the Time with Company variable, and the other retaining the transformed variable. There was virtually no difference between results of both analyses. Furthermore, the cases with extreme values for this variable were not observed to have extreme values on other scores. Therefore, a decision was made to keep the transformed Time with Company variable in the final analysis. Throughout the remainder of this dissertation, then, the variables Time with Company and Time in Current Job will be understood to mean the logarithmic transformations of these variables.

Although transformed variables are thought to occasionally increase the difficulty of interpretation, it often depends on the scale on which the variable is measured (Tabachnick & Fidell, 1996). If the scale of measurement is somewhat arbitrary (as is often the case), transformation does not noticeably increase the difficulty of interpretation (Tabachnick & Fidell, 1996). In fact, two widely-recognized scales use log transformations to measure data: the decibel scale used to measure sound and the Richter scale used to measure earthquakes. Since Time with Company and Time in Current Job variables are both measured on a somewhat arbitrary scale (i.e., time), clear-sighted interpretation of the log transformations of these variables should not prove difficult.

Means, standard deviations, and minimum and maximum scores for all demographic variables are shown in Table 1. The data represent values with transformed scores for Age, Time with Company, and Time in Current Job, as discussed above.

Person-Organization Congruence (P-OC)

Person-Organization Congruence was measured using the Organization Culture Profile (OCP; O'Reilly, et al., 1991). An implicit assumption in using the OCP is that an organization's culture can be represented in a single profile (Chatman, 1989). Therefore, this study had a group of organization leaders (the Executive Group), presumed knowledgeable about the company's culture and values, complete OCP Section 2 (My Company's Organizational Values). Through rank correlation of responses to each item, their OCP scores were averaged to establish the culture profile for the organization (O'Reilly et al. 1991).

Chatman (1989) argues that to aggregate individual ratings of culture to represent an organizational level construct, a certain level of agreement among raters is necessary.

Table 1

Mean Scores, Standard Deviations, and
Minimum and Maximum Scores for Variables

Variable	<u>M</u>	<u>SD</u>	Minimum	Maximum
Age	41.81	8.72	24	62
Time.Co ^a	4.20	1.16	1.61	6.01
Time.Job ^b	3.45	1.13	.00	5.48
P-OC ^c	.07	.27	-.54	.68
Stress	196.18	29.12	143	283
PCV ^d	11.96	22.12	-48	71

^aTime.Co = Log of Time with Company. ^bTime.Job = Log of Time in Current Job.

^cP-OC = Person-Organization Congruence. ^dPCV = Psychological Contract Violation

She maintains that a strong organizational culture would be indicated by a high reliability coefficient which shows that organization members similarly perceive the content and ordering of organizational values. In her research, Chatman (1989, 1991, 1994) follows Nunnally's (1978) suggestion for a reliability coefficient above .70 .

However, using Cronbach's alpha (Nunally, 1978) to calculate the degree to which the organization's values are consistently shared among the Executive Group provided a reliability coefficient of only .32. Examining the raw data to determine how individual executives rated the 54 values provided verification of the lack of agreement on organizational values. More specifically, a list of executives' highest rankings (score of 9) and lowest rankings (score of 1) showed a range of 19 different values (eight for

highest ranking and eleven for lowest ranking). Only one value (Being results oriented) was selected by more than half the executives ($n = 5$) as the highest ranking value, and only one value (Being quick to take advantage of opportunities) was rated lowest by three executives. The remaining 17 values had no more than one or two executives in agreement about their ratings. Table 2 lists the values that the executives selected as Highest or Lowest, and the number of executives who rated the value as such.

It is not exceptional that a group of executives do not agree on a valid corporate profile of organizational culture. For example, in attempting to create corporate profiles from the responses of partners, managers, and senior staff members in six different accounting firms, Sheridan (1992) found reliability coefficients ranging from .09 to .35, with the median value being just .23.

Since no valid corporate profile of organizational culture could be constructed in the present study, no analysis of objective P-OC could be conducted. Objective P-OC is defined as individual employees' assessment of their personal values compared to the composite profile established from the Executive group.

Consequently, only subjective P-OC was analyzed in this study. To measure subjective P-OC (i.e., the individual's assessment of how personal values compare to that same individual's perception of the company's organizational values), the rank ordering of OCP Section 1 (My Company's Organizational Values) were compared to the rank ordering of OCP Section 2 (My Organizational Values) for each individual from the Employee Group. Possible scores for the OCP range from -1.0 (perfect incongruence) to $+1.0$ (perfect congruence). The mean P-OC score for this population was .08 ($SD = .27$).

Table 2

Highest and Lowest Rankings of Organizational Values
By Number of Executives

Highest Ranked Values	n^a
Having a good reputation	1
Achievement orientation	2
Being results oriented	5
High expectations for performance	2
Respect for individual rights	1
Emphasizing a single culture throughout the company	1
Having a clear guiding philosophy	2
Action orientation	2
Lowest Ranked Values	n^b
Being easy going	2
Being distinctive/different	2
Fitting in	1
Stability	1
Developing friends at work	1
Being precise	1
Quick to take advantage of opportunities	3
Being calm	1
Autonomy	1
Flexibility	1
Being team oriented	1

n^a = Number of executives who ranked this value highest. n^b = Number of executives who ranked this value lowest.

A high positive score reflects a high level of P-OC; a high negative score reflects a low level of P-OC. Tests for normality were within acceptable range ($D = .061$; $p > .20$).

Descriptive statistics for P-OC are summarized in Table 1.

Occupational Stress

The Personal Strain Scale (PSS) of the Occupational Stress Inventory-Revised (OSI-R; Osipow, 1998) was used to assess occupational stress symptoms. The OSI-R Professional Manual (Osipow, 1998) interprets the sub-scales of the PSS (i.e., Vocational Strain (VS); Psychological Strain (PSY); Interpersonal Strain (IS); Physical Strain (PHS) rather than the total score. The author's rationale for this is that he believes that each of the sub-scales measures qualitatively different aspects of occupational stress. However, in the present study, a decision was made to sum the mean subscale scores to calculate a total PSS score. This decision can be supported for four reasons: (a) the individual sub-scales of occupational stress (i.e., Vocational Strain, Psychological Strain, etc.) are not important variables in the present study – the variable of interest is total occupational stress, (b) the mean correlation between each of the subscales and the total stress scores for this population is relatively high, as shown in Table 3 ($M = .76$; range = .62 to .84; $p < .01$), (c) the mean correlation between each of the subscales and the total stress scores for the population on which the OSI-R was normed is quite high ($M = .84$; range = .76 to .91; $p < .01$), and (d) the OSI-R manual reports the total PSS score as the sum of the four sub-scales.

Having summed the means of the four subscales, then, the mean stress score for this population was 196 ($SD = 29$; range = 143 to 283). Higher scores indicate greater reported stress symptoms.

Tests for normality for Occupational Stress were within acceptable range ($D = .081$; $p = .18$). Descriptive statistics for Occupational Stress are summarized in Table 1.

Table 3

Correlations Between Subscales of the Personal Strain Scales and the Total Stress Score Of the Occupational Stress Inventory-Revised

Subscale	1	2	3	4	5
IS ^a	--				
PHS ^b	.69**	--			
PSY ^c	.68**	.68**	--		
VS ^d	.36**	.38**	.56**	--	
STRESS ^e	.78**	.79**	.84**	.62**	--

^aIS = Interpersonal Stress. ^bPHS = Physical Stress. ^cPSY = Psychological Stress. ^dVS = Vocational Stress. ^eSTRESS = Total Stress Score

** $p < .01$, two-tailed.

Psychological Contract Violations (PCV)

The Psychological Contract Questionnaire (PCQ) was used to assess psychological contract violations (PCV). The PCQ is based on the work of Rousseau (1990a, , 1995) who developed a list of promises that organizations typically make to prospective employees during recruitment. Potential scores for the PCQ can range from

-150 (very low PC violation score) to +150 (very high PC violation score). The mean PCV score for this population was 11.96 ($SD = 22.12$; range = -48 to +71). Tests for normality for Psychological Contract Violation were within acceptable range ($D = .073$; $p < .20$). Descriptive statistics for PCV are summarized in Table 1.

Test of Hypotheses

Two statistical tests were performed on the data to test the two hypotheses proposed in this study. These tests were (a) bivariate correlation, and (b) canonical correlation. The results of each test, as they relate to the study's hypotheses, are described in the next two sections.

Bivariate Correlations

Bivariate correlations were performed between all pairs of variables in this study, and results are shown in Table 4. There was no significant correlation between the two Employee Outcome variables, Psychological Contract Violations (PCV) and Stress ($r = .184$).

Next, the correlation between Employee Outcome variables and Demographic variables was assessed as a preliminary test of this study's hypotheses. Hypothesis 1 states that congruence between employee values and organizational values will be negatively related to an employee's perception of violations in the psychological contract. Higher congruence is expected to be related to lower scores on the Psychological Contract Questionnaire (PCQ), and lower congruence is expected to be related to higher scores on the PCQ. As predicted, Person-Organization Congruence (P-OC) was negatively related to perceptions of Psychological Contract Violations (PCV ($r = -.39$, $p < .01$). Therefore, Hypothesis 1 was supported by the preliminary analysis.

Hypothesis 2 states that congruence between worker values and organizational values will be negatively related to an employee's reported occupational stress. Higher congruence is expected to be related to lower scores on the Personal Strain Scales (PSS)

Table 4
Intercorrelations Between All Pairs of Variables

Variables	1	2	3	4	5	6	7
Age	--						
Gender	-.182	--					
PCV ^a	.185	-.085	--				
P-OC ^b	-.045	.081	-.388**	--			
Stress	.004	-.112	.184	-.084	--		
Time.Co ^c	.421**	-.046	.083	-.110	.245*	--	
Time.Job ^d	.166	.113	-.086	.081	.229*	.548**	--

^aPCV = Psychological Contract Violation. ^bP-OC = Person-Organization Congruence.

^cTime.Co = Log of Time with Company, in months. ^dTime.Job = Log of Time in Current Job, in months.

* $p < .05$ (two-tailed). ** $p < .01$ (two-tailed).

of the Occupational Stress Inventory – Revised (OSI-R), and lower congruence is expected to be related to higher scores on the PSS/OSI-R. Contrary to expectations, however, bivariate correlations did not show P-OC to be significantly related to Occupational Stress ($r = -.08$), although the correlation was in the expected direction. Therefore, Hypothesis 2 was not supported by the preliminary analysis.

In addition to Hypotheses 1 and 2, a research question was tested regarding the relationship of certain demographic variables to the Employee Outcome variables (PCV and occupational stress). Much of the research in the areas of P-OC, occupational stress and PCV examines how certain demographic variables may affect employee outcomes (e.g., Posner, 1992; Scandura & Lankau, 1997; Sheridan, 1992; Vagg & Spielberger, 1998). However there is little agreement across studies regarding the relationship of demographic variables to the important variables in the present study (i.e., P-OC, occupational stress, and PCV). In the present study, the results of bivariate correlations showed that there was no significant relationship between PCV and the demographic variables of Age, Gender, Time with Company and Time in Current Job. However, Occupational Stress was significant related to Time with Company ($r = .25, p < .05$) and Time in Current Job ($r = .23, p < .05$).

Most of the results of these bivariate correlations were corroborated with the subsequent canonical correlation performed on the data. However, because canonical correlation is a more robust statistical test, understanding of the relationship among the variables analyzed in this study is enhanced. The results of the canonical correlation analysis are discussed in the next section.

Canonical Correlation Analysis

To further explore the relationship among variables in this study, a canonical correlation model (Tabachnick & Fidell, 1996) was used to determine the relationship between a set of Demographic variables (Person-Organization Congruence [P-OC]; Age; Gender; Time with Company; Time in Current Job) and a set of Employee Outcome

variables (occupational stress symptoms; reported violations of the psychological contract).

Tabachnick and Fidell (1996) point out some limitations to canonical correlation, however, and cite "interpretability" as the most critical. These researchers contend that a canonical solution may be mathematically viable, but not understandable. They refer to one study in which low self-esteem, satisfaction with marital state, and conservative attitudes toward the proper role of women in society go with few visits to physicians, favorable attitudes toward use of drugs, and little actual use of them. Given these results, it would be difficult to find meaning in these relationships.

Despite this theoretical limitation, the advantages of canonical correlation analysis far outweigh its limitations in the present study. Canonical correlation allows assessment of the relationship between two sets of variables (in this case, Demographic variables and variables associated with Employee Outcomes) without inflating the studywise error rate. Canonical correlation also provides a picture of how these variables combine together to reveal the different dimensions in these relationships. In addition, canonical correlation reduces the chances of Type I error, as compared to using univariate analysis to evaluate these relationships (Heesacker & Neimeyer, 1990).

The Statistical Analysis System (SAS, version 6.12) was used to perform the canonical correlation analysis. Table 5 shows the results of this analysis. The first canonical correlation was .44 and the second was .33, both of which are larger than any of the between-set Pearson correlations cited in the previous section. Results of the analysis revealed that the first pair of canonical variates was statistically significant ($F = 3.19, p = .0008$). This result supports Hypothesis 1, that lower levels of Psychological

Contract Violation (PCV) are associated with higher levels of Person-Organization Congruence (P-OC).

Table 5

Correlations, Standardized Canonical Coefficients, Canonical Correlations, Percents of Variance, and Redundancies between Demographic Variables and Employee Outcome Variables and Their Corresponding Canonical Variate

Variables	<u>First canonical variate</u>		<u>Second canonical variate</u>	
	Correlation	Coefficient	Correlation	Coefficient
Employee Outcome Set				
PCV ^a	-.98	-1.02	.22	.03
Stress	.03	.22	.99	.99
% Variance	.48		.52	Total = 1.00
Redundancy	.09		.06	Total = .15
Demographic Set				
P-OC ^b	.86	.82	-.30	-.25
Age	-.43	-.47	-.03	-.39
Gender	.14	-.04	-.35	-.43
Time.Job ^c	.32	.31	.69	.49
Time.Co ^d	-.07	.04	.76	.60
% Variance	.21		.25	Total = .46
Redundancy	.04		.03	Total = .07
Canonical Correlation	.44		.33	

^aPCV = Psychological Contract Violation. ^bP-OC = Person-Organization Congruence.

^cTime.Job = Log of Time in Current Job. ^dTime.Co = Log of Time with Company.

The second pair of canonical variates was also significant ($F = 2.73, p = .03$).

Contrary to the results of the preliminary bivariate correlation analysis cited in the

previous section, this result supports Hypothesis 2, that greater occupational stress is associated with lower P-OC. Thus, the canonical correlation analysis provided a more powerful test of Hypothesis 2 than did the bivariate correlation analysis.

One advantage of canonical correlation over bivariate correlation is that the former reveals how certain combinations across two sets of variables are related. Tabachnick and Fidell (1996) suggest that correlations between variables that are equal to, or greater than, .30 show significant relationships. The results of the present analysis show that the first canonical variate was characterized by high negative loading on Psychological Contract Violation (PCV) ($r = -.98$) along with high positive loading on Person-Organization Congruence (P-OC) ($r = .86$), medium negative loading on Age ($r = -.43$), and medium positive loading on Time in Current Job ($r = .32$). Specifically, the first pair of canonical variates indicates that those with low PCV scores are predominantly associated with higher P-OC, and to a lesser extent to younger age, and longer time in the current job. These results support Hypothesis 1, that congruence between employee values and organizational values will be negatively related to an employee's perception of violations in the psychological contract.

These results also showed that there is no significant relationship between PCV and the demographic variables of Gender and Time with Company. However, there is a significant relationship between PCV and the demographic variables of Age and Time in Current Job.

The second canonical variate was characterized by a high positive loading on Stress ($r = .99$) along with medium negative loadings on Gender ($r = -.35$) and Person-Organization Congruence ($r = -.30$), and high positive loadings on Time in Current Job (r

=.69) and Time with Company ($r = .76$). Specifically, the second pair of canonical variates indicates that those with higher occupational stress are associated predominantly with longer time in the current job, and longer time with the company, and to a lesser extent, to Person-Organization Congruence and to being male. These results support Hypothesis 2, that greater occupational stress is associated with lower P-OC.

These results also showed that there is no significant relationship between occupational stress and the demographic variable Age. However, there is a significant relationship between occupational stress and Gender, Time with Company, and Time in Current Job.

Taken as a pair, these variates suggest that certain undesirable employee outcomes (PCV and Stress) are associated in different ways with the demographic variables of P-OC, Age, Gender, Time in Current Job, and Time with Company. Specifically, employees who report a higher level of psychological contract violations are more likely to experience a lack of congruence between their own values and the organization's values, be relatively older, and have been in their current job for a relatively shorter length of time. Also, employees who report higher occupational stress symptoms are more likely to be male, to have been in the current job for a relatively longer length of time, and to have been with the company for a relatively longer length of time.

Total percent of variance indicates that the first pair of canonical variates extracts 48% of variance from the Employee Outcome variables and 21% of variance from the Demographic variables. The second pair of canonical variates extracts 52% of variance from the Employee Outcome variables and 25% of variance from the Demographic

variables. Together, the two canonical variates account for 100% of variance in the Employee Outcome set, and 46% of variance in the Demographics set.

Redundancies indicate that the first Employee Outcome variate accounts for 9% of the variance in the Demographic variables, while the second Employee Outcome variate accounts for 6% of the variance. Together, the two Employee Outcome variates explain 15% of the variance in the Demographic variables. The first Demographic variate accounts for 4% and the second accounts for 3% of the variance in the Employee Outcomes set. Together the two Demographic variates overlap the variance in the Employee Outcomes set by 7%.

Summary

The results of data analyses were examined in order to determine whether (and to what extent) Person-Organization Congruence (P-OC), Age, Gender, Time with Company, and Time in Current Job are related to reported psychological contract violations and occupational stress symptoms. The scores of 98 full-time working adults who participated in the study were used to complete the data analyses. In addition to a Demographic Data Form, the instruments used in the study were the Organizational Culture Profile (OCP; O'Reilly et al., 1991), the Psychological Contract Questionnaire (PCQ; Rousseau, 1990a, , 1995), and the Personal Strain Scales (PSS) of the Occupational Stress Inventory-Revised (OSI-R; Osipow, 1998).

As a group, these participants can be described as having relatively low levels of Person-Organization Congruence ($M = .08$, $SD = .27$); low levels of Occupational Stress ($M = 196$, $SD = 29$), and low reported Psychological Contract Violations ($M = 11.96$, $SD = 22.12$). They are middle-aged ($M = 41.8$ years, $SD = 8.7$) working adults with a

relatively long Time with Company ($M = 113.8$ months, $SD = 101.90$), as well as a stable period of Time in Current Job ($M = 54.7$ months, $SD = 60$).

Bivariate correlations among all variables provided an initial test of two hypotheses: The first hypothesis, that congruence between worker values and organizational values will be negatively related to an employee's perception of violations in the psychological contract, was supported ($r = -.388$, $p < .01$). This finding is compatible with the notion that when employees' values are not in harmony with the organization's values, they are likely to perceive that the organization has not kept the promises made to them.

Preliminary testing of the second hypothesis, that congruence between worker values and organizational values will be negatively related to an employee's reported stress symptoms showed the relationship in the predicted direction ($r = -.084$), however the results did not reach conventional significance levels. This finding does not support the premise that when employees' values are in harmony with the organization's values, they are less likely to experience occupational stress.

Preliminary testing of the research question regarding the association of Age, Gender, Time with Company, and Time in Current Job showed two significant correlations: Occupational Stress was positively related to Time with Company ($r = .245$, $p < .05$) and Time in Current Job ($r = .229$, $p < .05$). Consequently, in the preliminary analysis, these demographic variables were shown to have a relationship to occupational stress, but not to PCV.

To further test the two hypotheses, a canonical correlation analysis (Tabachnick & Fidell, 1996) was done. The purpose of the analysis was to determine the relationship

between the independent variables (P-OC, Age, Gender, Time with Company, Time in Current Job) and the dependent variables (occupational stress symptoms, reported violations of the psychological contract). The independent variables formed a set called Demographic Variables, and the dependent variables formed a set called Employee Outcome Variables.

Results of the canonical correlation showed that the first pair of canonical variates was statistically significant ($F = 3.19, p = .0008$) as was the second pair ($F = 2.73, p = .03$). These results support the first two hypotheses: (a) lower levels of Psychological Contract Violation (PCV) are associated with higher levels of Person-Organization Congruence (P-OC); and (b) greater occupational stress is associated with lower P-OC.

Certain demographic characteristics (Age, Gender, Time with Company, and Time in Current Job) were shown to have a significant relationship with an employee's perception of violations of the psychological contract or with reported stress symptoms. The first pair of canonical variates indicates that those with lower PCV scores are associated predominantly with higher P-OC, and to a lesser extent with younger age, and longer time in current job. The second pair of canonical variates indicates that those with higher occupational stress scores are associated predominantly with longer time in the current job and longer time with the company, and to a lesser extent to lower P-OC and to being male. Specifically, the demographic variables of Age and Time in Current Job were shown to be associated with the employee outcome of Psychological Contract Violations; and the demographic variables Gender, Time in Current Job, and Time with Company were shown to be associated with the employee outcome of Occupational Stress.

Chapter V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This final chapter discusses the results of the data analyses conducted in this study, and provides some directions for future research. The first section contains a summary of previous research that frames the background for the present study. The second section presents the findings of this investigation, determined as a result of the analysis of the data. The third section highlights the major contributions of this dissertation to our understanding of Person-Organization Congruence (P-OC), Psychological Contract Violation (PCV), and occupational stress. The fourth section describes the strengths and limitations of the present study, and the fifth section suggests areas for future empirical research. Finally, the last section discusses the implications of this research for counseling and organizational practice.

Summary of Previous Research

The world of work has undergone a radical transformation in the last two decades: Many organizations are facing an uncertain economic future, the threat of hostile takeovers, and global competition for customers and resources. Other organizations are downsizing, re-structuring, and re-engineering in an attempt to contain costs and stay competitive (Tomow, 1988). In addition, Posner and Schmidt (1992) cite the extraordinary developments in information technology, lifestyle changes, and demographic trends that are modifying workforce values, skills, and expectations.

Today, a distinct lack of harmony (or congruence) between organization and worker often characterizes the nature of the employment relationship. As both the

organization and the workforce react in response to environmental changes, employee values are often incongruent with evolving organizational culture (Chatman, 1991).

These environmental changes also give rise to a workforce that has become increasingly vigilant in monitoring the promises made to them by the organization (Morrison & Robinson, 1997). The psychological contract, as defined in this study, covers the sum total of the employee's understanding of what was promised him by the organization (Rousseau, 1990a). By monitoring the terms of their psychological contracts, employees track their company's compliance with those terms. Unfortunately, the security and rules that once bound the psychological contract between employer and employee have become uncertain (DeMeuse & Tomow, 1990).

Morrison and Robinson (1997) believe that vigilance is most likely to be triggered in times of turbulence or dramatic changes in the environment. With the collective environmental, organizational, and demographic changes that have occurred, it is expected that vigilance will be increased. It is likely that perceived violations in the psychological contract will increase, as well (Morrison & Robinson, 1997).

In the past decade, researchers note an increase in health and disability claims (Kohler & Kamp, 1992) in which workers are reporting a variety of job-related stress symptoms. Some researchers believe that these stress symptoms are in response to overwhelming environmental and organizational changes that are beyond the employee's ability to cope (e.g., French et al., 1982; Harrison, 1985). Since these changes are believed to trigger a lack of congruence between individual values and organizational culture (Chatman, 1991), it is probable that employees who experience incongruence will experience stress symptoms as well. By the same token, since changes in the

organization and the environment are also believed to heighten vigilance (Morrison & Robinson, 1997), it is conceivable that employees who experience incongruence will perceive more instances where their psychological contracts have been violated.

There is evidence that an organization whose culture is congruent with employees' values is more likely to be effective as measured along various financial dimensions (Denison, 1997). It would stand to reason that congruence between these same variables would have other positive outcomes as well, for example the health of employees and their satisfaction with their psychological contracts.

Study Hypotheses

The independent variables examined in this study formed a set of Demographic variables (Person-Organization Congruence [P-OC], Age; Gender; Time with Company; Time in Current Job). The dependent variables examined in this study formed a set of Employee Outcome variables (occupational stress symptoms; reported violations of the psychological contract). A canonical correlation model (Tabachnick & Fidell, 1996) was used to determine the relationship between these two sets of variables.

This study examined two hypotheses. Hypothesis 1 states that congruence between worker values and organizational values will be negatively related to an employee's perception of violations in the psychological contract. Higher congruence is expected to be related to lower scores on the Psychological Contract Questionnaire (PCQ), and lower congruence is expected to be related to higher scores on the PCQ.

Hypothesis 2 states that congruence between worker values and organizational values will be negatively related to an employee's reported stress symptoms. Higher congruence is expected to be related to lower scores on the Personal Strain Scales (PSS)

of the Occupational Stress Inventory–Revised (OSI-R), and lower congruence is expected to be related to higher scores on the PSS/OSI-R.

In addition, the association of certain demographic variables with the Employee Outcome variables (PCV and occupational stress) was tested. Much of the research in the areas of P-OC, occupational stress, and PCV examines how demographic variables may affect employee outcomes (e.g., Posner, 1992; Scandura & Lankau, 1997; Sheridan, 1992; Vagg & Spielberger, 1998). However, there is little agreement across studies regarding the relationship of demographic variables to the important variables in the present study (i.e., P-OC, occupational stress, and PCV). The next section discusses the findings in relation to the hypotheses tested.

Summary and Discussion of Findings

Results of the canonical correlation analysis revealed that the first pair of canonical variates was statistically significant, as was the second pair. These results support this study's two hypotheses: (a) higher levels of Person-Organization Congruence (P-OC) are associated with lower levels of Psychological Contract Violation (PCV), and (b) higher levels of P-OC are associated with lower levels of occupational stress.

In addition to Hypotheses 1 and 2, a research question was tested regarding the relationship of certain demographic variables to the Employee Outcome variables (PCV and occupational stress). Much of the research in the areas of P-OC, occupational stress and PCV examines how certain demographic variables may affect employee outcomes (e.g., Posner, 1992; Scandura & Lankau, 1997; Sheridan, 1992; Vagg & Spielberger, 1998). However there is little agreement across studies regarding the relationship of

demographic variables to the important variables in the present study (i.e., P-OC, occupational stress, and PCV). In the present study, the first pair of canonical variates showed that there was a significant relationship between PCV (-.98) and the demographic variables of Age (-.43) and Time in Current Job (.32). The second pair of canonical variates showed that Occupational Stress (.99) was significantly related to the demographic variables Gender (-.35), Time with Company (.76) and Time in Current Job (.69).

In summary, the first pair of canonical variates indicates that those with lower PCV scores are associated predominantly with higher P-OC, and to a lesser extent with younger age, and longer time in current job. The second pair of canonical variates indicates that those with higher occupational stress scores are associated predominantly with longer time in the current job and longer time with the company, and to a lesser extent to lower P-OC, and to being male.

The finding that the employee outcome, Psychological Contract Violations (PCV), has a strong negative relationship to the demographic variable, Person-Organization Congruence (P-OC), is supportive of the assumption that higher levels of congruence are related to positive individual and organizational outcomes (O'Reilly et al., 1991). While this assumption is logically sound and widely studied, the results of the present study provide support that an important employee outcome (PCV) is related to how well an employee's values match the values of the organization. This relationship has not been examined in previous research.

The finding that the employee outcome, PCV, has a moderate relationship to the demographic variable, Age, supports the notion that older workers are more likely to

perceive violations in their psychological contracts. This finding is not surprising since older workers presumably have had a greater time period in which violations might have occurred. Also, given the extraordinary developments in technology and demographic trends that are modifying workforce values, skills, and expectations, older workers may be more likely to perceive that the terms of their psychological contracts have been violated. Their present skills, which were sufficient to perform their jobs in the past, may not be adequate to meet the technological requirements of today's workplace. If the organization now insists that skills be updated or does not promote older workers because they lack these skills, it is likely that older employees will perceive that the terms of their psychological contract have been violated.

The finding that the employee outcome, PCV, has a modest negative relationship to the demographic variable, Time in Current Job, suggests that employees who have been in their current jobs for shorter periods of time are more likely to perceive violations in their psychological contracts. While this finding might appear to contradict the previous result (i.e., that older workers are more likely to perceive violations in the psychological contracts), it is incorrect to assume that older workers would have been in their current jobs for a longer time than younger workers. In fact, bivariate correlations showed no significant correlation between Age and Time in Current Job ($r = .17$).

The finding that the employee outcome, Occupational Stress, has a strong positive relationship to two demographic variables, Time in Current Job and Time with Company, suggests that employees who are in their current jobs and who have been with the company for longer periods of time, tend to report higher occupational stress. This makes sense given that many companies today are experiencing uncertain economic

futures, the threat of hostile takeovers, and global competition for customers and resources. The result is that the workforce is often under considerable pressure to improve performance, to contain costs, and to help their firms stay competitive. Logically, the more time workers are exposed to these pressures, the greater the likelihood that they will experience occupational stress. Matteson and Ivancevich (1987) suggest that, "Duration is an important factor. Generally speaking, the longer special demands are placed upon us, the more stressful the situation" (p. 11).

The finding that the employee outcome, Occupational Stress, has a moderate negative relationship to the demographic variable, Person-Organization Congruence, is supportive of the assumption that lower levels of congruence are related to higher levels of occupational stress. This relationship has been the subject of much research (e.g., Assouline & Meir, 1987; Cluskey & Vaux, 1997; Sutherland et al., 1995). However, most prior research looked at congruence as the fit between a worker's vocational interests and specific jobs and industries (Holland, 1985). The present study provides support for the empirical data, suggesting that occupational stress is related to congruence as defined by the match between an employee's values and the values of the organization.

The employee outcome, Occupational Stress, was found to have a moderate negative relationship to the demographic variable, Gender. Since Gender was coded Male = 1 and Female = 2, this finding suggests that males have higher levels of occupational stress than females. This finding is puzzling since recent research (e.g., Vagg & Spielberger, 1998) has shown that women report higher levels of distress at the less lethal end of the stress-related disorder spectrum (e.g., depression, anxiety), whereas

men are at greater risk for the lethal stress-related illnesses such as cardiovascular disease (Matuszek, Nelson, & Quick, 1995). Perhaps one explanation could be the coping mechanisms employed by individuals to handle occupational stress. The Occupational Stress Inventory-Revised (OSI-R; Osipow, 1998) identifies four categories of personal coping resources that individuals may use to reduce or alleviate chronic stress: (a) Recreational Activities; (b) Self-Care; (c) Social Support; and (d) Rational/Cognitive Coping. Although coping resources were not assessed in the present study, it is possible that women in this organization make better use of these coping mechanisms thereby mitigating the stress response.

Another possible reason why males in this sample have higher levels of occupational stress than females could be because of the nature of the psychological contracts that women often develop with their organization. Research has indicated that women still have primary responsibility for home and family obligations, despite being employed full-time (Hoschild, 1989). While this might indicate the occasion for additional stress, if women feel that the organization supports them in their need to manage both their career and their family, they might actually perceive less occupational stress. In this organization, parental leave was generous, and flexible work schedules were available to employees. Since women have been shown to make greater use of these policies and have greater organizational commitment and job satisfaction when they perceive the organization has family-responsive policies (Scandura & Lankau, 1997), women might also experience less occupational stress than men if they have negotiated terms in their psychological contracts that alleviate potential sources of stress.

Contributions of Present Research

This dissertation makes several contributions to the literature on Person-Organization Congruence (P-OC), psychological contract violations (PCV), and occupational stress. Most strikingly, the results of the present study offer strong support for the validity of assessing P-OC on the basis of value congruency. Much past research has assessed P-OC along dimensions other than values congruence, for example the Vocational Fit approach (Holland, 1985), the Needs-Supplies approach (Caplan, 1987), and the Demands/Abilities approach (Caplan, 1987).

Further, despite the variety of outcomes studied relative to P-OC, no empirical studies have adequately measured P-O values congruence and its relationship to the outcome measures examined in this study, that is, psychological contract violation and occupational stress. In addition, almost all of the previous studies focused on the early stage of psychological contract development, when the employee first enters the organization. Also, there has been much research on the effect of psychological contract violation, but virtually none on its antecedents. The present study contributes to the literature by (a) identifying two important employee outcomes of poor P-OC (i.e., PCV and occupational stress), (b) examining a population who has a history with its present organization, versus the traditionally-studied stage of organization entry, and, (c) identifying P-OC as a powerful antecedent of PCV and occupational stress.

Strengths and Limitations of Study

The research design for this study was fundamentally sound and balanced using valid and reliable instruments to collect the data. The Organizational Culture Profile

(OCP; O'Reilly et al., 1991) used the Q-sort methodology (Block, 1978) to measure Person-Organization Congruence, and as such, clearly forced greater specificity from participants regarding the company's and their own organizational values. However, there were two potential weaknesses in the OCP: (a) the amount of time to complete and score the instrument, and (b) the possibility that the fifty-four items did not accurately represent today's organizational values.

Following data collection, the researcher solicited feedback from participants. A few people mentioned the amount of time and concentration the OCP required to complete, but did not indicate that this compromised their responses. Additionally, none indicated that any of the OCP items were irrelevant. However, in an ideal world, the OCP items would be reassessed, new items replacing old ones, and commensurate validity and reliability tests conducted every 10 to 15 years to accommodate possible new management trends and vocabulary.

Another limitation is that this study assessed P-OC at one particular place in time. The research design could be improved by conducting a longitudinal study along similar lines as the current study. A longitudinal design could map changes in congruence over time and relate those changes to a number of company outcomes, including, but not limited to, psychological contract violations and occupational stress. To date, no longitudinal studies using the OCP have been reported in the literature.

One finding of this study showed that a lack of congruence between individual and organizational values is related to greater occupational stress. However, a stronger relationship was shown between occupational stress and two other variables (Time with Company and Time in Current Job). Those who were in their current jobs and with the

company for longer periods of time reported greater occupational stress. This could suggest that the effects of time, irrespective of a lack of congruence, might better explain the higher occupational stress scores.

This study used a quantitative, correlational approach to measure P-OC and its relationship to psychological contract violations and occupational stress. Therefore, results do not provide proof of the causal direction of this relationship. For example, could occupational stress and its manifestations (e.g., depression, anxiety, irritability) be the source of an employee's feeling at odds with organizational values? Or could the fact that the employee believes the company has not kept its promises provoke feelings of incongruence with company values or heightened occupational stress symptoms?

Although the causal direction cannot be proven, values are most often regarded as having an impact on attitudes (Locke, 1976; Rokeach, 1973). Also, the work of Chatman (1991) and O'Reilly et al. (1991) has demonstrated that Person-Organization Congruence (P-OC), as measured by values congruency, does predict turnover intentions and subsequent turnover. This suggests, therefore, that P-OC may precede affective outcomes such as reported psychological contract violations (PCV) and occupational stress.

The nature of the instruments used in this study, did not allow examination of the possible emotions associated with a lack of congruence and violations of employees' psychological contract. Morrison and Robinson (1997) emphasize the emotional aspect of PCV, in particular, and suggest that traditional survey methods and quantitative analyses may not adequately capture it. One way to do this in future research would be through more qualitative techniques, such as in-depth interviews or assessment of verbal

protocols. Qualitative assessment of these measures could provide further understanding of how P-OC, PCV, and occupational stress are related.

Finally, although this sample is believed to be sufficiently representative of the distribution of people in a typical organization regarding age, tenure, experience, and management levels, all data were collected with this one population, in a single organization, in a specific industry. Therefore, generalization of results must be made with appropriate caution.

Direction for Future Research

The present research examined whether employees whose values were congruent with their company's values would experience less psychological contract violation and lower occupational stress. No attempt was made to determine the content or direction of cultural values, for example whether the organization in question emphasized interpersonal relationship values or work task values. In his study of organizational culture and employee retention, Sheridan (1992) found employees stayed longer in organizations where interpersonal relationship values were fostered, regardless of P-OC scores. This finding suggests that employee retention is best explained because an organizational culture that emphasizes interpersonal relationship values is uniformly more attractive to employees than a culture emphasizing work task values. An area for future research would be to assess the content of organizational culture values to determine if a particular type of culture contributes more to reported psychological contract violations and occupational stress than does P-OC itself.

As discussed under Limitations, this study examined employees' assessment of their organizational values at a given point in time. Future research could examine

changes in employees' values over time by comparing their OCP profiles at one period to their profiles at other periods. Similarly, changes in a company's organizational values can be examined by comparing an organization's OCP profile over several time periods. In this way, changes in P-OC can be assessed to determine whether the person or the organization has changed, and the direction of the change. Chatman (1989) suggests that in organizations characterized by low agreement on the corporate OCP (as was found in the present study), individual values are likely to remain the same over time, that is, they will not change as a function of organizational membership. Future research could examine this situation and determine whether this would lead to even greater reported psychological contract violations and occupational stress over time.

The present study was conducted in the United States, with a population that was largely born and raised in the American culture. However, the content of psychological contracts and the processes shaping their change and violation vary with a society's norms. These norms play a major role in exactly what people believe a promise means. For example, in the United States, our society largely values consistency in word and deed. However variance occurs and is tolerated to some extent (Rousseau, 2000). This may not be true in other cultures. Therefore, a key research issue includes the nature and meaning of promises across nations and how societal differences in making and keeping promises affect the nature of the psychological contract. Examining the differences of psychological contract making and the effects of violation across national cultures would be an exciting research opportunity. Especially with the rise of international firms, it is common for managers from one country to supervise workers from another (Rousseau, 2000). Little is known how cross-national differences affect each party's interpretation

of the psychological contract, or how each assesses whether contract terms are fulfilled or violated. Further exploration of these issues is needed when psychological contracts exist between parties from different cultural groups.

Also, future research needs to examine the attributions that employees make when organizations renege on their promises. Perhaps employees would be less likely to perceive PCVs if they believe that the company's failure to keep its promises was due to external, uncontrollable forces. By the same token, if employees view their own poor performance for their company's refusal to keep its promises, they may be less likely to perceive that a PCV has occurred. Future research should assess employees' acceptance or rejection of the "reasons" they believe a PCV has occurred to determine whether this has a moderating affect on their perception of PCVs.

In this study, only the employee's perspective of the psychological contract was examined. However, the psychological contract is the sum total of promises made between the employer and the employee (Rousseau, 1990a). Knowing the employer's perspective of PCVs would explore the notion of reciprocity and the relationship between employee and employer promises. Towards that end, future research should examine the psychological contract from the perspective of both the employer and the employee.

Coping has been shown to be a critical variable in determining the effects of stress. While this study did not focus on coping mechanisms, the Occupational Stress Inventory-Revised (OSI-R) used to measure stress in this study has a sub-scale that assesses which coping mechanisms a person uses to deal with occupational stress. Future research should administer this sub-scale so that moderating effects of coping can be determined in the study of P-OC.

Implications for Vocational Counseling and Organizational Practice

The findings of this study have some implications for those who consult with organizations and for those who provide counseling to employees both inside and outside the organization. These implications are discussed next.

Implications for Counseling

Spokane (1985) suggests that clients come to career counseling looking for a "right answer" as to which jobs they should seek. In the past, counseling professionals have attempted to guide their clients in their job search using various measures of congruency such as Holland's (1985) RIASEC pentagon. Given the results of the present study, the thoughtful career counselor should include P-OC values congruency as an additional measure of vocational fit. Job seekers should be encouraged to do more than just find a job. They should also be guided to seek out organizations whose values are similar to their own. This will require soliciting intensive information about the organizations they are considering joining. Counselors can direct their clients to employ a variety of methods, for example, checking out the company's Internet web site, reading articles written about the company, speaking to people at various levels of the organization, looking at the company's mission statement, inquiring about the organization's vision or strategy, or asking direct questions during interviews about the work values most important to the company. If an organization claims to value teamwork, potential employees should ask how they reward employees for displaying teamwork. Counselors should encourage their clients to employ these strategies in career planning and during their job search.

However, counseling for work adjustment issues is often more complex than for career planning. Dawis and Lofquist (1984) suggest that this is because adjustment requires change in person or environment or both, and persons and environments are notoriously resistant to change. However, value congruency assessment can provide clues about how flexible or entrenched both person and organization values are, and the feasibility of successful adjustment.

Because it is the client who is immediately accessible, counselors have typically attempted to help the client effect personal changes. In a traditional approach, the counselor would focus on a client's feelings of low self-esteem, for example, as they are played out in work interactions. A P-O focus, however, could acknowledge that this organization is one in which teamwork and personal relationships are not valued. A P-O focus can direct counseling interventions to empower the client to effect changes in the organization, as well. A client with the courage to challenge organization values and the ability to effect changes in these values can have a very positive affect on his or her work adjustment. It seems that such an approach would help employees gain a clearer understanding of both their personal issues as well as those of the organizational culture.

Another area that has implications for counseling is the realm of psychological contracting. First, counselors can help clients to deal with the intense emotions that often occur as a result of violations in their psychological contracts. Second, the counselor can help the client take a more proactive role in managing the contract. Rather than defer the contract-making process to recruiters or to organization managers, individuals should be guided to engage in explicit discussions of psychological contract terms to ensure that perceptions of the terms are shared with the organization and that those terms are as clear

as possible. Third, counseling can direct clients to monitor the terms of their psychological contracts especially when significant time has elapsed since certain promises were made. Fourth, counselors can help clients determine factors that should alert them to the possibility of a company's renegeing on psychological contract terms. For example, being wary of potential contract violations whenever promises seem too good to be true, and during periods of organizational upheaval. Through heightened vigilance, employees may be better able to detect and redress psychological contract violations.

Fortunately, counselors no longer place the responsibility for mental health on the shoulders of the client, alone. Service providers are beginning to view the person in the context of the organization in which he or she works. The interrelationship between work and mental health has been clearly demonstrated in many studies. For example, career satisfaction is related to indicators of good mental health, such as higher self-esteem and lower levels of depression (Dawis & Lofquist, 1984). However, current methods still neglect necessary system changes for optimizing employee mental health. We cannot expect to counsel individuals and then return them to the same environment that led the client to seek counseling in the first place. If we fail to help the individual to alter the organization, the system forces the individual back to where he was before, either reestablishing or exacerbating the initial problem.

Nowhere is this more true than in industry's typical response to workplace stress: that is, to treat the employee, to recommend or even offer individual stress management services, but do nothing to modify the stress-producing aspects of the work environment. Such workplace interventions would, no doubt, promote health and productivity in

organizations. While elimination of all sources of stress in a market-driven economy is impossible, companies who attempt to align their values with those of their best employees, who strive to establish and fulfill mutually agreeable psychological contracts are more likely to spend fewer health care dollars than those that don't. These considerations will be discussed next.

Implications for Organizational Practice

The organizational selection process has traditionally focused on a job candidate's knowledge, skills, and abilities (KSAs) so that companies hire only those whose KSAs are compatible with job requirements. It is proposed here that the selection process should also seek to hire individuals who have values that are congruent with the organization's values. Since congruence appears to lead to fewer perceptions of psychological contract violations and lower occupational stress, organizations might benefit in some very tangible ways from actively attracting and selecting those whose values fit with organizational values.

One way to do this is in the hiring process. Organizational interviewers should pay attention to behaviors a candidate exhibits during the interview and to the answers given to particular questions. If the organization values teamwork, candidates could be asked to give examples of how they have helped others perform difficult jobs, encouraged someone who is having a bad day, or shared information or resources that others needed to do their job. Organizational agents need to emphasize and clearly articulate the values most important to their company. They must portray the most accurate and complete picture of their organization so that job seekers can assess the fit between their own and the company's values.

It may be that executives need help to understand their own organization's values. In the present study, senior executives did not agree on the values that represent their own company's culture. Whether from lack of contact with employees, personality factors, denial, projection, or some other influence, they could not describe the current culture. What many executives may need are objective feedback mechanisms – both formal and informal – in order to stay in touch with their organization's values.

The premise of this study is that higher levels of Person-Organization Congruence (P-OC) are beneficial for individuals and for organizations. However, some researchers suggest that extremely high levels of P-OC among numerous organizational members may lead to ineffective individual and organizational behavior (e.g., Chatman, 1989). These researchers believe that high levels of P-OC among a majority of employees may lead to conformity, homogeneity, and lowered innovation (Janis & Mann, 1977; Kanter, 1988). In fact, Schneider (1987) suggests that organizations must actively seek some individuals who do not completely fit the current organizational context. Therefore, before undergoing extensive efforts to change organizational or individual values, organizations should determine optimal levels of fit that still allow the organization to adapt to or take advantage of new opportunities.

There is little doubt that the old employee relationship is a thing of the past. As the current employment relationship continues to undergo transformation, understanding psychological contract violations will be a significant issue for researchers and practitioners alike. Although current research continues to show evidence that psychological contract violations negatively influence employee behavior, organizations

often neglect to work with employees to establish and maintain successful psychological contracts.

Organizational agents such as supervisors and Human Resource managers play a critical role in defining and executing employees' psychological contracts (Guzzo et al., 1994). In so doing, they can also play a critical role in minimizing contract violation. One way is to provide realistic job previews and exercise caution when making promises during the hiring process. Thereafter, they must provide frequent communication and clarification regarding obligations and expectations after employees have been hired. Greater attention should be given to managing employees' perceptions of psychological contract promises over time, and particularly during periods of organization change or upheaval.

Recognizing that psychological contracts are a two-way street, organizational agents should also provide clear feedback to employees whom they believe are failing to uphold their side of the psychological contract. Morrison and Robinson (1997) suggest that this feedback will minimize self-serving biases that may cause employees to believe that the organization alone is responsible for violations.

Finally, the way that the organization responds when employees report a violation will do much to minimize negative effects. While psychological contract violations are sometimes unavoidable, the destructive reactions that often follow are not. Feelings of anger and betrayal following psychological contract violation can be reduced if the employee's attributions for the violation are managed (Morrison & Robinson, 1997). If honest and adequate reasons are offered by the organization, employees are less likely to experience intense emotional upset or even to perceive that a violation has occurred.

Conclusions

This research found empirical evidence for a negative relationship between P-OC and perceived psychological contract violations and occupational stress. Quantitative measures were moderate to strong showing that higher P-OC can lead to lower levels of reported violations and occupational stress symptoms.

Person-Organization Congruence theory holds that occupational stress can result from the mismatch between the individual's and the organization's characteristics. The findings of this study support P-OC theory and emphasize that occupational stress must be understood in light of the congruence between organizational and individual values. This relationship emphasizes the importance of personnel selection when hiring and transferring employees and the benefit of allowing the needs and values of each worker to guide employment decisions.

Person-Organization theory does not include perceptions of psychological contract violations as one of the possible outcomes of a lack of congruence between individual and organizational values. The findings of this study support such a premise, and suggest the importance of careful attention to developing and managing the terms of employees' psychological contracts.

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Appendix A

Solicitation Letter

Informed Consent Form

Participate in a study and have an opportunity to win a prize worth \$250

You have been asked to participate in a study that will evaluate certain dimensions of your company's organizational culture. The purpose of the study is to assess organizational values, the promises organizations typically make to employees, and your response to these values and promises. This research will help to understand how H&R's current culture fits with employee values, and will provide opportunities to improve the fit, where necessary.

This research is part of a doctoral dissertation I am completing in partial fulfillment of the Ph.D. degree in the Department of Professional Psychology in the College of Education & Human Services, at Seton Hall University in South Orange, New Jersey. If you choose to participate, you will be asked to complete 3 surveys that ask you to rate your responses to items such as, "How important is it to you that your company provides regular feedback and performance appraisal," on a scale of 1 (not at all important) to 5 (extremely important).

It is expected that the surveys will take approximately 60-90 minutes to fill out, and you will be permitted to complete the surveys during company time. In addition to the 3 questionnaires described above, you will be asked to complete a demographic data sheet (age, gender, tenure, department, job title) to collect descriptive statistics for the study. This information will not be used to identify anyone in any way. All responses to the surveys will be totally anonymous and confidential. Only summarized results for the study will be published.

This project has been reviewed and approved by the Seton Hall University Institutional Review Board for Human Subjects Research. The IRB believes that the research procedures adequately safeguard the subject's privacy, welfare, civil liberties, and rights. The Chairperson of the IRB may be reached through the Office of Grants and Research Services. The telephone number of the Office is (973) 275-2974.

There are no foreseeable risks or benefits to you from your participation in this research because this is simply an assessment study. However, survey results can provide an opportunity for H&R to assess the corporate culture to determine how organizational values and individual values are aligned.

As an additional incentive to participate, the company is sponsoring a drawing for all who complete the surveys. At the end of the data gathering session, you will be given a card to complete with your name and telephone number. This card will be entered in a drawing for a chance to win a gift worth an estimated \$250.

The following date and times are scheduled for data gathering sessions. *Please choose the best time for you and respond back to me via e-mail (ccbocchino@aol.com) or phone (908) 766-3425, by Wednesday, April 5th.*

<u>DATE</u>	<u>TIMES</u>	<u>LOCATION</u>
-------------	--------------	-----------------

When I receive your agreement to participate, I will confirm your participation via phone or e-mail. Please arrive promptly at the designated start time so that other participants are not held up. Also, feel free to contact me if you have any questions prior to the study.

Sincerely,

Carol C. Bocchino, M.Ed.
 Dept. Of Professional Psychology
 Seton Hall University
 South Orange, NJ 07079
 (908) 766-3425 e-mail: ccbocchino@aol.com

Informed Consent Form

Your participation in a research study is requested. The purpose of the study is to assess organizational values, the promises organizations typically make to employees, and your response to these values and promises. If you agree to participate in the study, your involvement should take no longer than 1-1 1/2 hours. In addition to a demographic data form (age, gender, tenure, department, job title), you will be asked to complete three questionnaires that ask you to rate your responses to items such as, "How important is it to you that your company provides regular feedback and performance appraisal," on a scale of 1 (not at all important) to 5 (extremely important).

Your participation is completely voluntary and you are free to refuse to participate, or to stop at any time without penalty. All information will be coded by number to protect anonymity.

Do you have any questions at this time?

If you have any questions later, please feel free to contact:

Carol Bocchino, M.Ed.
Dept. Of Professional Psychology
Seton Hall University
South Orange, NJ 07079
(908) 766-3425

Bruce W. Hartman, Ph.D. ABPP
Dept. Of Professional Psychology
Seton Hall University
South Orange, NJ 07079
(973) 275-2739

Please read the following, and sign below if you agree to participate.

This project has been reviewed and approved by the Seton Hall University Institutional Review Board for Human Subjects Research. The IRB believes that the research procedures adequately safeguard the subject's privacy, welfare, civil liberties, and rights. The Chairperson of the IRB may be reached through the Office of Grants and Research Services. The telephone number of the Office is (973) 275-2974.

I understand that my responses to the questionnaires in this research will be kept strictly confidential. Also, I recognize that there are no foreseeable risks or benefits from my participation, because this is simply an assessment study.

I have read the material above, and any questions I asked have been answered to my satisfaction. I agree to participate in this activity, realizing that I may withdraw without prejudice at any time..

Signature _____ Date _____

Researcher _____ Date _____

If you would like to receive feedback on the overall results of this study, please fill in your e-mail address below; otherwise leave blank:

Appendix B

Instruments

Demographic Data Sheet

The following questions ask for some general demographic data. Please answer each question by *filling in the blanks* or by *circling* the most appropriate response. The information you provide in this protocol will be kept totally anonymous and confidential.

1. **Age:** _____

2. **Gender:** **Male** **Female**

3. **How long have you been working for your current organization?**
 ____ # Years ____ # Months

4. **How long have you been working in your current job?** ____ #Years ____ # Months

5. **What department do you work in?**

6. **What is your job title?**

Below is a list of 54 organizational values, numbered from 1 - 54. This part of the study will determine how important it is to you that a particular value be part of the value system of any company you work for.

1. On the Organizational Values Rating Sheet on the next page, there are nine categories, ranging from (1) *Least important to me*, to (9) *Most important to me*. Please refer to this page now.
2. Depending on the category (1 – 9), you will place either 2, 4, 6, 9, or 12 values from the list below in the appropriate category.
3. To get started, first review the list. Then, pick out the 2 values that are least important to you, and the 2 values that are most important to you. Next, enter the corresponding organizational value number (1 – 54) under the appropriate Category (1 = Least Important to me or 9 = Most Important to me) on the Organizational Values Rating Sheet.
4. Then, rate the remaining organizational values according to their importance to you, placing the corresponding value number (1 – 54) under the remaining categories (2 through 8).
NOTE: Within each category, you do NOT have to rank order your list of values. For example, you should merely place 9 values under Category 6, in no particular order of preference.
5. The question to keep in mind while completing the rating sheet is "How important is it to me that this value is a part of my ideal organization's value system?"
6. Feel free to change your choices at any time.

-
- | | | |
|--|--|---|
| 1. Flexibility | 20. Respect for the individual's right | 39. Low level of conflict |
| 2. Adaptability | 21. Tolerance | 40. Confronting conflict directly |
| 3. Stability | 22. Informality | 41. Developing friends at work |
| 4. Predictability | 23. Being easy going | 42. Fitting in |
| 5. Being innovative | 24. Being calm | 43. Working in collaboration with others |
| 6. Being quick to take advantage of opportunities | 25. Being supportive | 44. Enthusiasm for the job |
| 7. A willingness to experiment | 26. Being aggressive | 45. Working long hours |
| 8. Risk taking | 27. Decisiveness | 46. Not being constrained by many rules |
| 9. Being careful | 28. Action orientation | 47. An emphasis on quality |
| 10. Autonomy | 29. Taking initiative | 48. Being distinctive – different from others |
| 11. Being rule oriented | 30. Being reflective | 49. Having a good reputation |
| 12. Being analytical | 31. Achievement orientation | 50. Being socially responsible |
| 13. Paying attention to detail | 32. Being demanding | 51. Being results oriented |
| 14. Being precise | 33. Taking individual responsibility | 52. Having a clear guiding philosophy |
| 15. Being team oriented | 34. Having high expectations for performance | 53. Being competitive |
| 16. Sharing information freely | 35. Opportunities for professional growth | 54. Being highly organize |
| 17. Emphasizing a single culture throughout the organization | 36. High pay for good performance | |
| 18. Being people oriented | 37. Security of employment | |
| 19. Fairness | 38. Offers praise for good performance | |

My Organizational Values Rating Sheet -- Part 1

<u>Least important to me</u>	<u>Less important to me</u>	<u>Neutral or Undecided about importance</u>	<u>More Important to me</u>	<u>Most Important to me</u>				
1	2	3	4	5	6	7	8	9
1. _____	1. _____	1. _____	1. _____	1. _____	1. _____	1. _____	1. _____	1. _____
2. _____	2. _____	2. _____	2. _____	2. _____	2. _____	2. _____	2. _____	2. _____
3. _____	3. _____	3. _____	3. _____	3. _____	3. _____	3. _____	3. _____	3. _____
4. _____	4. _____	4. _____	4. _____	4. _____	4. _____	4. _____	4. _____	4. _____
	5. _____	5. _____	5. _____	5. _____	5. _____	5. _____	5. _____	5. _____
	6. _____	6. _____	6. _____	6. _____	6. _____	6. _____	6. _____	6. _____
		7. _____	7. _____	7. _____	7. _____	7. _____	7. _____	7. _____
		8. _____	8. _____	8. _____	8. _____	8. _____	8. _____	8. _____
		9. _____	9. _____	9. _____	9. _____	9. _____	9. _____	9. _____
		10. _____	10. _____	10. _____	10. _____	10. _____	10. _____	10. _____
		11. _____	11. _____	11. _____	11. _____	11. _____	11. _____	11. _____
		12. _____	12. _____	12. _____	12. _____	12. _____	12. _____	12. _____

This part of the study will determine how characteristic a particular value is of the value system of the company you currently work for.

1. On the Organizational Values Rating Sheet on the next page, there are nine categories, ranging from (1) *Least characteristic of my company*, to (9) *Most characteristic of my company*. Please refer to this page now.
2. Depending on the category (1 – 9), you will place either 2, 4, 6, 9, or 12 values from the list below under the appropriate category.
3. To get started, first review the list. Then, pick out the 2 values that are *least characteristic of your company*, and the 2 values that are *most characteristic of your company*. Next, enter the corresponding organizational value number (1 – 54) under the appropriate Category (1 = Least characteristic or 9 = Most characteristic) on the Organizational Values Rating Sheet.
4. Then, rate the remaining organizational values according to their importance to you, placing the corresponding value number (1 – 54) under the remaining categories (2 through 8).
NOTE: Within each category, you do NOT have to rank order your list of values. For example, you should place 9 values under Category 6, in no particular order of preference.
5. The question to keep in mind while completing the rating sheet is *“How characteristic is this value in my current organization's value system?”*
6. Feel free to change your choices at any time.

-
- | | | |
|--|--|---|
| 1. Flexibility | 20. Respect for the individual's right | 39. Low level of conflict |
| 2. Adaptability | 21. Tolerance | 40. Confronting conflict directly |
| 3. Stability | 22. Informality | 41. Developing friends at work |
| 4. Predictability | 23. Being easy going | 42. Fitting in |
| 5. Being innovative | 24. Being calm | 43. Working in collaboration with others |
| 6. Being quick to take advantage of opportunities | 25. Being supportive | 44. Enthusiasm for the job |
| 7. A willingness to experiment | 26. Being aggressive | 45. Working long hours |
| 8. Risk taking | 27. Decisiveness | 46. Not being constrained by many rules |
| 9. Being careful | 28. Action orientation | 47. An emphasis on quality |
| 10. Autonomy | 29. Taking initiative | 48. Being distinctive – different from others |
| 11. Being rule oriented | 30. Being reflective | 49. Having a good reputation |
| 12. Being analytical | 31. Achievement orientation | 50. Being socially responsible |
| 13. Paying attention to detail | 32. Being demanding | 51. Being results oriented |
| 14. Being precise | 33. Taking individual responsibility | 52. Having a clear guiding philosophy |
| 15. Being team oriented | 34. Having high expectations for performance | 53. Being competitive |
| 16. Sharing information freely | 35. Opportunities for professional growth | 54. Being highly organized |
| 17. Emphasizing a single culture throughout the organization | 36. High pay for good performance | |
| 18. Being people oriented | 37. Security of employment | |
| 19. Fairness | 38. Offers praise for good performance | |

My Company's Organizational Values – Part 2

<u>Least characteristic of my company</u>	1	2	3	4	5	6	7	8	9
	<u>Less characteristic</u>				<u>Neither characteristic nor uncharacteristic</u>	<u>More characteristic</u>			<u>Most characteristic of my company</u>
1. _____	1. _____	1. _____	1. _____	1. _____	1. _____	1. _____	1. _____	1. _____	1. _____
2. _____	2. _____	2. _____	2. _____	2. _____	2. _____	2. _____	2. _____	2. _____	2. _____
3. _____	3. _____	3. _____	3. _____	3. _____	3. _____	3. _____	3. _____	3. _____	3. _____
4. _____	4. _____	4. _____	4. _____	4. _____	4. _____	4. _____	4. _____	4. _____	4. _____
	5. _____	5. _____	5. _____	5. _____	5. _____	5. _____	5. _____	5. _____	5. _____
	6. _____	6. _____	6. _____	6. _____	6. _____	6. _____	6. _____	6. _____	6. _____
	7. _____	7. _____	7. _____	7. _____	7. _____	7. _____	7. _____	7. _____	7. _____
	8. _____	8. _____	8. _____	8. _____	8. _____	8. _____	8. _____	8. _____	8. _____
	9. _____	9. _____	9. _____	9. _____	9. _____	9. _____	9. _____	9. _____	9. _____
	10. _____	10. _____	10. _____	10. _____	10. _____	10. _____	10. _____	10. _____	10. _____
	12. _____	12. _____	12. _____	12. _____	12. _____	12. _____	12. _____	12. _____	12. _____

Part 1 – Promises Made by My Employer

At various times during the employment relationship, employers may make promises to employees in exchange for job performance. This section focuses on how important different promises may be to you. For each of the items in the first column, please place a check (✓) in the appropriate column to indicate how important each of the items is to you personally.

Employer Promises	1. Not Important	2. Somewhat Important	3. Moderately Important	4. Very Important	5. Extremely Important
1. High pay					
2. Regular pay raises					
3. Merit pay					
4. Bonuses for extra or exceptional work					
5. Overall benefits					
6. Training					
7. Career Development					
8. Promotion & advancement					
9. Job security					
10. Support with personal problems					
11. Job challenge					
12. Regular feedback & performance reviews					
13. Supervisory support with work problems					
14. Job control					
15. Job responsibility					

Please list any other promises made to you by your current employer, not listed above:

Part 2: Promises *Kept* by Employer

How well do you believe that your employer has kept promises made to you? For each item listed in the first column, please place a check (✓) in the appropriate column to indicate how the amount that you receive compares to the amount that you were promised. For example, if you are receiving somewhat more training than you were promised, you would place a check (✓) under the column headed, "2. Somewhat More Than Promised."

If you feel a particular promise was *never made to you* by your employer, please place an "X" next to the promise, in addition to rating the degree to which it was or was not fulfilled.

My employer has kept its promise to provide me with:	X	1. Much Less Than Promised	2. Somewhat Less Than Promised	3. About the Same As Promised	4. Somewhat More Than Promised	5. Much More Than Promised
1. High pay						
2. Regular pay raises						
3. Merit pay						
4. Bonuses for extra or exceptional work						
5. Overall benefits						
6. Training						
7. Career Development						
8. Promotion & advancement						
9. Job security						
10. Support with personal problems						
11. Job challenge						
12. Regular feedback & performance reviews						
13. Supervisory support with work problems						
14. Job control						
15. Job responsibility						

Sample Occupational Stress Inventory-Revised Items

I don't seem to be able to get much done at work.

Lately I am easily irritated.

I often argue with friends.

I eat the wrong foods.

Appendix C
Letter of Permission

December 5, 2000

Personnel Psychology Journal
520 Ordway Avenue
Bowling Green, OH 43402
Attn: Permissions

Dear Gretchen:

Thank you for advising me of the procedure to obtain permission to adapt Figure 1, page 4, from "Person-Organization Fit: An Integrative Review of its Conceptualizations, Measurement, and Implications," by Amy L. Kristof, 1996, *Personnel Psychology*, 49. I would like to use the attached adaptation in my doctoral dissertation, entitled, *The Relationship of Person-Organization Congruence to Employee Stress Symptoms and Perception of Violations of the Psychological Contract*.

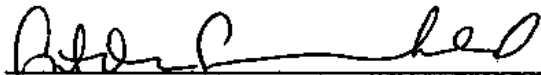
Per your instructions, I have attached a copy of the adapted Figure that I propose using. As discussed, I have already spoken to Dr. Kristof-Brown and have sent her the proposed Figure, as well.

By your signature below, please indicate that I have permission to use the adapted Figure, attached.

Sincerely,


Carol C. Bocchino

Permission is granted to Carol C. Bocchino to use the attached Figure in her doctoral dissertation, as explained above.



Name (for *Personnel Psychology*)

Assistant Managing Editor

12-12-00

Date