CLIMATE STRENGTH AS A MODERATOR OF THE RELATIONSHIP BETWEEN PERSON-ORGANIZATION FIT AND JOB PERFORMANCE

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Abstract of Dissertation

Climate Strength as a Moderator of the Relationship
Between Person-Organization Fit and Job Performance

Although meta-analytic evidence suggests that a greater fit between the person and the organization (P-O fit) is significantly related to a variety of positive work attitudes and contextual performance (Arthur, Bell, Villado, & Doverspike, 2006; Hoffman & Woehr, 2004, 2006; Kristof-Brown, Zimmerman, & Johnson, 2005; Verquer, Beehr, & Wagner, 2003), the relationship between P-O fit and job performance has been inconsistent. In fact, Arthur and his colleagues argue that the lack of meta-analytic support should warrant the exclusion of P-O fit in selection because only criteria directly related to the job (i.e., job performance, not work attitudes) are deemed as appropriate criteria for selection (Civil Rights Act, 1964, 1991; Equal Employment Opportunity Commission, 1978). This dissertation sought to explore this inconsistency by proposing and testing a mediated moderation model where the relationship between P-O fit and job performance is both moderated by climate strength and mediated by organizational commitment. The results indicate that P-O fit did not have any significant relationships with the study variables. However, organizational commitment was significantly related to perceptions of organizational climate quality as well as job performance. Although the proposed model was not supported, there are several methodological limitations for how P-O fit was conceptualized and measured that may be threats to construct validity. These limitations and other explanations for the findings are discussed.

Table of Contents

Acknowledgments……...…….iv

Abstract of Dissertation……...……...……...v

Table of Contents……..vi

List of Figures…….…….vii

List of Tables…….....viii

Chapter 1: Foreword…….1

Chapter 2: Introduction…….3

Chapter 3: Method……..57

Chapter 4: Data Aggregation……..64

Chapter 5: Results……...70

Chapter 6: Discussion…….77

References……91

Appendices…….116

List of Figures

Figure 1. Mediated Moderation Model of Person-Organization Fit and Job Performance...113

Figure 2. Path Models of the Simple Effects for Low and High Climate Strength……...114

Figure 3. Path Coefficient Estimates of the Mediated Moderation Model……115

List of Tables

Table 1. Descriptive Statistics, Correlations, and Reliability of Study Variables…….109

Table 2. Coefficient Estimates……...111

Table 3. Analysis of Simple Effects……..112

Chapter 1: Foreword

Traditionally, person-environment (P-E) fit has been conceptualized as the match between an individual and their environment, with a greater match producing increases in performance and reductions in stress (Pervin, 1968). More recent conceptualizations of P-E fit have identified the specific factors within an organization that an individual can "match" with, such as the job (person-job fit), organization (person-organization fit), work group (person-group fit), and supervisor (person-supervisor-fit) (Kristof, 1996).

In the context of employee selection, organizations focus on evaluating person-job (P-J) fit – the match between an individual and the knowledge, skills, and abilities (KSAs) required for the job. Recently, there has been interest to incorporate measures of person-organization (P-O) fit—the match between an individual's values, goals, and personality with the organization's values, goals, and personality—in the selection process based on the changing nature of work (e.g., Borman, Hanson, & Hedge, 1997; Werbel & Gilliland, 1999) and the importance of contextual performance to organizational effectiveness (e.g., Borman & Motowidlo, 1993). Although meta-analytic evidence suggests that a greater fit between the person and the organization is significantly related to a variety of positive work attitudes and contextual performance (Arthur, Bell, Villado, & Doverspike, 2006; Hoffman & Woehr, 2004, 2006; Kristof-Brown, Zimmerman, & Johnson, 2005; Verquer, Beehr, & Wagner, 2003), the relationship between P-O fit and job performance has been inconsistent. In fact, Arthur and his colleagues argue that the lack of meta-analytic support should warrant the exclusion of P-O fit in selection because only criteria directly related to the job (i.e., job

performance, not work attitudes) are deemed as appropriate criteria for selection (Civil Rights Act, 1964, 1991; Equal Employment Opportunity Commission, 1978).

The overall purpose of the dissertation was to explore whether the inconsistent relationships observed between P-O fit and job performance occur because the relationship is moderated by a second variable. While meta-analyses have examined potential methodological moderators, a large percentage of the variance remains unaccounted for which suggests the presence of additional moderators (Arthur et al., 2006; Hoffman & Woehr, 2004, 2006; Kristof-Brown et al., 2005; Verquer et al., 2003). One such situational moderator could be the strength of the organizational climate; that is, the extent to which individuals have similar perceptions of the types of practices and behaviors that are expected in a particular work setting. If global climate strength intensifies the relationship between P-O fit and performance, then P-O fit could be a valid and legally defensible criterion for selection into strong organizational climates.

The current study proposed and tested a model where the relationship between P-O fit and job performance is both moderated by climate strength and mediated by organizational commitment. The results indicate that P-O fit did not have any significant relationships with the study variables. However, organizational commitment was significantly related to perceptions of organizational climate quality as well as job performance. Although the proposed model was not supported, there are several methodological limitations for how P-O fit was conceptualized and measured that may be threats to construct validity. These limitations and other explanations for the results are discussed.

Chapter 2: Introduction

Conceptualizations of Person-Environment Fit

The person-environment (P-E) fit paradigm states that there are particular environments which are most compatible with an individual's specific characteristics. When there is a good fit between an individual and his or her work environment, then a variety of beneficial behaviors can occur, such as increased levels of performance and decreased levels of stress (Pervin, 1968, 1989). Traditionally, there have been two major conceptualizations of what defines a good "fit" between the individual and the environment (Muchinsky & Monahan, 1987). *Complementary fit* refers to the extent to which the individual adds something positive to the environment that may have been missing, or vice versa. This conceptualization of fit can be further defined as either *demands-abilities fit* (the individual's skills and abilities meet the demands of the environment) or *needs-supplies fit* (the individual's needs are met by the supplies in the environment) (Kristof, 1996; Kristof-Brown et al., 2005). Research using a complementary conceptualization of P-E fit generally draws on theories of psychological need fulfillment (Cable & Edwards, 2004); that is, positive attitudes and behaviors will result to the extent that the individual's needs and desires are met by the work environment (Edwards, 1991).

The second major conceptualization of fit – *supplementary fit* – refers to the similarity between what the individual offers and what the environment offers (Muchinsky & Monahan, 1987). Research on supplementary fit focuses on the value congruence between the individual and the organization (Cable & Edwards, 2004). Value congruence is expected to result in positive attitudes and behaviors because the shared values help employees

interpret events similarly thereby reducing ambiguity in situations (e.g., Kalliath, Bluedorn, & Strube, 1999). Conversely, low value congruence is expected to result in cognitive dissonance and dissatisfaction because the organization's values are not in line with the employee's values and behaviors (Cable & Edwards, 2004).

Types of P-E Fit

These conceptualizations of P-E fit as either complementary or supplementary can be further categorized based on the level of analysis in the environment (Kristof, 1996). At the broadest level of analysis is person-vocation fit, followed by person-organization fit, person-group fit, and, the most specific level of analysis, person-job fit.

Person-vocation (P-V) fit refers to the match between an individual's vocational interests and their career. P-V fit fit is exemplified by Holland's (1985) theory of vocational interests, which suggests that individuals seek out occupations that are congruent with their personality type. Holland's RIASEC personality types consist of realistic, investigative, artistic, social, enterprising, and conventional personality types. When there is a match between the employee's personality type and the career environment, then the employee is more likely to report adjustment to the job and job satisfaction (Holland, 1997).

Person-organization (P-O) fit refers to the compatibility between the employee and the organization (Kristof, 1996). In the literature, P-O fit is most frequently conceptualized as supplementary fit; that is, the degree of similarity between the individual and the organization (Kristof, 1996; Kristof-Brown, 2000). Similarity can be defined as values, needs, goals, or personality, although in most cases, P-O fit is defined as similarity in values (Piasentin & Chapman, 2006). Many of the seminal articles on P-O fit advocate that values represent enduring characteristics of both individuals and organizations and as such, they can

provide a comparison between the two entities (Chatman, 1989, 1991; O'Reilly, Chatman, & Caldwell, 1991). Furthermore, values are thought to be the key mechanism by which organizational culture is translated into organizational norms, practices, and procedures.

Person-group (P-G) fit refers to the compatibility between an employee and their work group (Kristof, 1996). Research supports the classification of P-G fit as a distinct form of P-E fit as different work groups can have different sets of norms and practices (e.g., Cantwell, Mullen, & Smith, 2007; Jermier, Slocum, Fry, & Gaines, 1991; Schneider & Bowen, 1985). Differences between work groups can arise as supervisors have some discretion in creating group norms and organizational practices (Zohar, 2000; Zohar & Luria, 2004, 2005).

Finally, person-job (P-J) fit refers to the compatibility between the characteristics of the employee and the job (e.g., Edwards, 1991; Kristof, 1996). P-J fit has most commonly been conceptualized as demands-abilities fit in the literature – the match between the knowledge, skills, and abilities of the individual with the demands of the job. Although, P-J fit can also be conceptualized as needs-supplies fit, which is the match between employee needs and the organizational rewards provided to employees (Cable & DeRue, 2002).

Research has shown that these different types of fit are conceptually distinct. For example, Kristof-Brown (2000) found that campus recruiters could distinguish between perceptions of P-J and P-O fit during the selection process and that both types of fit made independent contributions to predicting hiring recommendations. Similarly, Lauver and Kristof-Brown (2001) reported a low correlation between P-J and P-O fit and showed that both types of fit significantly contributed to predicting job satisfaction and intent to quit. Kristof-Brown, Jansen, and Colbert (2002) found that P-J, P-O, and P-G fit all made unique

contributions to job satisfaction. Finally, a recent meta-analysis examining the relationships between P-J, P-G, P-O, and person-supervisor (P-S) types of fit found that they were only moderately correlated with one another (Kristof-Brown et al., 2005) and these relationships decreased when indirect measures of fit were used (i.e., assessment of the person variable and the environment variable were made independently).

Traditionally, P-J fit has received the most attention from researchers looking at the selection process (e.g., Borman et al., 2003; Bowen, Ledford, & Nathan, 1991; Werbel & Gilliland, 1999). However, Jansen and Kristof-Brown (2006) reviewed the literature across stages of the hiring process and concluded that P-O fit is also most salient during selection as well as during the employee's long-term tenure with an organization. Accordingly, the next section discusses the utility of examining P-O fit in the hiring process and describes its current use in selection.

Person-Environment Fit and Personnel Selection

Despite the many types of P-E fit, research interested in personnel selection has addressed only P-J and P-O types of fit. Of the two types of fit, P-J fit has had the greatest emphasis in selection research (O'Reilly et al., 1991; Werbel & Gilliland, 1999). This is not surprising given that the match between the knowledge, skills, abilities, and other characteristics (KSAOs) of the applicant with the requirements of the job is required by the *Uniform Guidelines on Employee Selection Procedures* (Equal Employment Opportunity Commission, 1978) and the *Principles for the Validation and Use of Personnel Selection Procedures* (Society for Industrial and Organizational Psychology, Inc., 2003).

While P-J fit has clear legal implications, many have argued that this static notion of the specific job tasks and requirements in the determination of P-J fit can provide an incomplete assessment of an applicant. The inclusion of P-O fit in the selection process could be beneficial for several reasons, each to be addressed in turn: (a) to address changes in the nature of work, (b) to predict criteria other than job performance that is related to organizational effectiveness, and (c) to provide unique information about the applicant without producing adverse impact.

First, some researchers have proposed that selection procedures should be expanded to include both an assessment of the applicant's fit with the characteristics of the job (P-J fit) and the organization (P-O fit) to deal with the changing nature of work (e.g., Borman et al., 1997; Bowen et al., 1991). Organizations are increasingly interested in having a workforce that possess a broad array of skills and abilities to deal with the need for incumbents to rotate assignments or change jobs due to downsizing (e.g., Borman et al., 1997). Moreover, global competition and the increased use of technology has created a demand for employees who are able to continually improve and expand their skill set (Werbel & Gilliland, 1999). Simply relying on P-J fit alone may be inadequate because simple changes in job requirements could substantially impact the incumbent's job performance or work attitudes, whereas shared values will extend across job tasks.

It is worth noting that some researchers have criticized that the changing nature of job requirements and work in modern society may also imply an ongoing change in the corporate culture of an organization, thereby limiting the utility of P-O fit in selection (Werbel & Gilliland, 1999). This argument is tenuous given that the underlying values of the culture are generally sustained over time (e.g., Schein, 1992). Because P-O fit is most frequently

assessed at the level of values (Piasentin & Chapman, 2006), this would imply that P-O fit would also be an appropriate measure of value congruency over time.

P-O fit could also be useful to assess during the hiring process because it may predict other criteria related to organizational effectiveness. Borman and Motowidlo (1993) advocate for the expansion of the criterion domain to include not only individual job performance, but other criteria associated with organizational effectiveness as well. For example, contextual performance behaviors could be beneficial to the organization by supporting the ongoing demands of the work (e.g., exerting extra effort or helping a colleague). Contextual performance is very similar to the concepts of organizational citizenship behavior (OCB; Bateman & Organ, 1983; Smith, Organ, & Near, 1983) and prosocial organizational behavior (POB; Brief & Motowidlo, 1986), but contextual performance refers collectively to these types of behaviors in a selection context (Motowidlo & Van Scotter, 1994). In addition, long-term organizational commitment can also benefit organizational effectiveness by preventing the extensive cost and time required to recruit and train a replacement employee. Indeed, P-O fit has consistently demonstrated relationships with contextual performance and organizational commitment (e.g., Arthur et al., 2006; Hoffman & Woehr, 2006; Kristof-Brown et al., 2005; Verquer et al., 2003) which will be discussed in greater detail in the subsequent section.

Finally, the inclusion of P-O fit in the selection process could be beneficial because it provides unique information about the applicant without producing adverse impact. Cognitive ability tests have been shown to be the most valid predictor of performance (e.g., Hunter & Hunter, 1984; Schmidt, 2002; Schmidt & Hunter, 1998). However, measures of cognitive ability have traditionally resulted in adverse impact for minorities (see Gatewood &

Feild, 2001 for a review). An assessment of P-O fit could potentially be a beneficial alternative if it may provide a relatively comparable level of validity and utility as cognitive ability tests while minimizing adverse impact. However, the use of P-O fit could lead to problems with disparate treatment if individuals are selected based on particular values that may be represented in different proportions across groups. For example, if an organization strongly emphasized autonomy and selected individuals based on the value of individualism, applicants from cultures valuing collectivism would be at a disadvantage. Although there is utility in exploring the use of P-O fit as an alternative selection measure to reduce adverse impact, the implications for other types of discrimination also need to be considered.

To date research indicates that P-O fit has the potential to be a valuable tool in selection to predict multiple facets of job performance and reduce the likelihood of adverse impact. Barrett (1995) found that greater congruence on a fit measure evaluating preferences for job activities had a significant relationship with job performance yet it produced less adverse impact between Blacks and Whites than a multiple-choice job knowledge test (.39 and 1.05 standard deviations, respectively). Additional research also found that a fit measure for both job and organizational preferences did predict facets of job performance while still being viewed favorably by test-takers and eliminating adverse impact when cutoff scores were set at the mean of the sample (Lundquist, Kudisch, Fleming, & Fortunato, 2004). In the only study to directly compare fit measures and cognitive ability measures, McCulloch and Turban (2002) found preliminary evidence that P-O fit actually predicted unique variance of training performance and actual turnover (2% and 9%, respectively) when entered in hierarchical regression equations with cognitive ability.

Assessment of P-O Fit in Personnel Selection Research

Currently, selection procedures generally include (relatively informal) assessments of P-O fit that rely upon the perceptions of the recruiter, not the job applicant (Bowen et al., 1991; Judge & Ferris, 1992; Rynes & Gerhart, 1990). According to Lawrence, Doverspike, and O'Connell (2004), P-O fit can be assessed in three ways during the hiring process. Based on Schneider's Attraction-Selection-Attrition model (ASA; 1987), the responsibility of fit assessment is first given to the applicant. That is, during the application process applicants are interested in organizations that are similar in their own personal characteristics, such as goals or values (P-O fit). Indeed, meta-analytic evidence suggests that perceived congruency of fit impacts applicant attraction to the organization (Chapman, Uggerslev, Carroll, Piasentin, & Jones, 2005).

A second way to evaluate P-O fit in the selection process is through subjective judgments by current members of the organization, such as the recruiter or interviewer (Lawrence et al., 2004). These judgments are commonly a part of the selection interview which can provide a unique opportunity to assess the KSAOs related to traditional conceptualizations of performance as well as other criteria that is related to important job outcomes such as turnover (Bowen et al., 1991; Judge & Ferris, 1992; Kristof-Brown, 1998). Research has shown that the recruiter's and interviewer's perceptions of applicant fit with the job (e.g., Bretz, Rynes, & Gerhart, 1993) and fit with the organization (e.g., Cable & Judge, 1997; Chuang, 2001; Kristof-Brown, 2000) influence hiring recommendations and final selection decisions.

Recent research examined the relative emphasis on different types of fit throughout the selection process. Kristof-Brown (2000) found that evaluations of P-J fit were more strongly associated with hiring recommendations than P-O fit evaluations during initial interviews. More recently, Chuang and Sackett (2005) evaluated the relative importance recruiters placed on P-J fit and P-O fit during a single interview conducted before making a final decision (single-stage interview) and between the initial versus final interviews when the interviews were conducted as part of a multi-stage process. Recruiters reported that P-J fit was the primary focus during the initial screening of applicants, while P-O fit was the primary focus during the single or final interview. Thus, it appears that recruiters are interested in assessments of both P-J and P-O fit in the selection process, with P-O fit serving as a criterion later in the selection process once P-J fit is established.

A third way to assess fit is through the use of formal questionnaires that measure the degree of congruence between the applicant and the job and/or organization (Lawrence et al., 2004). For example, Villanova, Bernadin, Johnson, and Dahmus (1994) utilized a forced-choice Job Compatibility Questionnaire (FCJCQ; Bernadin, 1989) based on prior job analyses to measure the extent to which the applicant's preferences for job characteristics matched the actual characteristics of the job. This study was particularly unique in its predictive validation research design using formal measures of fit to select applicants into actual jobs for motion picture theatres. To the best of my knowledge, no other studies have utilized formal measures of P-O fit using actual job applicants. Formal measures of P-O fit are much less common, and research examining the validity of these measures tends to use job incumbents rather than job applicants. However, formal measures of P-O fit could be developed by conducting an organizational analysis to identify relevant job-related aspects of

the organization's culture or climate (Werbel & Gilliland, 1999). For example, formal measures of P-O fit could also determine the match between an employee's needs with the structure and availability of organizational rewards to predict job-related criteria affecting turnover, such as job satisfaction (e.g., Scarpello & Campbell, 1983).

In sum, P-O fit is assessed during the selection process using informal perceptions of the recruiter or interviewer once P-J fit has been established. Unfortunately, only a handful of studies have empirically examined formal measures of fit using a predictive validation design in the hiring process (Barrett, 1995; McCulloch & Turban, 2007; Villanova et al., 1994). If formal P-O fit assessments are to be used to make decisions about employees, then these assessments need to adhere to applicable legal standards. Specifically, P-O fit measures need to be validated with job-related criteria in order to ensure that the inclusion of P-O fit is a legally defensible measure in accordance with the Civil Rights Act (CRA; 1964, 1991), the *Uniform Guidelines on Employee Selection Procedures* (Equal Employment Opportunity Commission, 1978), and the *Principles for the Validation and Use of Personnel Selection Procedures* (Society for Industrial and Organizational Psychology, Inc., 2003). In the next section, I discuss the theoretical rationale and empirical support for the relationships between P-O fit and a variety of work-related outcomes, including organizational commitment, job satisfaction, turnover, and job performance.

Person-Organization Fit and Work-Related Outcomes

Theoretical Frameworks

There are several theoretical frameworks that explain the relationships between P-O fit and work-related outcomes. According to the Theory of Work Adjustment (TWA; Dawis

& Lofquist, 1984), individuals will respond to the environment based on an evaluation of the extent to which the organization's needs are fulfilled by the individual and the individual's needs are fulfilled by the organization. Individuals will show greater job satisfaction and decreased likelihood of leaving the organization when there is a match between the needs of the individual and the organization. Similarly, theories of psychological need fulfillment (e.g., French, Caplan, & Harrison, 1982; Maslow, 1987) propose that positive attitudes are likely to result when the environment satisfies an individual's needs. For example, psychosocial theories of strain and health state that when an individual's abilities, needs, or goals related to the work environment are deficient or in excess of what the environment provides, then physiological, behavioral, and psychological strains, such as job dissatisfaction, are likely to result (French et al., 1982). Thus, according to the TWA and need fulfillment theories, P-O fit will result in positive work attitudes and behaviors.

The Theory of Reasoned Action (TRA; Ajzen & Fishbein, 1977) and Theory of Planned Behavior (Ajzen, 1991) also provide theoretical support for how P-O fit is related to work-related outcomes. According to the Theory of Reasoned Action, an individual's attitude towards a given aspect of the environment will produce behaviors that are consistent with this attitude. In an organizational setting, a good fit with the environment would create positive attitudes toward the organization, which would increase the likelihood of engaging in behaviors that are consistent with these attitudes, such as decreased likelihood of leaving the organization. Furthermore, according to the Theory of Planned Behavior (Ajzen, 1991) a good fit with the environment would also lead to a greater sense of mastery of the environment and perceived behavioral control which would lead to behaviors that are congruent with these favorable attitudes. These two theories are consistent with Festinger's

(1957) Cognitive Dissonance Theory which states that individuals are motivated to behave in ways that are consistent with their attitudes. For example, when an individual perceives a poor fit with the organization, cognitive dissonance will occur if the individual has stated that he/she was extremely satisfied with the job (Kristof-Brown et al., 2005).

As previously mentioned, Schneider's Attraction-Selection-Attrition model (ASA; 1987) also provides a theoretical framework for how fit can impact attitudes and behaviors. According to the ASA model, individuals are attracted to organizations that are similar with regards to expressed goals and values. Subsequently, organizations will select individuals who share these similarities for employment. Individuals who fit in with the organization are more likely to stay, whereas individuals who do not fit will likely voluntarily or involuntarily leave the organization. Thus, similarities between the individual and the organization can be more likely to result in positive work attitudes, whereas a poor fit is likely to result in turnover. It is important to note that Schneider also argues that selecting individuals based on fit could also lead to increased homogeneity in organizations. Thus, the relationship between P-O fit and positive work attitudes could be at the expense of reducing organizational effectiveness.

The theoretical frameworks have generally focused on relationships between P-O fit and work attitudes, but there is also reason to expect both indirect effects (through work attitudes) and direct effects of P-O fit on performance. One possibility is that work attitudes could at least partially mediate the relationship between P-O fit and job performance. Mediation occurs when a third variable (work attitudes) serves as the mechanism through which the independent variable (P-O fit) influences the dependent variable (job performance) (Baron & Kenney, 1986). Mediation requires the following four conditions to be met: (a)

the independent variable must have a significant relationship with the mediator, (b) the independent variable must have a significant relationship with the dependent variable, (c) the mediator must have a significant relationship with the dependent variable after controlling for the effects of the independent variable, and (d) the strength of the relationship between the independent variable and the dependent variable is less after controlling for the effects of the mediator (Baron & Kenney, 1986; Holmbeck, 1997).

Research suggests that the basic conditions for a mediating effect of work attitudes on the P-O fit relationship could be met. For example, meta-analytic evidence has found significant, moderate relationships between P-O fit and work attitudes and performance. This provides support for the first and second conditions, respectively (.44 for job satisfaction, .51 for organizational commitment, -.35 for intent to quit, .13 for task performance, and .27 for contextual performance) (e.g., Kristof-Brown et al., 2005). To address the third condition, a recent meta-analysis showed a moderately strong significant relationship (.30) between job satisfaction and job performance (Judge, Thoreson, Bono, & Patton, 2001) though the effects of P-O fit were not controlled for in the analyses.

A recent meta-analysis explored the tenability of all four conditions of the mediational model in a single study (Arthur et al., 2006). The significant meta-analytic estimates provided support for the first, second, and third conditions, and the strength of the relationship between P-O fit and performance did decrease from .15 to .06 when controlling for the effects of work attitudes. Although work attitudes may partially mediate the relationship between P-O fit and performance, the path coefficient of .06 was still significant which implies that P-O fit may make a small, direct contribution to performance.

In addition to the potential for P-O fit to have indirect effects on job performance via work attitudes, P-O fit could also have a direct impact on job performance through the effects of strong organizational climates. For example, the terms "culture" and "climate" of an organization both refer to shared aspects of the environment that influence attitudes and behaviors. Whereas organizational culture is defined as the shared underlying values, beliefs, and assumptions of an organization (Schein, 1992), organizational climate refers to how these values, beliefs, and assumptions are translated into organizational practices, policies, and procedures (Ostroff, Kinicki, & Tamkins, 2003; Reichers & Schneider, 1990; Schneider, Salvaggio, & Subirats, 2002). If the individual fits with the organization's culture and climate – that is, he or she prefers the work environment and subscribes to the same underlying value system that governs its practices and procedures – then job stressors are likely to be reduced (e.g., Parkington & Schneider, 1979) thereby impacting job performance (e.g., Tubre & Collins, 2000). The impact of organizational climate characteristics on job performance will be discussed in greater detail in the section on climate strength.

Given these theoretical frameworks for the relationships between P-O fit and work attitudes and behavioral outcomes, the next section will describe empirical evidence addressing each of these criteria in turn.

Relationships Between P-O Fit and Work Attitudes

A wealth of research demonstrates that greater fit with the organization is significantly associated with several attitudinal outcomes, including job satisfaction (e.g., Chatman, 1991; Bretz & Judge, 1994; Kristof-Brown et al., 2002; La Police & Sharpe, 2004; Meglino, Ravlin, & Adkins, 1989; Vancouver & Schmitt, 1991), organizational commitment (e.g., Meglino et al., 1989; La Police & Sharpe, 2004; Vancouver & Schmitt, 1991) and

reduced likelihood to leave the organization (e.g., Chatman, 1991; La Police & Sharpe, 2004). To date, the four published meta-analyses summarizing the fit literature have yielded somewhat consistent estimated population correlation coefficients.

Verquer et al. (2003) combined the results of 21 studies and estimated operational validity correlation coefficients between P-O fit and job satisfaction, organizational commitment, and turnover intentions to be .28, .31, and -.21, respectively after corrections were made for sampling error and unreliability of the criterion. An additional meta-analysis by Hoffman and Woehr (2004) examined 64 studies and made corrections for measurement error in both the predictor and criterion. They found higher estimations of population correlation coefficients, where job satisfaction was .36 (increase of .08 over Verquer et al., 2003), organizational commitment was .36 (increase of .05), and turnover intentions was -.45 (increase of .24).

More recently, Kristof-Brown et al. (2005) meta-analyzed 172 studies and found similar relationships between P-O fit and work attitudes. After correcting for sampling error and measurement error in the predictor and criterion, the estimated population correlation coefficients were higher than previous meta-analytic results (Hoffman & Woehr, 2004; Verquer et al., 2003) for job satisfaction (.44) and organizational commitment (.51). However, the estimated population correlation coefficient for turnover intentions (-.35) was lower than prior meta-analyses.

Finally, the most recently published meta-analysis (Arthur et al., 2006) also corrected for unreliability in the predictor and criterion and estimated the population correlation coefficients to have moderate effect sizes consistent with Kristof-Brown et al. (2005). Here,

the estimated true validities were .36, .31, and .25 (reverse-scored) for job satisfaction, organizational commitment, and intent to turnover, respectively.

In each of these three meta-analyses, the lower value of the 80%, 90%, or 95% credibility interval did not include zero, which indicates that the validity of P-O fit predicting work attitudes is generalizable. In addition, the percentage of variance accounted for by statistical artifacts was relatively low ranging from 4-9% in the Kristof-Brown et al. (2005) study and 10-17% in the Arthur et al. (2006) study. This suggests that there may be situational moderators that impact these relationships between P-O fit and work attitudes.

Relationships Between P-O Fit and Performance

A limitation of the meta-analysis conducted by Verquer et al. (2003) is the sole focus on attitudinal outcomes. Behavioral outcomes, specifically job performance, are also of particular interest, given the context of selection. In recent years, most researchers have adopted a two-factor model of job performance consisting of task and contextual performance (Borman & Motowidlo, 1993, 1997). Task performance refers to behaviors associated with the technical requirements of the job, whereas contextual performance refers to behaviors associated with contributing to the overall social and psychological processes of the organization. For example, an employee may continue to follow procedures even if it is inconvenient, volunteer to assist other employees, or engage in behaviors that are conducive to establishing a supportive environment. Contextual performance on behalf of employees is vital to an organization as it is associated with greater performance and organizational goal attainment (e.g., Allen & Rush, 1998).

Traditionally, P-J fit has been associated with task performance because possession of the necessary KSAs to perform the job is likely be related to job performance (e.g., Kristof,

1996; Lawrence et al., 2004). On the other hand, P-O fit has been more closely associated with contextual performance (e.g., Goodman & Svyantek, 1999). Although both facets of performance are distinct, they both contribute to overall job performance ratings (e.g., Motowidlo & Van Scotter, 1994) and supervisors consider both types of performance when making overall performance ratings (Borman & Motowidlo, 1997). However, meta-analytic research examining the relationship between P-O fit with these two facets of performance independently has shown that the links between the types of fit and types of performance are not necessarily straightforward.

Research indicates that there are significant relationships between P-O fit and contextual performance (e.g., Goodman & Svyantek, 1999; Lauver & Kristof-Brown, 2001). Recent meta-analyses have shown estimated population correlation coefficients between P-O fit and contextual performance to be .22 (Arthur et al., 2006), .21 (Hoffman & Woehr, 2006), and .27 (Kristof-Brown et al., 2005). Meta-analyses that utilized an 80% or 90% credibility interval did not contain zero in the interval, indicating that the relationship between P-O fit and contextual performance is generalizable (Hoffman & Woehr, 2006; Kristof-Brown et al., 2005). However, Arthur et al. utilized a more conservative 95% interval and calculated the lower credibility value to be -.07. Thus, according to their results, P-O fit is not a valid predictor of contextual performance. Given the size of the credibility interval for some of these relationships, (e.g., .07 to .35 with a 90% credibility interval in Hoffman & Woehr, 2006) and given the moderately-sized percentage of variance accounted for by statistical artifacts [24% (Arthur et al., 2006), 33% (Kristof-Brown et al., 2005), 49% (Hoffman & Woehr, 2006)], there may be other moderators impacting this relationship.

The relationship between P-O fit and task performance seems less intuitive, as the greater congruency of values between the individual and the organization appears to be unrelated to the possession and use of the KSAs required to effectively perform job tasks. Early research by Meglino et al. (1989) found no relationship between worker-supervisor value congruence and task performance. However, this result could be attributed to the nature of the job; performance was directly influenced by the machine speed as opposed to an interpersonal context of performance with the supervisor and other co-workers. In jobs where performance is contingent on greater interpersonal interaction, such as teamwork, then a relationship between P-O fit and performance could emerge (Meglino et al., 1989). Thus, some researchers argue that the fit-performance relationship may be contingent upon the work context (Werbel & Gilliland, 1999).

Recent meta-analytic research examining P-O fit and task performance has found positive relationships. An early meta-analysis by Hoffman and Woehr (2004) estimated population correlations of .26 between P-O fit and supervisor ratings of performance (k = 22) and a correlation of .21 between P-O fit and objective measures of performance, such as number of promotions or salary increases (k = 9). In 2006, they updated their 2004 study to include recent literature and focus solely on behavioral outcomes as criteria. Across 34 data points, the estimated relationship between P-O fit and task performance was .26 (Hoffman & Woehr, 2006).

Kristof-Brown and her colleagues (2005) examined 17 data points and estimated a population correlation between P-O fit and task performance of only .13. However, the 80% confidence interval around this estimate was .01 to .26, which indicates that it is possible that the true correlation is actually quite small. Similarly, the estimated population correlation for

overall performance was .07 across 22 data points, but, the 80% confidence interval around this estimate included zero, indicating that P-O fit is not a valid predictor of overall performance.

In the most recent meta-analysis, Arthur et al. (2006) examined 36 data points and estimated the relationships between P-O fit and overall performance to be .15 and between P-O fit and task performance to be .10. In contrast to other meta-analyses, Arthur and his colleagues utilized a more conservative 95% credibility interval and calculated the lower value to be -.09 for both task and overall performance. Thus, Arthur et al. conclude that P-O fit is not a valid predictor for task or overall performance.

However, before conclusions can be drawn about the nature of the relationships between P-O fit and work-related outcomes, it is important to look for potential moderators of these relationships. Given the large size of the credibility interval around the estimated population correlation coefficients for some of these relationships (e.g., .07 to .35 with a 90% credibility interval in Hoffman & Woehr, 2006), and the fact that only less than 48% of the variance could be attributed to statistical artifacts across meta-analyses (Arthur et al., 2006; Hoffman & Woehr, 2006; Kristof-Brown et al., 2005), it seems that moderators may have a significant impact on the relationships between P-O fit and both work attitudes and performance.

Research examining possible moderators of the relationships between P-O fit and work outcomes have looked at a variety of individual differences variables including personality traits (e.g., Hutcheson, 1999; Shantz, 2003), demographic variables (e.g., Posner, 1992), and the personal importance of aspects of fit (e.g., Edwards, 1996; Sinar, 2001). In addition, situational variables have also been hypothesized to moderate P-O fit relationships,

such as the attributed nature of stressors in the environment (e.g., Autry, 2001), the nature of relationships with leaders/supervisors (e.g., Xie, Han, Zhang, & Shi, 2006), and the existence of mentoring relationships (e.g., Morris, 1995). However, methodological moderators are most relevant to the current study because of the many ways P-O fit has been conceptualized, defined, measured, and calculated. The next section will describe these methodological moderators and how they impact P-O fit measurement in the current study.

Methodological Moderators of the Relationships Between P-O Fit and Work-Related Outcomes

Meta-analyses examining methodological moderators between P-O fit and work-related outcomes have found some consistent relationships (Arthur et al., 2006; Hoffman & Woehr, 2006; Kristof-Brown et al., 2005; Verquer et al., 2003).

Conceptualization of P-O Fit

P-O fit has been conceptualized and defined in numerous ways (e.g., Kristof, 1996; Kristof-Brown et al., 2005), which could moderate the relationship between P-O fit and outcomes. Kristof-Brown et al. examined conceptualization of fit as a moderator between P-O fit and work attitudes only, due to the lack of available studies regarding performance. They classified P-O fit as being conceptualized as either supplementary, complementary (needs-supplies), complementary (demands-abilities), or a combination of any of these conceptualizations. Only a single study was classified as complementary (demands-abilities) and was subsequently removed from further analysis. In most cases, the largest effect sizes were found when P-O fit was conceptualized as supplementary fit, but functionally the conceptualization of P-O fit made little difference as similar effects were produced regardless of conceptualization. Overall, these results are consistent with Cable and Edwards' (2004)

notion that P-O fit can be thought of in terms of need fulfillment (needs-supplies fit) and congruency between characteristics (supplementary fit).

The current study will conceptualize P-O fit as supplementary fit which is defined as the extent of similarity between the individual and the environment (Muchinsky & Monahan, 1987). The supplementary form of fit was selected because this conceptualization is most frequently used in the literature (Kristof, 1996; Kristof-Brown, 2000). Furthermore, the use of a supplementary or complementary conceptualization of fit does not produce functionally different relationships with outcomes (e.g., Kristof-Brown et al., 2005).

P-O Fit Measurement Strategy

P-O fit is generally assessed using one of three different measurement strategies (Arthur et al., 2006; Kristof, 1996; Kristof-Brown et al., 2005). *Direct fit* measures ask the individual to rate how well he or she fits with the environment. Direct measures of fit are also referred to as "perceived" fit (e.g., Arthur et al., 2006; Kristof-Brown et al., 2005) or "subjective" fit (e.g., Verquer et al., 2003) because the individual is using his/her judgment to make the rating. In contrast, indirect measures of fit make a comparison between a measure of the individual (*P*) and a measure of the environment (*E*) and can take one of two forms. *Indirect-perceived/subjective fit* refers to same source ratings; that is, the individual rates both their own characteristics and that of the environment. This can also be referred to as "perceived" fit (e.g., Arthur et al., 2006) or "subjective" fit (e.g., Kristof-Brown et al., 2005) because again the individual is using his/her judgment to rate his or herself and the environment. *Indirect-actual fit* refers to ratings made by different sources. Here, the individual rates his or her own characteristics and another source rates the characteristics of

the environment. This is also referred to as "objective" fit (e.g., Arthur et al., 2006; Kristof-Brown et al., 2005) because the ratings are made independently of one another.

Meta-analytic research indicates that measurement strategy is an important moderator of P-O fit relationships with work attitudes and performance. Direct measures of P-O fit produced the highest effect sizes when predicting job satisfaction, organizational commitment, and turnover intentions (Arthur et al., 2006; Kristof-Brown et al., 2005; Verquer et al., 2003). This could be a function of consistency bias where individuals are more likely to rate attitudes consistently with their own perceptions of the environment or with past behaviors (Salancik & Pfeffer, 1977). Thus, if the individual perceives a positive work experience then he or she may be more likely to give high ratings of perceived P-O fit to be consistent with these perceptions. Similarly, according to Cognitive Dissonance Theory (Festinger, 1957) individuals strive to reduce feelings of dissonance, making it unlikely that an individual would rate a poor fit with the organization but report high levels of positive work attitudes, such as organizational commitment.

Inconsistent patterns emerged between measurement strategies when performance was the criterion of interest. This is interesting as job performance ratings are made independent of fit measures regardless of the measurement strategy. Kristof-Brown et al. (2005) compared direct versus indirect measures and found that direct measures had larger true-score correlations with overall performance, task performance, and contextual performance. Similarly, Arthur et al. (2006) also found the largest effect sizes with direct measures than indirect-perceived/subjective and indirect-actual measures for job performance. However, examination of the credibility intervals for each of these relationships shows that direct measures had the strongest, generalizable relationships with

task and overall performance according to Kristof-Brown et al., but only indirect-perceived/subjective fit measures had a generalizable relationship with overall performance as reported by Arthur et al.

In contrast, Hoffman and Woehr (2006) found that indirect-actual fit had the largest effect sizes, followed by indirect-perceived/subjective fit and direct fit for both task performance and contextual performance. Here, the credibility intervals indicate that all of these relationships are generalizable (with the exception of indirect-perceived/subjective fit measures with contextual performance). Thus, all three meta-analyses provide different conclusions regarding the best measurement strategy to predict performance.

The inconsistent relationships between different measurement strategies and performance are consistent with the theme across P-O fit research that no single strategy offers the best choice and the most appropriate choice depends on the context of the specific study or application (Kristof-Brown et al., 2005). Some researchers argue that direct measures can be inappropriate because they provide little information as to the underlying mechanisms of how an individual develops perceptions of fit (e.g., Kristof-Brown et al., 2005), they are susceptible to common method bias (e.g., Kristof-Brown et al., 2005), they confound the measurement of person characteristics and environment characteristics as independent constructs (e.g., Edwards, 1991), they are subject to a consistency bias (e.g., Kristof, 1996), and they fail to measure commensurate person and environment characteristics unless the specific content dimension, such as values or goals, is specified (e.g., Kristof, 1996).

On the other hand, indirect measures can also be viewed as inappropriate. The core tenants of interactional psychology argue that it is perceptions of the environment that matter

most (e.g., Endler & Magnusson, 1976), which implies that either direct measures or indirect-perceived/subjective measures are most appropriate (Kristof, 1996). Furthermore, although indirect measures are expected to measure a more objective reality, the environment is still processed according to individual perceptions, implying again that perceptions matter most when examining relationships between fit and outcomes (Kristof-Brown et al., 2005). Finally, direct measures may be more appropriate given the debate on whether or not there needs to be a sufficient level of agreement before aggregating perceptions of the environment to create a higher-level variable (see Klein, Conn, Smith, & Sorra, 2001; Kristof, 1996).

One way to determine the best way to measure fit is to consider the criterion of interest. For example, Kristof-Brown et al. (2005) note that indirect-actual measures may be more appropriate when performance is the criterion of interest because there will be limits to the maximal performance of an individual to the extent that discrepancies exist between the demands of the job and the abilities of the individual. This assertion is supported by the fact that differences between direct and indirect measures are greatest in the pre-organizational entry context of recruitment and selection (.45 mean difference; Kristof-Brown et al., 2005), ostensibly because perceptions of fit are based on limited amounts of information about the organization.

In the current study, performance is also the criterion of interest because of the context of personnel selection. Given that indirect-actual measures may be most appropriate for this criterion, this measurement strategy will be utilized in the current study to measure P-O fit. This approach is also consistent with Hoffman and Woehr's (2006) meta-analysis which found the largest effect sizes with indirect-actual measures of fit and these relationships with task performance were generalizable.

Content Dimensions of P-O Fit

Research has used a variety of different content dimensions to operationalize P-O fit including values (e.g., Cable & Judge, 1996; Chatman, 1989, 1991; Meglino et al., 1989; O'Reilly et al., 1991), goals (e.g., Vancouver & Schmitt, 1991), personality (e.g., Ryan & Kristof-Brown, 2003), and combinations of these dimensions (e.g., Bretz & Judge, 1994; Cable & Judge, 1996; Saks & Ashforth, 1997). By far the most frequently examined content dimension of P-O fit is values (Piasentin & Chapman, 2006). Meta-analyses have shown relatively consistent results when examining content dimensions as a moderator of P-O fit relationships with work attitudes and performance (Arthur et al., 2006; Hoffman & Woehr, 2006; Kristof-Brown et al., 2005; Verquer et al., 2003). With regards to work attitudes, the largest effect sizes were generally found when P-O fit was defined as value congruency in comparison with any other type of content dimension alone, a combination of values congruency with another measure of congruency, or any combination of congruency measures (Arthur et al., 2006; Kristof-Brown et al., 2005; Verquer et al., 2003). In some cases a combination of congruency measures was more strongly related to work attitudes, but the differences were quite small (Kristof-Brown et al., 2005).

Similar to relationships with work attitudes, the largest effect sizes for relationships with contextual performance were found when P-O fit was defined as value congruence (Hoffman & Woehr, 2006). On the other hand, when task performance was the criterion, the effect sizes for other types of congruency or a combination of values with other types of congruency were slightly larger than for value congruency alone (Arthur et al., 2006; Hoffman & Woehr, 2006). However, Arthur et al. did not find any of these relationships

between P-O fit and performance to be generalizable for any type of content dimension based on the estimates within the credibility interval.

Collectively, the results of these meta-analyses indicate the importance of considering values when defining P-O fit. In cases where value congruency did not have the strongest relationship with an outcome, there were generally only small differences with other types or combinations of congruency (Arthur et al., 2006; Hoffman & Woehr, 2006; Kristof-Brown et al., 2005; Verquer et al., 2003). These results support Chatman's (1989, 1991) assertion that values are the key basis for defining P-O fit. As such, the current study will also utilize values-based congruency as the primary content dimension to define P-O fit.

Method of Calculating P-O Fit

Recall that direct fit measures ask the individual directly to rate how well he/she fits with the environment (Kristof, 1996). As such, the P-O fit score will be the rating that corresponds to a given question or statement and no further calculation is needed. However, if indirect fit measures are utilized (i.e., indirect-perceived/subjective or indirect-actual), then there are several methods available to calculate the P-O fit score. These methods can be classified into three general types: bivariate congruence indices, profile similarity indices, and polynomial regression approaches (Edwards, 1994). First, the different methods of calculating fit will be briefly reviewed, followed by the results of moderator analyses from meta-analytic research.

Bivariate congruence indices. Bivariate congruence indices capture discrepancies between two corresponding components (Edwards, 1994), in this case between the person (*P*) and the organizational environment (*E*). This method assumes that absolute scores are the most important consideration when calculating P-O fit (Verquer et al., 2003). Common

examples of this type of index are algebraic difference scores, absolute difference scores, and squared difference scores.

There are several methodological criticisms regarding the use of bivariate congruence indices (Edwards, 1994). First, the index has conceptual ambiguity because the relative contribution from each component cannot be determined. Second, collapsing two components into a single score ignores information about the direction of the difference between the components. Finally, there are usually untested constraints placed on the regression coefficients for *P* and *E* (Edwards, 2002), which may impact the predictive validity of the construct (Putka, 2005).

Profile similarity indices. Profile similarity indices combine a series of corresponding components (Edwards, 1994). Although there are several forms of this index (e.g., the sum of absolute differences, the sum of squared differences, the square root of the sum of squared differences, and Euclidean distance), the most prevalent calculation in the P-O fit literature is a profile correlation (e.g., Chatman, 1989, 1991; O'Reilly et al., 1991). Profile correlations represent the correlation between two profiles and provide an indication of the similarity between the shapes of two different *P* and *E* profiles (Edwards, 1993, 1994). For example, a popular method to assess P-O fit using profile correlations is the Organizational Culture Profile (OCP; O'Reilly et al., 1991) which requires individuals to sort 54 values into 9 categories ranging from most desirable to least desirable. To assess the individual's personal profile (*P*), the individual sorts the values based on how important that value is for an organization to have. To assess the organization's profile (*E*), the rank-ordered value ratings across individuals in the organization are aggregated together. An

individual's P-O fit score would be the correlation between the individual's value preference profile with the organization's value preference profile.

Profile correlations share many of the same criticisms as bivariate congruence indices (Edwards, 1994), including the conceptual ambiguity of the relative contribution from each paired component that make up the series (e.g., they all have equal weight or some paired components dominate the score), and the ambiguity surrounding the particular constructs of interest within the dimensions themselves (e.g., the specific value of 'teamwork' makes a substantial contribution). Profile correlations are also problematic because of the sole focus on similarity in shape while ignoring the size of discrepancies between the profiles (Edwards, 1994; see also Nunnally, 1978). Information about the size of the discrepancies is lost because of the ordinal nature of the measures inherent in ranking or sorting procedures (i.e., there are not equal intervals between units and there is no true zero).

Despite the problem of losing some information with the use of ranking or sorting procedures in profile correlations, researchers argue that there are some advantages to this approach. First, the procedures may reduce the likelihood of socially desirable responses compared to non-ipsative, Likert-type measures (Ravlin & Meglino, 1987). Another advantage of profile correlations is that they can provide a more holistic comparison across multiple dimensions (Kristof-Brown et al., 2005). Researchers also argue that rank-order procedures are more desirable because they focus on the relative importance of the values for the individual rather than the absolute levels of values as seen in difference score calculations (e.g., Adkins, Russell, & Werbel, 1994; Meglino et al., 1989). Thus, when a more holistic assessment across a set of values is desired, rank-ordered correlations may be a more appropriate method of calculating fit.

Regression approaches. To address the limitations of bivariate congruence indices and profile similarity indexes, Edwards (1994, 2002) advocates using a polynomial regression approach to calculate fit relationships. Polynomial regression assumes that the relationship between the person (*P*) and the environment (*E*) should be modeled in three dimensions: *P*, *E*, and *P* x *E* and accordingly, three-dimensional response surface plots should be utilized to further demonstrate the complexities of these relationships. There are several key advantages to a polynomial regression approach over difference score or profile similarity approaches to calculating P-O fit (Edwards, 1994, 2002). First, the limitation of conceptual ambiguity is removed, because the original measurement of *P* and *E* are kept in the equation rather than combined into a single score. Second, polynomial regression allows for the examination of the main effects of *P* and *E*, which is a necessary condition for examining interactions (e.g., Cohen, 1978). Third, the constraints on the regression coefficients that are often artificially placed on equations when difference score or profile similarity approaches are used can actually be tested beforehand (Edwards, 1994, 2002). Fourth, this approach may explain larger proportions of the variance. Finally, the examination of P-O fit as a three-dimensional construct provides additional information on the nature of relationships with outcomes.

A major drawback of polynomial regression is that it cannot be applied when a cross-levels approach is taken (also known as the indirect-actual measurement strategy of P-O fit previously discussed). In other words, *P* would represent an individually-based level of analysis and variation would occur from individual to individual, but *E* would represent a higher (group) level of analysis because the individual responses would be aggregated (Putka, 2005). If there was no variation in the *E* variable, which would be the case when

looking at unit or department-level organizational climate, then a polynomial regression approach would be inappropriate because *E* would be a constant and drop out of the regression equation. As a large portion of the P-O fit literature has examined P-O fit when *E* is constant (e.g., Chatman, 1991; O'Reilly et al., 1991), the polynomial regression approach is not utilized very often and researchers have continued to use difference scores or profile similarity approaches despite their drawbacks.

To utilize the advantages of a regression approach to calculate P-O fit but still model an environment that is constant across individuals (e.g., a single organizational unit), Putka (2005) recently proposed a spline regression approach. This approach utilizes a non-linear regression model that allows the predictor variable to have different types of relationships with the criterion variable across a pre-specified range of values of the predictor variable (Marsh & Cormier, 2002; Putka, 2005). In contrast to polynomial regression, spline regression enables the researcher to determine where the changes in the relationship between the predictor and criterion variables (i.e., inflection points or knots) should be modeled. That said, Putka noted that this approach should not automatically be utilized without some theoretical rationale. He suggests first modeling the relationship between each component of the series (i.e., each specific value within the entire set of values of interest) and a criterion. If each component within the series accounts for a significant amount of variance and the regression coefficient signs are in the expected direction consistent with theory, then all of the components can be combined into a single model.

Despite the advantages of spline regression, there are instances where this approach is not useful. The spline regression approach requires researchers to determine a priori the point where the level of fit on a single value of an entire measure (e.g., teamwork)

corresponds to the level of fit on a commensurate single dimension within the environment (e.g., teamwork and cooperation in the work unit) (Putka, 2005). Although multiple inflection points can be specified in the model to allow a range of acceptable values (multiple knots) rather than only specifying a single value where the *P* and *E* would correspond (single knot), this approach theoretically does not seem appropriate in the context of the current study. Capturing the overall sense of fit across the values is appropriate when the goal is to obtain a holistic measure of fit. Second, we don't know what range of values where *P* and *E* would correspond that would appropriately define fit or misfit. This range of acceptable values can vary across individuals and, to date, researchers have yet to explore individual differences in the tolerance of misfit.

Meta-analytic evidence consistently suggests that higher effect sizes are produced when P-O fit is calculated via correlations rather than difference scores for work attitudes (Arthur et al., 2006; Verquer et al., 2003). Kristof-Brown et al. (2005) also examined polynomial regression as a method to calculate fit across 25 studies, but the inclusion of higher-order terms (e.g., P^2 and E^2) in the regression equation did not allow for direct comparisons of this approach with difference scores and profile similarity measures. With regards to job performance, meta-analytic evidence also suggests that there are higher effect sizes for correlations rather than difference scores (Arthur et al., 2006). However, this conclusion is not definitive, because the lower 95% credibility interval for both correlations and difference scores contained zero. Arthur et al. were not able to conduct moderator analyses examining polynomial regression because too few studies used this approach to calculate P-O fit.

In conclusion with regards to P-O fit calculation methods, each method has its advantages and disadvantages, and there is no clear method that seems to be consistently appropriate across situations. Kristof-Brown et al. (2005) suggest that the decision about which method to use should be based on the context of the study and the nature of the hypothesized relationship between P-O fit and outcomes. Indeed, Kristof-Brown et al. state that "when more precision is necessary, as in cases where excess versus deficiency are expected to have distinct results, the polynomial approach is recommended. When a more holistic assessment of similarity is sufficient, PSIs may provide adequate information" (p. 325).

The current study seeks to examine a more holistic assessment of fit between the individual's values (*P*) with commensurate dimensions of the organization's values (*E*). Specifically, a holistic approach that calculates P-O fit via ranked correlations seems appropriate in this study for several reasons. First, there are no hypotheses about the specific values that can impact fit. That is, because all of the values included in the organizational value profile are considered to be important values to the organization, then each value is considered equally important when assessing P-O fit. Second, meta-analyses correct for measurement error and the fact that stronger effect sizes for were found for correlation measures in profile similarity indices rather than difference scores (e.g., Arthur et al., 2006; Verquer et al., 2003) may mean that relationships could be more readily detected using correlation measures. Third, the ranking procedure utilized in calculating correlations between profiles could reduce the likelihood of engaging in socially desirable responding, which researchers argue is more prevalent in Likert-type scales (Ravlin & Meglino, 1987).

As the current study is interested in P-O fit in the context of selection, attempting to reduce social desirability bias seems particularly important.

Summary of Methodological Moderators

To summarize meta-analytic evidence on methodological moderators, the most critical moderators for relationships between P-O fit and outcomes appear to be the content dimension of fit (i.e., values) and operationalization of fit (i.e., direct-perceived/subjective fit) (Arthur et al., 2006; Hoffman & Woehr, 2006; Kristof-Brown et al., 2005; Verquer et al., 2003). However, with a few exceptions, only a small amount of variance could be attributed to statistical artifacts and there was a large range of variation around the estimated population correlation coefficients, indicating that there may be other moderators impacting these relationships. Indeed, Kristof-Brown et al. (2005) state the need for additional research on situational moderators.

The following section introduces one situational moderator, organizational climate strength, and presents theoretical support and empirical evidence for climate strength as a potential moderator of the relationship between P-O fit and performance.

Organizational Climate and Climate Strength

As previously mentioned, organizational climate refers to how the organization's culture – its values, beliefs, and assumptions – are translated into organizational practices, policies, and procedures (Ostroff et al., 2003; Reichers & Schneider, 1990; Schneider et al., 2002). Individuals form *psychological climate* perceptions of these organizational practices and assign meaning to them (Reichers & Schneider, 1990). When these perceptions across individuals are aggregated together, these perceptions are referred to as *organizational*

climate perceptions (James & Jones, 1974). Thus, in the current study organizational climate can be defined as "incumbents' perceptions of the events, practices, and procedures and the kinds of behaviors that get rewarded, supported, and expected in a setting" (Schneider, 1990, p. 384).

Within this broad definition, organizational climate can be conceptualized in terms of either a specific dimension, such as a climate for safety (e.g., Zohar & Luria, 2005) or a climate for service (e.g., Schneider et al., 2002), or it can be conceptualized as a collective of climate dimensions (e.g., Carr, Schmidt, Ford, & DeShon, 2003; Ostroff, 1993). For example, Ostroff (1993) conducted a comprehensive review of climate perceptions and outcomes to develop a three-facet taxonomy of climate dimensions. These three facets and corresponding climate dimensions are: affective (participation, warmth, social rewards, and cooperation), cognitive (personal growth, innovation, autonomy, and intrinsic rewards), and instrumental (hierarchy, organizational structure, extrinsic rewards, and achievement). The current study seeks to also use a broad measure of global organizational climate as a climate for a particular construct (e.g., service or safety) is not as relevant across different functional areas of an organization.

Aside from measuring climate quality (i.e., a mean rating) on a single climate dimension or across a set of climate dimensions, researchers have begun to focus on how the dispersion of ratings around the mean (i.e., variance) also provides useful information. Climate strength focuses on the amount of variance in climate perceptions, and it is defined as the extent of agreement among organizational members (Schneider et al., 2002). Chan's (1998) typology of compositional models specify how researchers can examine a particular form of a relationship between constructs at different levels of analysis. These models also

provide a useful framework to discuss how organizational climate and climate strength have been operationalized and measured.

According to Chan (1998), additive models sum the lower-level units into a higher-level unit regardless of how much variance is present among the lower-level units. This model adheres to Glick's (1985, 1988) conceptualization of how individual psychological climate perceptions can be grouped together to define organizational climate. Glick took a macro view where organizational climate was the focus and could be described along some continuum irrespective of the amount of dispersion in ratings.

In contrast to additive models, direct consensus models assume that a certain level of within-group agreement is necessary at the lower-level units in order to justify aggregation (Chan, 1998). James and his colleagues (James, 1982; James, Joyce, & Slocum, 1988) subscribed to this conceptualization and argued that the focus should be on individuals and their respective ratings and that a certain level of agreement across individual psychological climate perceptions is required before aggregating perceptions to define organizational climate. In other words, direct consensus models view disagreement as meaningful information about the climate. Some other researchers ascribe to this model and concur that a sufficient level of agreement should be necessary before aggregating ratings (e.g., Klein et al., 2001).

The referent-shift consensus model is similar to the direct consensus model, with the exception that the former model uses lower-level units and shifts the referent of these lower-level units (e.g., self to others) prior to assessing consensus (Chan, 1998). An example of research that uses a referent-shift consensus model is one that aggregates psychological climate perceptions to form organizational collective climate.

Chan's (1998) dispersion model uses within-group variance, rather than agreement, to operationalize the higher-level construct. In other words, the amount of variance among psychological climate perceptions of a group defines the strength of the climate. Thus, whereas consensus models view within-group variance as error variance, dispersion models view within-group variance as the actual construct of interest.

Finally, process composition models emphasize changes in behaviors (Chan, 1998). Here a process is specified at the lower-level and its parameters and their interrelationships are also defined. To form higher-level constructs, analogues of these lower-level parameters are formed. To capture changes in behaviors, assessments across several time periods are included in the model. An example of research that adheres to this model is one that examines psychological climate development to determine organizational climate emergence.

In sum, Chan's (1998) direct consensus models have been traditionally followed in the organizational climate literature, but recent interest has moved towards agreement of climate perceptions as a construct in itself (Van Vienen, Bechtoldt, De Pater, & Evers, 2007). Thus, the degree of within-group agreement in climate perceptions provides an indication of climate strength (e.g., Schneider et al., 2002). Although some research has examined climate strength as a moderator of the relationship between mean climate levels and outcomes (e.g., Colquitt, Noe, & Jackson, 2002; González-Romá, Peiró, & Tordera 2002; Schneider et al., 2002), the current study seeks to examine climate strength as a moderator of the relationship between P-O fit and performance.

Theoretical Support for Climate Strength as a Moderator

The rationale for how climate strength could impact P-O fit relationships with performance is based on Mischel's (1977) concept of strong versus weak situations. Strong

situations produce similar interpretations of the environment among individuals, create well-defined, uniform expectations for behavior, provide incentives for behaving in accordance with these expectations, and the same skill sets are required to perform these behaviors. When these situational constraints are present in strong situations, individuals are more likely to act in a manner congruent with the expectations in the environment as there are only a select number of agreed upon responses.

In weak situations, individuals have different interpretations of the environment, there are no uniform expectations for behavior, there are not clear incentives for performing in a particular manner, and a variety of different skill sets can perform the behaviors appropriately (Mischel, 1977). Due to the ambiguity of the weak situation, individuals are more likely to act based on their personality dispositions and other individual differences. Here, there are numerous ways to appropriately respond to the situation. For example, Beaty, Cleveland, and Murphy (2001) found that when a situation contained weak cues (e.g., few cues to reinforce the importance of helping coworkers as a critical aspect of job performance) personality characteristics had stronger relationships with intentions to engage in contextual performance behaviors. In contrast, when the situation contained strong cues these situational constraints were more likely to guide behavior than individual differences.

Similarly, organizational climates possess situational cues that serve to guide behavior. Within organizations, values, norms, policies, and procedures serve as situational constraints that define what behaviors are expected and appropriate (Svyantek & Bott, 2006). When there is substantial agreement as to the relevant values, norms, policies, and procedures, then the organizational climate is said to be strong and it acts as a strong

situation to guide behavior (Schneider et al., 2002). Strong organizational climates are thought to impact performance in a number of ways.

First, strong organizational climates can reduce job stressors by clarifying roles and defining expectations (Parkington & Schneider, 1979; Zohar, 2000). When employees are faced with complex or non-routine situations, strong climates can provide information about the appropriate procedures to follow and the relative priorities of competing demands (Zohar, 2000). The existence of this information reduces job stress and ambiguity about the proper actions to take. For example, Parkington and Schneider (1979) found that differences between employee and upper management service orientation were associated with greater role ambiguity and role conflict from employees, which were significantly associated with employee dissatisfaction and turnover intentions. Meta-analytic evidence provides some support that reductions in job stressors will facilitate job performance (Tubre & Collins, 2000). Specifically, the estimated population correlation coefficient between role ambiguity and job performance was -.21, but there was only a small relationship (-.07) between role conflict and job performance.

In addition to reducing job stress, strong organizational climates can impact performance by reducing process losses (Hackman, 1992; Zander, 1994). If little information is provided about an organization's priorities or values, or about the individual's specific job role, then extra time will be spent addressing issues related to procedures and relative priorities as well as clarifying job roles. Although Zohar (2000) focused specifically on safety climate, he stated that climates can also provide information about the relative priorities of competing goals, such as a goal for safety versus a goal for production.

Finally, strong organizational climates can impact job performance by increasing the quality of interpersonal relations and communication (Zander, 1994). If there is group consensus about organizational practices and processes, employee behavior is likely to be more consistent across individuals, and consequently, more predictable. An understanding of how employees will behave in situations reduces conflict and interpersonal strain.

Research on Climate Strength as a Moderator

Bowen and Ostroff (2004) stated that an organization's climate "can act as a strong situation when employees develop a shared interpretation of the organization's policies, practices, procedures, and goals and develop shared perceptions about what behaviors are expected and rewarded in the organization" (p. 207). Research has examined if climate strength can moderate relationships between climate quality and work-related outcome variables. Climate quality is defined as the proximity of the mean rating of climate perceptions across one or more climate dimensions to an endpoint of a rating scale (Lindell & Brandt, 2000). Research examining climate strength as a moderator has either defined organizational climate quality in terms of several dimensions (Lindell & Brandt, 2000; Malamut, 2002) or in terms of a specific climate dimension (Colquitt et al., 2002; González-Romá et al., 2002; Poling, Mericac, & Woehr, 2007; Schneider et al., 2002; Zohar & Luria, 2004).

Overall climate quality. Lindell and Brandt (2000) were among the first to examine climate strength as a moderator of relationships between climate quality and outcomes, using the term 'climate consensus' to describe the dispersion of individual ratings. They investigated a sample of local emergency planning committees (LEPCs) which are organizational entities responsible for developing and communicating emergency response

plans for chemical incidents. Employees completed an overall measure of organizational climate that assessed leadership, teamwork, role clarity and conflict, and job characteristics.

Contrary to their hypothesis, Lindell and Brandt (2000) found that climate consensus across these four dimensions did not predict a unique amount of variance for individual and organizational outcomes after controlling for the effects of climate quality. They offered several potential explanations for the discrepant findings. First, the nature of the work in the LEPCs could be performed autonomously and did not require a great deal of interdependence. It may be that climate consensus is only relevant in situations where individuals need to work together. This is consistent with Chatman's (1989) finding that fit only mattered for highly interdependent tasks. Second, many of the dimensions used in the climate survey represented outcomes of a strong or weak climate rather than the more traditional definitions of organizational climate (i.e., agreement on organizational practices and procedures). That is, although innovation and teamwork are commonly examined dimensions of climate (e.g., Ostroff, 1993), role clarity and conflict as well as job characteristics (e.g., task significance) could be seen as an outcome of working in an ambiguous environment where there is little structure and many ways to perform the work. Thus, it would be informative to examine if climate consensus (strength) moderates relationships between climate quality and outcomes when climate quality reflects a variety of dimensions that are more closely associated with the dimensions included in climate taxonomies (e.g., Ostroff, 1993).

Malamut (2002) took this holistic approach and examined organizational climate across several dimensions, including management and communication. Over 14,000 hourly employees of a an international hospitality chain completed an organizational climate survey,

and one year later three organization-level outcome variables were assessed: overall guest satisfaction, percent voluntary turnover, and percent hotel profit. The results showed that climate strength was a significant moderator of the relationship between mean climate quality perceptions and percent hotel profit, but not for guest satisfaction or percent voluntary turnover. However, this result could be explained by the fact that guest satisfaction was a one time measurement, whereas percent hotel profit could reflect performance over time and be a more generalizable measure. It could also be that climate strength has a more direct relation to guest satisfaction in that if hourly employees consistently adhere to established policies and procedures, guests will be exposed to a consistent set of behaviors which may have more of an impact on guest satisfaction rather than the aggregated employee perceptions of climate (climate quality). In fact, climate strength alone was a significant predictor of guest satisfaction above and beyond mean climate quality alone. Collectively, these results underscore the importance of climate strength on organizational performance.

In contrast to Malamut (2002) and Lindell and Brandt (2000), other researchers have focused on how climate strength can moderate relationships between a specific dimension of climate and work-related outcomes. These specific dimensions include a climate for service (e.g., Schneider et al., 2002), safety (e.g., Zohar & Luria, 2004), innovation (e.g., González-Romá et al., 2002), or a procedural justice climate (e.g., Colquitt et al., 2002; Poling et al., 2007).

Specific dimensions of climate. Schneider and his colleagues (2002) examined the interaction between organizational climate for service and climate strength across 134 bank branches over a three-year period. Service climate contained dimensions of customer orientation, managerial practices, customer feedback, and global service climate. The

outcome variable of interest was aggregated customer perceptions of service quality, including efficiency, security, competency, relationships, and overall perceptions. They found that climate strength did moderate the relationship between the quality of the service climate and reported customer experiences of service quality for only the managerial practices dimension and not the other three dimensions. Schneider and his colleagues suggest that the managerial practices dimension could be the dimension with the greatest impact on employees, which could explain the significant results for this dimension only. Managers and supervisors could have an immediate impact on behaviors, whereas the other climate dimensions (customer orientation, customer feedback, and global service climate) could be interpreted as indirect outcomes of leadership practices. Following this logic, the consistent interaction between the managerial practices dimension with climate strength seems to indicate that the strength of the climate can impact customer perceptions.

Zohar and his colleagues (Zohar, 2000; Zohar & Luria, 2004, 2005) examined safety as a specific dimension of organizational climate. They view supervisory practices as a critical determination of how climate can vary from group to group. Specifically, organization-wide policies and procedures are translated and implemented at the group or unit level by the supervisor; for example, the supervisor can determine the relative priorities of safety versus production in a unit. First, Zohar (2000) demonstrated the relationship between safety climate and outcomes by examining 53 work groups of production workers in a metal-processing plant over a 5-month period. Production workers filled out a safety climate questionnaire with a two-factor structure: the assessment of supervisory positive and negative reactions to conduct and supervisory expectations regarding safety and productivity. Following the questionnaire, employee visits to the infirmary were screened over a 5-month

period to identify the number of microaccidents (defined as behavior-dependent injuries that were minor but still required medical attention). Zohar found that the quality of safety climate significantly predicted the number of microaccidents.

Next, to examine climate strength as a moderator, Zohar and Luria (2004) collected information about safety climate and the number of on-the-job injuries from over 2,000 soldiers across 81 platoons. Safety climate was measured using a 25-item questionnaire about supervisory practices and critical incidents where safety and mission priorities may have been in competition with one another. Contrary to their hypothesis, climate strength did not moderate the relationship between safety climate and the number of injuries. However, climate strength was not operationalized as agreement of individual perceptions of organizational practices (a la Schneider et al., 2002); instead, supervisory scripts for behaviors were used as a proxy for variation in organizational practices. Due to this difference in how climate strength was defined and given the unique combat-related context of this type of organization, these results may not generalize to more traditional conceptualizations of organizations.

In an examination of another dimension of climate quality, Colquitt et al. (2002) examined the interaction between perceptions of procedural justice (PJ) climate and climate strength on team-related outcomes. Employees from 88 teams across six different automobile manufacturing plants completed a procedural justice climate level survey where the aggregated ratings served as a measure of climate and the coefficient of variation was used to define climate strength. Ratings of team performance were collected two months after the climate survey, and ratings of absenteeism were collected three months later. The results show that climate strength moderated the relationship between PJ climate level and

team performance and absenteeism, such that stronger relationships existed in strong climates rather than weak climates. Although these results support climate strength as a moderator, the authors noted that the sizes of the teams were much smaller than the size of many departments in an organization, and the results may not fully generalize to large departments or organizational units.

In another study, Poling et al. (2007) examined procedural justice (PJ) climate perceptions but rather than examining behavioral outcomes, they examined work attitudes as the outcome of interest. Individuals from 64 units of a sales organization completed several surveys to assess procedural justice, trust in management, job satisfaction, and intent to quit. Two of the three possible moderating relationships could not be examined because there were no significant main effects for climate quality. However, PJ climate strength did moderate the relationship between PJ climate quality and intent to quit in that when climate quality was low and there was a weak climate, individuals were more likely to report intentions to quit the organization. In conjunction with the results from Colquitt et al. (2002), it appears that climate strength can have an impact on moderating the relationship between PJ climate quality and work-related outcomes.

Finally, González-Romá et al. (2002) examined three single dimensions of organizational climate independently rather than as an overall climate measure. The three single facets were support (extent to which there are kind, supportive relationships in the environment), innovation (extent to which environment encourages openness to new ideas), and goals orientation (extent to which goals are clearly defined and goal achievement is valued). Employees in 197 work units of a regional public health service completed a survey that assessed these three climate dimensions. As hypothesized, climate strength moderated

three of the six possible relationships: innovation climate quality interacted with climate strength to predict both satisfaction and organizational commitment, and goals orientation interacted with climate strength to predict organizational commitment. Each relationship was significantly stronger when the climate was classified as strong rather than weak.

In sum, conclusions about climate strength as a moderator of climate-outcome relationships are difficult to form because different studies have looked at different combinations of specific versus global predictor measures of climate, attitudinal versus behavioral outcome variables, and individual, team, versus organizational-level outcome variables. Although there is some evidence that climate strength can moderate climate quality-outcome relationships (e.g., Colquitt et al., 2002; González-Romá et al., 2002; Malamut, 2002; Poling et al., 2007; Schneider et al., 2002), when it does or does not moderate relationships seems to vary on a case-by-case basis depending on the context of the job and the outcome variables of interest. Accordingly, the current study seeks to move away from how climate strength interacts with climate quality and instead focus on how climate strength interacts with the extent to which individuals "fit in" with the climate.

Climate Strength and P-O Fit

Climate strength could moderate the relationship between P-O fit and performance to the extent that stronger situations heighten the importance of "fitting in" with the practices, processes, and behaviors that are expected in that situation. House, Rousseau, & Thomas-Hunt (1995) suggested that the degree of "coupling" within an organization can impact the strength or the direction of fit relationships. This hypothesis can be applied to the context of strong and weak organizational climates. P-O fit may be critical in organizations with strong groupings because there are clear boundaries and expectations that an individual may or may

not follow, which could have a substantial impact on their attitudes and behaviors. That is, if there is a strong climate with clearly defined expectations for job roles and behaviors, then there are set ways an individual can perform to be congruent with these expectations. If the personal characteristics the individual brings to the organization (e.g., values, preferences, interests, personality characteristics, KSAs) match these expectations for job roles and behaviors, then positive outcomes are likely to result. If the individual does not possess personal characteristics that are congruent with the expectations that the situation demands, then negative outcomes will likely result.

Conversely, if an organization is loosely coupled then the degree of P-O fit may not be as relevant to individual outcomes since there is no "strong situation" to define the parameters of expected behaviors. In these weak organizational climates there are numerous ways that an individual's personal characteristics, skill sets, and interests can produce beneficial outcomes because there are few or ill-defined expectations for specific behaviors. Thus, P-O fit may not have as strong a relationship with work-related outcomes in weak climates.

Current Study

The current study seeks to integrate two streams of literature. One stream of literature focuses on relationships between P-O fit and beneficial work-related outcomes, and another stream of literature focuses on relationships between work climates (either globally or a specific facet of climate) and beneficial work-related outcomes. However, the question remains how P-O fit and characteristics of the work climate interact to predict outcomes. Although both streams of literature report positive relationships with each of these variables

when examined independently, would characteristics of the climate (i.e., climate strength) strengthen the relationship between P-O fit and work outcomes? In other words, it may be the case that P-O fit only matters when the organizational climate is strong.

To my knowledge, there has been one study that examined climate strength as it relates to person-environment fit constructs. Sinar (2001) examined the strength of agreement about organizational values (termed value crystallization) as a potential moderator of relationships between P-O fit and job satisfaction and performance. He hypothesized that there would be stronger relationships between P-O fit and outcomes when an organizational value was high in crystallization. Employees from an animal food supply company (dataset one) and a household products company (dataset two) completed an organizational climate survey addressing five dimensions: innovation, outcome orientation, aggressiveness, detail orientation, and team orientation. To assess P-O fit, the employee's value desirability rating was subtracted from the rating of the value's prevalence (as determined by two supervisors rating the individual's performance) and then squared and reversed scored.

Counter to expectation, Sinar (2001) found either non-significant or slightly negative relationships between P-O fit and job performance. To examine value crystallization as a moderator, Sinar examined the average magnitude of the relationships for values that were high versus low in crystallization with job satisfaction and job performance. Relationships with performance were slightly higher for highly crystallized values (.05 and .03 for datasets one and two, respectively) than for values low in crystallization (-.10 and -.07, respectively). In addition, relationships with job satisfaction were slightly higher for highly crystallized values (-.10) than for values low in crystallization (-.20). Although these relationships were in the hypothesized direction, these relationships were not statistically significant.

Although Sinar (2001) did not find evidence to support climate strength as a moderator of the relationship between P-O fit and job performance and satisfaction, the level of analysis could serve as a major study limitation. Sinar examined an entire center with numerous supervisors, whereas examining work groups as the level of analysis may have been more appropriate. Research indicates that supervisors play a large role in how organizational values are translated into organizational practices (e.g., Zohar, 2000; Zohar & Luria, 2004, 2005). Thus, there may have been substantial differences in value crystallization across work groups that were missed due to the aggregation of fit and climate data across the organization. In addition, Sinar measured P-O fit using a difference score due to his interest in the distance between the two value profiles. However, the use of difference scores ignores information about the direction of the difference between P and O and there is conceptual ambiguity because the relative contribution from each component cannot be determined (Edwards, 1994). As a result, P-O fit may not have been adequately measured which could account for the non-significant findings.

The current study seeks to expand upon Sinar's (2001) work by using an alternate measure of P-O fit and a lower-level grouping variable to define a unit of climate (departments rather than an entire call center). First, the current study will measure P-O fit using profile correlations as this measure can provide a more holistic comparison across multiple dimensions (Kristof-Brown et al., 2005). Second, analysis at the department level is desired because it seems climate strength would vary across an entire call center and that perhaps sub-climates may exist that vary by department or supervisors. Early researchers used cluster analysis techniques to identify collective climates that were based on agreement about climate perceptions and not necessarily based on department or functional area (e.g.,

Jackofsky & Slocum, 1988; Joyce & Slocum, 1984). Overall, this research suggests that collective climate might be too broad. For example, Jackofsky and Slocum initially found evidence of collective climates across departments; however, this finding did not hold three months later. This discrepancy in climate over three months could be due to the cross-departmental nature of the work; that is, there were no clear distinctions in the type of work across departments. An additional explanation for the discrepancy can be identified from work by Payne and his colleagues (Payne, 1990; Patterson, Payne, & West, 1996) who argue that collective climates should only be viewed as such if one can ascribe sociopsychological meaning to the group, not solely based on similar response patterns. That is, a climate should represent a cluster of individuals who are related in some way such as physical location, department, profession, or clique. In fact, the very definition of organizational climate according to Bowen and Ostroff (2004) emphasizes this formal structure of a defined climate: "organizational climate…is based on shared perceptions among employees within formal organizational units" (p. 205).

Although some researchers have reported no differences between climates when climates were defined based on common tasks and close physical proximity (e.g., Patterson et al., 1996), other researchers have found differences on climate dimensions between functional areas/departments (e.g., Cantwell et al., 2007) and work units in the same organization (e.g., Jermier et al., 1991; Schneider & Bowen, 1985). Accordingly, the current study seeks to extend Sinar's (2001) work by examining climate perceptions at the department level.

It is important to note that this review has focused on the construct of P-O fit in the context of organizational values. In the current study, when P-O fit is operationalized at the

climate level, the construct is actually referring to how organizational values are implemented within a work unit. The current study makes the assumption that the values of the organization are translated into the organizational climate of each work unit. For the sake of consistency with the literature, the construct label "P-O fit" will be used even though it is referring to how well the individual fits in with the organizational culture as defined by the work unit or department level.

When organizational climate is conceptualized at the department level, the extent to which an individual fits in with the department's processes, practices, and procedures (P-O fit) and individual-level outcomes is likely to be determined by the degree of consensus about the department's processes, practices, and procedures. That is, when there are clearly agreed upon ways for how the department functions and the individual can fit in and work well in that environment, beneficial individual outcomes will result. However, if the individual cannot work well in that environment, negative individual outcomes will result. Given this general prediction, a model of these constructs and specific hypotheses are detailed next.

Mediated Moderation Model

Edwards and Lambert (2007) present an analytical framework that integrates mediation and moderation to demonstrate direct, indirect, and total effects among variables and how these paths can differ according to a moderating variable. The current study presents and tests a model that is consistent with their First Stage and Direct Effect Moderation Model (see Edwards & Lambert, 2007, Panel F, p. 4). In Figure 1, the model shows that climate strength directly moderates the relationship between P-O fit and performance as well as indirectly moderates the relationship through organizational commitment.

P-O fit and job performance. Coefficient b_X represents the relationship between P-O fit (*X*) and job performance (*Y*). Recall that research has shown inconsistent results with regards to the relationship between P-O fit and different measures of performance (Arthur et al., 2006; Hoffman & Woehr, 2006; Kristof-Brown et al., 2005). Meta-analytic estimates (ranging from .21 to .27) show a moderate relationship between P-O fit and performance when an 80% or 90% credibility interval was used. Thus, a moderate relationship is expected between P-O fit and contextual performance. In contrast, meta-analytic estimates with task and overall performance as the criteria were weak or non-significant, and a similar relationship is expected in the current study.

Hypothesis 1a: There will be a positive relationship between P-O fit and task performance.

Hypothesis 2a: There will be a significant positive relationship between P-O fit and contextual performance.

However, it is expected that the strength of these relationships will change when incorporating climate strength (*Z*) as a moderator. This expected change is based on research that indicates strong climates can clarify roles and define expectations (e.g., Parkington & Schneider, 1979; Zohar, 2000), reduce process losses (e.g., Hackman, 1992; Zander, 1994), and increase the quality of interpersonal relationships and communication (e.g., Zander, 1994). In a strong climate with clearly defined roles, procedures, and practices, individuals who fit in with these expectations will be more successful performers than individuals who do not fit in with these expectations. Conversely, when a variety of roles, procedures, and practices are viewed as appropriate, as seen in weak climates, then the extent to which an individual fits in with any single set of expectations should not affect performance.

Hypothesis 1b: Climate strength will moderate the relationship between P-O fit and task performance such that the highest task performance ratings will be for individuals experiencing high P-O fit in strong organizational climates.

Hypothesis 2b: Climate strength will moderate the relationship between P-O fit and contextual performance such that the highest contextual performance ratings will be for individuals experiencing high P-O fit in strong organizational climates.

P-O fit and organizational commitment. Coefficient a_X represents the relationship between P-O fit (*X*) and a measure of work attitudes, organizational commitment (*M*). Recall that work attitudes typically have a moderate relationship with P-O fit (Arthur et al., 2006; Hoffman & Woehr, 2004; Kristof-Brown et al., 2005; Verquer et al., 2003). In the two most recent meta-analyses, the estimated population correlation coefficients ranged from .36 to .44 for job satisfaction, .31 to .51 for organizational commitment, and .25 (reverse-scored) to -.35 for turnover intentions (Arthur et al. 2006, Kristof-Brown et al., 2005, respectively). In the current study, it is hypothesized that there will be a significant main effect between P-O fit and one measure of work attitudes, organizational commitment.

Hypothesis 3a: There will be a significant positive relationship between P-O fit and organizational commitment.

It is also predicted that climate strength will intensify the effects of P-O fit on organizational commitment. That is, if an individual experiences high P-O fit, then the strength of the climate will have little impact on organizational commitment because the individual fits with either the well-defined expectations of the strong climate, or the

individual fits with the inherent ambiguity in a weak climate. Conversely, if a climate is strong and the individual experiences low P-O fit, then organizational commitment is especially likely to decline because the individual does not fit in with the clear expectations for the roles, practices, and procedures evident in a strong climate. In a weak climate, expectations are not clear-cut and misfit would be less salient.

> *Hypothesis 3b*: Climate strength will moderate the relationship between P-O fit and organizational commitment such that the lowest ratings of organizational commitment will be for individuals experiencing low P-O fit in strong organizational climates.

Mediated moderation. Coefficient b_M represents the mediating role of organizational commitment (*M*), and coefficients a_{XZ} and b_{XZ} represent the moderating role of climate strength (*Z*). As previously discussed, research suggests that some of the basic conditions for mediation have been met (e.g., Judge et al., 2001; Kristof-Brown et al., 2005), and recent research within a single study found that work attitudes partially mediated the relationship between P-O fit and job performance (Arthur et al., 2006). The size of the relationship was reduced from .15 to .06, though both coefficients remained statistically significant. Based on these findings, the current study will replicate this analysis and incorporate climate strength as a moderator to examine the direct and indirect effects of P-O fit on performance. It is hypothesized that one type of work attitude, organizational commitment, will partially mediate the relationship between P-O fit and job performance and this indirect effect will intensify based on the strength of the organizational climate.

Hypotheses 4a: Organizational commitment will partially mediate the relationship between P-O fit and task performance.

Hypothesis 5a: Organizational commitment will partially mediate the relationship between P-O fit and contextual performance.

Hypotheses 4b-5b: Climate strength will moderate the mediating effect of organizational commitment on the relationship between P-O fit and task performance (*Hypothesis 4b*) and contextual performance (*Hypothesis 5b*) such that the relationship between P-O fit and performance will be weakened after taking organizational commitment into account, with the greatest decrease occurring in strong organizational climates.

To investigate these hypotheses, I will collect and analyze data from employees and supervisors of an international hospitality chain as part of the company's annual employee opinion survey.

Chapter 3: Method

Participants

Data was collected from a total of 5,330 job incumbents from the corporate headquarters of an international hospitality chain. All job incumbents participated in the company's annual employee opinion survey on a voluntary basis. Supervisors of the job incumbents provided job performance ratings. Participants did not receive compensation or any other benefits for their participation.

Measures

Organizational climate. A portion of the employee opinion survey served as a measure of organizational climate. This survey was developed by the company to assess employee perceptions about their jobs, supervisors, and the company. The principal investigator of the current study signed a nondisclosure agreement with the company, and as such, the specific climate dimensions and climate items cannot be provided.

The survey contained one demographic item regarding race/ethnicity and 35 items about seven different company climate dimensions (e.g., work/life balance, leadership, and teamwork). Prior confirmatory factor analyses using a larger dataset have found that a seven-factor model is a good fit to the data (NFI = .938, CFI = .938). Participants responded to each climate item using a 6-point Likert-type scale where *1 = Strongly Disagree* and *6 = Strongly Agree* and had the option to leave an item blank. The organizational climate measure had a sufficient level of reliability (Cronbach's alpha = .95).

The responses to the climate items were averaged to create a mean climate perception score for each job incumbent. A global measure of organizational climate across dimensions

was desired to be consistent with arguments on the bandwidth-fidelity issue (Cronbach & Gleser, 1957). That is, there should be a match between the breadth of the criterion and predictor variables. In the context of organizational climate, when the criterion of interest (i.e., job performance) is broad, then the predictor variables should be broad as well (i.e., global organizational climate) (Carr et al., 2003).

Person-organization fit. P-O fit was measured using 10 items on the employee opinion survey. The instructions asked participants to rank-order 10 personal work preferences in order of their importance to motivate the employee to work hard and remain with the company (where *1 = Most Important* and *10 = Least Important*). Although some research indicates that ranking procedures produced more questions and respondents held less favorable opinions when compared to a Likert-type rating, (Barber & Wesson, 1998), the current study utilized ranking procedures in order to obtain as much variance as possible. Barber and Wesson found that ranking procedures did produce slightly more variance than rating procedures.

The work preferences items were developed in collaboration between the principal investigator and the organization. The items were specifically developed to tap into each of the climate dimensions included in the employee opinion survey. Consequently, the personal work preferences used to assess P-O fit shared the same content as the climate dimensions used to calculate organizational climate strength. Due to the nondisclosure agreement the specific items cannot be provided, but the general work preferences included items related to teamwork, diversity, career development, supportive management, supportive supervisors, work/life balance, employee participation, employee compensation, employee medical benefits, and employee retirement benefits.

These work preferences are considered to be values-based because previous research has framed desired work preferences and attributes in the organization as a way to measure personal values (e.g., Chatman, 1991; O'Reilly et al., 1991). As previously discussed, a value-based measure of P-O fit is highly desirable in the current study for several reasons. First, researchers have advocated that values are the key basis for defining this type of fit (e.g., Chatman, 1989, 1991). Second, values are the most frequently utilized content dimension in research (Piasentin & Chapman, 2006). Finally, values-based congruency generally has the strongest relationships with outcome variables or there are only small differences with other content dimensions or combinations of dimensions (Arthur et al., 2006; Hoffman & Woehr, 2006; Kristof-Brown et al., 2005; Verquer et al., 2003).

The job incumbent's personal profile (*P*) was the rank-ordered profile of work preferences. To assess the organization's profile (*E*), the rank-ordered value ratings across job incumbents in the department were aggregated together. The participant's P-O fit score was the correlation between the incumbent's work preferences profile with the department's work preferences profile.

As previously discussed, the method of measuring and calculating P-O fit should be made based on the context and application of the specific study (Kristof-Brown et al., 2005). In the current study, an indirect-actual approach rather than a direct approach to measuring P-O fit was desirable for several reasons (McCulloch & Turban, 2007). In the context of selection, several applicants are likely to distort their responses in an attempt to present a favorable impression (i.e., fake). Moreover, applicants have information about the organization's actual climate. This lack of knowledge about the organization brings in to question the validity of direct measures when generalizing to the applicant population. Not

surprisingly, the greatest discrepancies between direct and indirect measures of fit have been found in the pre-organizational entry context during recruitment and selection (.45 mean difference; Kristof-Brown et al., 2005). In addition, the profile correlation approach to calculating P-O fit was desirable because of the interest to obtain a more holistic assessment of fit, to make efforts to reduce the likelihood of socially desirable responses (Ravlin & Meglino, 1987), and to focus on the individual's relative importance of values/preferences rather than the absolute levels (e.g., Adkins et al., 1994; Meglino et al., 1989). The assessment of global P-O fit allows for the measurement of variables at commensurate levels of breadth: overall P-O fit, global climate, and overall job performance, which are all broad measures.

Individual job performance. Supervisory ratings of job performance served as the outcome variable. These administrative performance evaluations are linked to the organization's performance management process and pay decisions. There was an approximate three- to five-month interval between the time of survey administration and the time of performance appraisal. The performance appraisal consisted of rating employees on five dimensions of job performance, including personal goal achievement and time and resource management. Due to the non-disclosure agreement, the specific dimensions and definitions cannot be provided. These five dimensions represent core competencies critical for job performance based on prior job analytic work conducted within the company.

To determine if the five dimensions of job performance indeed represented distinct facets of performance, such as task and contextual performance, a content sorting rating task was conducted. Six industrial-organizational psychologists with graduate degrees served as subject matter experts (SMEs). These SMEs were selected based on their familiarity with the

performance dimensions and their access to confidential company information without additional approval.

Each SME was provided with a list of the five performance dimensions and definitions as well as a definition of the performance facets. Task performance was defined as performance that "utilizes competencies that are directly related to the organization's technical work, such as applying job knowledge to successfully perform the requirements of the job". This definition is consistent with the definition of task performance provided by Borman and Motowidlo (1993, 1997). Contextual performance was defined as performance that "utilizes competencies that are related to the overall functioning of the organization and provide a context that facilitates task performance". This includes behaviors such as exerting extra effort to complete work, volunteering for activities that are not part of the formal job requirements, cooperating with others, adhering to proper organizational procedures, and supporting the organization's mission". This definition is consistent with Borman and Motowidlo's (1997) taxonomy of contextual performance. The third facet of performance was defined as follows: "Other performance utilizes competencies that are not directly related to the organization's technical work or to enhance the organization's overall functioning; rather, other performance refers to other facets of overall job performance that are not explicitly task or contextual in nature".

SMEs were asked to classify each dimension as either a facet of task, contextual, or other performance. The option was also provided to select more than one facet of performance or to select "None of these facets of performance".

The extent of agreement among the SMEs was evaluated using a modified version of kappa to account for more than two raters classifying nominal data (Fleiss, 1971). The extent

of agreement across the six raters was k = -0.0061. According to Landis and Koch (1977), this k value can be interpreted as indicating no agreement. Further investigation of the intercorrelations between the five dimensions showed that the dimensions were highly correlated with one another (ranging from r = .32 to r = .50) where each correlation was significant at the $p < .01$ level. Consequently, performance could not be differentiated into facets of task and contextual performance; instead, overall job performance was used as the sole outcome variable of interest. Overall job performance ratings were made by averaging the ratings across the five dimensions.

Organizational commitment. Organizational commitment served as a measure of work attitudes. Participants rated four items related to company pride and viewing the company as a great place to work on a 6-point Likert-type scale where *1 = Strongly Disagree* and *6 = Strongly Agree*. Due to the nature of the disclosure agreement, the specific items cannot be provided but the items adhered to the view of commitment as a "psychological state that (a) characterizes the employee's relationship with the organization, and (b) has implications for the decision to continue or discontinue membership in the organization" (Meyer & Allen, 1991, p. 67). The average rating across the four items served as the measure of organizational commitment. The scale had an acceptable level of reliability (Cronbach's alpha = .87).

Procedure

The annual employee opinion survey was administered via the internet through a third party vendor. Job incumbents received a unique web link in their email which the vendor used to link responses to specific individuals. However, incumbents were informed that the vendor would maintain confidentiality and no personally identifying information was

provided to the company. Incumbents were encouraged to complete the survey during the 4-week period when the survey was available online. Two reminder emails were sent throughout survey administration.

The principal investigator obtained the performance appraisal ratings from the third party vendor. The vendor was asked to link the performance appraisal ratings to the employee opinion survey responses using the unique identification number, but remove all personally identifying information.

Chapter 4: Data Aggregation

A total of 5,330 employees at the headquarters of an international hospitality chain completed the employee opinion survey. All survey responses were within the appropriate data ranges. Participants were given the option to decline to respond to any item on the survey. All nonresponses were treated as missing data. Participants who declined to provide one or more value rankings for the P-O fit measure were was dropped from subsequent analyses to ensure that all participants had a complete value profile for calculating both the individual value profile and the organizational value profile. This process reduced the sample size by 80 participants (N = 5,250).

Determining the Organizational Unit of Analysis

To create a measure of unit-level climate strength, individual-level mean climate perception scores were aggregated. Historically, researchers have debated when it is appropriate to aggregate climate perceptions to represent a psychological or organizational phenomenon (e.g., Glick, 1985, 1988; James, 1982; James et al., 1988). It is generally agreed that individual-level responses should have some baseline statistical level of support prior to aggregating responses when testing a consensus model because within-group agreement as inherently linked to the construct validity of climate perceptions (Chan, 1998). In contrast, it is not necessary to provide statistical support prior to aggregating responses when testing a dispersion model, as is the case in the current study. In dispersion models, the extent of agreement is the construct of interest (Chan, 1998). As such, dispersion is inherently a group-level construct and dispersion models are most appropriate to examine climate strength.

Although statistical support is used to justify aggregation in consensus models, Chan (1998) states that the use of a dispersion model requires the absence of multimodality in the within-group distributions. Thus, in order to provide empirical support for a dispersion model, a researcher would need to test for scalar and factorial invariance across the units of comparison. However, in the context of the current study testing for measurement invariance is inappropriate because it requires too many tests across the large number of divisions, departments, or sub-departments. Instead, the current study utilized statistical support (i.e., $r_{wg(j)}$) to justify aggregating climate perceptions, which is consistent with methodology utilized by other climate researchers (e.g., Klein et al., 2001; Malamut, 2002; Sinar, 2001; Schneider et al., 2002).

The current study conceptualizes units of organizational climate at the department level of analysis. Departments represented distinct business functions within more general areas, such as Sales & Marketing and Global Finance. To justify statistical aggregation of individual responses at the department level of analysis, the $r_{wg(j)}$ was calculated across all items of the climate survey for each department. The $r_{wg(j)}$ across departments ranged from .966 to .997 with an average of .988. This provided sufficient statistical support to justify aggregation as it is above the generally accepted standards of .7 or .8 (James, 1982). Thus, the unit of organizational climate was established at the department level of analysis.

Measuring Climate Strength

To serve as an index of the extent of agreement about climate perceptions within the department (i.e., climate strength), the standard deviation of employee climate perceptions was calculated for each department. The standard deviation was selected as the index for several reasons. First, Schmidt and Hunter (1989) advocated for the use of the standard

deviation of group members' ratings to measure interrater reliability because the r_{wg} method advocated by James, Demaree, and Wolf (1984) is based on a strict set of assumptions that may not be true when working with multiple targets. However, Kozlowski and Hattrup (1992) argued that the standard deviation was inappropriate because it was a measure of reliability, not agreement. The principal investigator agrees with other researchers contesting this argument because the standard deviation provides a measure of *disagreement* (Lindell & Brandt, 2000; Schneider et al., 2002) which is equally applicable to describe variation in agreement and variation in reliability. Second, using the standard deviation provides an index of climate strength that is easily interpreted. Another popular index of climate strength when dealing with multiple items (with *j* items), $r_{wg(j)}$, compares the within-group variance to a theoretical distribution (James et al., 1984). Although the degree of agreement has an upper and lower bound to aid in interpretation when the index is applied to scales with multiple items, some values fall outside of the range making interpretation difficult (Lindell & Brandt, 1997). Moreover, the average within-group standard deviation is strongly correlated with $r_{wg(j)}$ (Klein et al., 2001; Lindell & Brandt, 2000). Finally, the use of standard deviation is intuitively appealing because most people think of standard deviation as an index of variability (Schneider et al., 2002) and this approach is consistent with the approach advocated by other climate researchers (e.g., Chan, 1998; Klein et al., 2001; Malamut, 2002).

Eliminating Department Outliers and Equalizing Standard Errors

With the unit of organizational climate established at the department level of analysis, the dataset contained a total of 88 units of organizational climate with 5,250 participants. There were 35 participants who did not indicate department membership, and they were deleted from subsequent analyses reducing the sample size to 5,215. Of those participants

who did indicate department membership, there was a large amount of variability in subsample sizes between departments, ranging from 4 to 522 respondents in each department. Recall that in the current study organizational climate is defined as "incumbents' perceptions of the events, practices, and procedures and the kinds of behaviors that get rewarded, supported, and expected in a setting" (Schneider, 1990, p. 384), and that the supervisor can play a major role in shaping these perceptions for a work unit (Zohar, 2000; Zohar & Luria, 2004, 2005). Because it seems likely that there will be a lot of variation and a less stable climate for departments with few participants, and because it seems likely that subgroups will be formed within extremely large departments, outlying departments with less than 8 participants or greater than 100 participants were removed from analyses. Only ten departments had fewer than eight participants whereas seven departments had exactly eight participants. By setting the lower threshold at eight, a larger number of organizational units could be retained in the analyses. The upper threshold of 100 participants was selected again to maximize the number of organizational units that could be retained in the analyses yet eliminate extremely large departments. A total of 10 organizational climate units were removed from subsequent analyses because they had fewer than eight participants, and 16 organizational climate units were removed because they had greater than 100 participants. These thresholds reduced the number of organizational climate units from 88 to 62.

Two sets of extreme groups ANOVAs were conducted to ensure that there were no significant differences between the study variables from the dataset with all departments in comparison to a dataset with the reduced set of departments. A new group variable was calculated to classify department size into three equally sized groups. An ANOVA was

conducted with the group size variable as the independent variable, and the study variables as the dependent variables. The results indicate that there were statistically significant differences between the means of different sized departments for value 5, value 6, value 9, organizational climate, and climate strength (see Appendix A). Once the outlying departments were removed, a second grouping variable was calculated to classify department size into three equally sized groups. When these outlying departments were removed, there were no longer statistically significant differences on any of the study variables. Thus, there is support to justify eliminating these outlying departments. Of the 62 climate units, an additional 26 organizational climate units were removed from subsequent data analyses because of missing performance data. Thus, the final dataset consisted of 36 units of climate.

In cases where there are large differences in the sample size between units, Schneider and his colleagues (Schneider et al., 2002; Schneider, Hanges, Smith, & Salvaggio, 2003) recommend that researchers equalize the standard errors for the unit-level means. This would prevent units that contained disproportionately larger sample sizes from driving the results. To equalize the standard errors, Schneider et al. (2002) randomly selected five observations from each unit of analysis to use in subsequent data analyses. Malamut (2002) equalized the standard errors by including only those units where the number of respondents fell within one standard deviation above and below the sample size mean across units. Schneider et al. (2003) looked at the organization (their unit of analysis) with the smallest number of respondents and used that number to sample across organizations. In order to retain the largest number of observations within climate units, the current study utilized Schneider et al.'s (2003) approach. The unit with the fewest number of respondents (n = 8) was used to randomly sample eight respondents from each of the remaining 36 units. Thus,

the final dataset for all analyses consisted of a random sample of eight participants across 36 climate units for a total of 288 participants.

Chapter 5: Results

Descriptive Statistics

The means and standard deviations of all study variables and their intercorrelations are presented in Table 1. Organizational climate was significantly correlated with organizational commitment ($r = .72$, $p < .01$) and job performance ($r = .18$, $p < .01$). Organizational commitment also was significantly related to job performance ($r = .16$, $p < .01$). Person-organization fit and climate strength did not have any significant relationships with the key study variables.

Test of a Mediated Moderation Model

The analytical framework offered by Edwards and Lambert (2007) was used to test the hypotheses illustrated in the mediated moderation model of the current study. This framework utilizes ordinary least squares (OLS) regression and path analysis by taking a basic mediational model, adding product terms related to the moderator, and developing reduced form equations to determine the effects of the specific paths in the model. In principle, this framework can be applied to multilevel models because the framework serves as a way of thinking about how to combine mediation and moderation by using algebraic manipulations (J. R. Edwards, personal communication, December 13, 2007).

Edwards and Lambert (2007) state that, in the context of path analysis, the processes of mediated moderation and moderated mediation can be equivalent when the path from *X* (P-O fit) to *M* (organizational commitment) is moderated by *Z* (climate strength) but the path from *M* (organizational commitment) to *Y* (job performance) is not moderated by *Z* (climate strength). This is the case in the current study as the model proposes a direct effect and a

first stage (but not second stage) indirect effect. Edwards and Lambert advocate that the label applied to the model (i.e., mediated moderation or moderated mediation) reflect the researchers' conceptualization of the model. As such, the current study uses the label "mediated moderation model" because of the focus on climate strength as a moderator.

The framework offered by Edwards and Lambert (2007) makes several assumptions regarding the OLS regression and path analyses. First, the variables are interval measures that contain minimal measurement error. The study variables in the present study are interval measures and this first assumption is met.

A second assumption of Edwards and Lambert's (2007) framework is that the residuals are (a) normally distributed with a mean of zero and a constant variance, (b) uncorrelated with other residuals, and (c) uncorrelated with the predictor variables. To examine the normality of the residuals, q-q scatterplots of the residuals were plotted across the study variables in SPSS version 14.0 (Cohen, Cohen, West, & Aiken, 2003). By examining the distribution of residuals within the plot, all residuals from the study variables appeared to be normally distributed. To examine the correlations between the residuals and the study variables, the Durbin-Watson statistic was calculated in SPSS version 14.0 (Tabachnick & Fidell, 2001). Using the 1.80 and 1.81 critical values by Savin & Whit (1977) (also see http://www.stanford.edu/~clint/bench/dwcrit.htm), all residuals were independent with two exceptions. The residuals were correlated between P-O fit and climate strength (Durbin-Watson statistic = .426) and organizational commitment and climate strength (Durbin-Watson statistic = .486). Edwards and Lambert (2007) state that although there are methods to correct violations of correlated residuals, these methods have not been

adequately studied in a mediated moderation framework. Thus, the violation of assuming all residuals are independent will be acknowledged as a concern in the discussion section.

A third assumption for using Edwards and Lambert's (2007) framework is that the relationships between the variables are unidirectional, linear, and additive. Edwards and Lambert state that these assumptions can be addressed by using the reduced form equations and interaction terms in the framework. Specifically, the additivity assumption is met because product terms are included in the regression equations based on parameters rather than the study variables themselves. The linearity assumption is met because the framework plots simple paths among the variables to capture the effects at specific levels of *X*.

The fifth assumption of Edwards and Lambert's (2007) framework is that the causal structure of the relationships is correctly portrayed in the model. Although the proposed model may not be the best-fitting model or represent the "true" relationships among the variables, the assumption that the specified causal structure is correct due to the time lag between the variables. That is, because measures of P-O fit and organizational commitment were taken prior to the assessment of job performance, we can assume that the specified causal structure between P-O fit and performance as well as organizational commitment and performance is accurately specified.

Analyses

As recommended by Edwards & Lambert (2007), all continuous variables were mean centered prior to analyses. Analyses of the current study were conducted according to the structure outlined by Edwards and Lambert's (2007) first stage and direct effect moderation model (see panel F, p. 4). As such, Equations 5 and 6 (see p. 5) were used in the first set of analyses. The following two regression equations were used where the specific path

coefficients are represented in Figure 1, and where X = person-organization fit, Y = job performance, Z = climate strength, and M = organizational commitment. The subscripts of 5 or 6 identify the equation number to which they belong.

The first equation for M (organizational commitment) (Equation 5 in Edwards & Lambert, 2007) added product terms to the basic regression equation that tests for moderation to determine if climate strength moderated the effect of P-O fit on work attitudes.

$$M = a_{05} + a_{X5}X + a_{Z5}Z + a_{XZ5}XZ + e_M$$

The regression equation for Y (job performance) (Equation 6 in Edwards & Lambert, 2007) incorporated work attitudes to determine if organizational commitment is related to job performance and to determine if the interaction between P-O fit and climate strength (XZ) was no longer significant.

$$Y = b_{06} + b_{X6}X + b_{Z6}Z + b_{XZ6}XZ + b_{M6}M + e_Y$$

OLS regression can estimate the equations for the models, but bootstrapping procedures must be used to test the coefficients (Edwards & Lambert, 2007). Because this framework utilizes reduced form equations (i.e., they contain the products of two coefficients), the analytic procedures to test the coefficients must take the sampling distributions of the products of random variables into account. Applying the bootstrapping method produced a sampling distribution of product terms by taking repeated samples to estimate the coefficients.

The constrained nonlinear regression (CNLR) module of SPSS (Version 14.0; 2005, SPSS Inc.) was used to estimate coefficients from 1,000 samples. Each bootstrap sample contained 288 cases (based on the size of the original sample) that were randomly sampled with replacement. The module automatically wrote the coefficients to an output file which

was subsequently saved as an Excel 2003 file. The coefficients from Equation 5 and 6 were merged together in the same spreadsheet.

Formulas were entered into the spreadsheet to construct confidence intervals to test the coefficient estimates, simple paths, and direct effect of the model (see Appendix B). First, formulas were entered into the spreadsheet to compute the mean and other descriptive statistics from the bootstrap samples to test the coefficient estimates. Next, additional formulas were written into the spreadsheet using Equation 19 from Edwards & Lambert (2007).

$$Y = [b_{06} + b_{Z6}Z + (a_{05} + a_{Z5}Z)b_{M6}] + [(b_{X6} + b_{XZ6}Z) + (a_{X5} + a_{XZ5}Z)b_{M6}]X + e_{Y6} + b_{M6}e_{M5}$$

These formulas computed the simple paths and direct effect of the model at two selected levels of the moderator variable: one standard deviation below ($Z = 0.52$) and one standard deviation above ($Z = 0.82$) the mean level of climate strength. The use of one standard deviation above and below the mean is recommended when there are no values with clear practical meaning (Aiken & West, 1991; Edwards & Lambert, 2007). Applying these formulas produced 1,000 estimates of the simple paths and direct effect of the model. Finally, an additional set of formulas produced 1,000 estimates of the differences between the two levels of the moderator variable for the simple paths and direct effect.

After applying these formulas to derive the estimates of the coefficients, simple paths, and direct effect, formulas were written into the spreadsheet to locate the percentiles to construct 95% and 99% confidence intervals around each of the estimates. These percentiles were then corrected with formulas proposed by Stine (1989, p. 277) to obtain bias-corrected confidence intervals (as recommended by Edwards & Lambert, 2007). If the confidence

interval did not contain zero, then the estimate of interest was considered to be statistically significant.

The coefficient estimates from the original OLS regression analysis are presented in Table 2 and as part of the model in Figure 2. Individual coefficients were tested using the standard errors from OLS regression analysis. Products of coefficients were tested using the bias-corrected confidence intervals derived from the bootstrap coefficient estimates produced by the constrained nonlinear regression (CNLR) analysis. The path between organizational commitment and job performance was significant ($b_{M6} = 1.061$, $p < .05$) indicating that if all variables were held constant, the predicted value of job performance would increase by approximately 1 unit for every unit increase in organizational commitment. Paths between P-O fit and organizational commitment and P-O fit and job performance were not significant ($a_{X5} = 0.012$, *n.s.*; $b_{X6} = 0.835$, *n.s.*, respectively).

With regards to the hypothesized moderating effects of climate strength, the coefficient estimates show that climate strength did not moderate the path from P-O fit to organizational commitment ($a_{XZ5} = .609$, *n.s.*), nor did it moderate the path from P-O fit to job performance ($b_{XZ6} = 4.046$, *n.s.*). To illustrate how the paths remained the same regardless of climate strength, analyses of the simple effects were conducted using a high and low measure of climate strength. The estimated coefficients are presented in Table 3 and were tested using the bias-corrected confidence intervals derived from the bootstrap coefficient estimates produced by the CNLR analysis. More specifically, when $Z = 0.52$ (one standard deviation below mean climate strength) the first stage of the indirect effect ($a_{X5} + a_{XZ5}Z$) equals $0.012 + 0.609(0.52) = 0.33$. The direct effect ($b_{X6} + b_{XZ6}Z$) equals $0.835 + 4.046(0.52) = 2.94$. When $Z = 0.82$ (one standard deviation above mean climate strength) the

first stage of the indirect effect ($a_{X5} + a_{XZ5}Z$) equals 0.012 + 0.609(0.82) = 0.51. The direct effect ($b_{X6} + b_{XZ6}Z$) equals 0.835 + 4.046(0.82) = 4.15. None of the simple effects reached significance.

Differences in simple effects were obtained by subtracting low climate strength from high climate strength. There were no significant differences between low and high climate strength for the first stage of the indirect effect (0.51 - 0.33 = 0.18, *n.s.*) nor for the direct effect (4.15 – 2.94 = 1.21, *n.s.*). Figures 3A and 3B illustrate the differences in paths between low and high levels of climate strength for the first stage and direct effect of the model.

Chapter 6: Discussion

The current study proposed and tested a mediated moderation model between person-organization fit, climate strength, organizational commitment, and job performance. It was hypothesized that climate strength would moderate the mediating effect of organizational commitment on the relationship between P-O fit and job performance. Although the initial interest was to examine facets of job performance in the hypotheses, the facets were collapsed together for an overall measure of job performance because there was little agreement on a content sorting task and the facets were highly correlated. No support was found for the moderating effect of climate strength; however, several interesting relationships were noted. Each hypothesis addressing these relationships will be addressed in turn.

Hypotheses 1a and 2a posited a positive relationship between P-O fit and job performance. As presented in Table 1, P-O fit did not have a significant correlation with job performance. Prior meta-analytic studies have reported a moderate relationship between P-O fit and contextual performance but inconsistent relationships with task and overall performance (Arthur et al., 2006; Hoff man & Woehr, 2006; Kristof-Brown et al., 2005). As the measure of job performance collapsed facets of task and contextual performance, the results of the current study are consistent with meta-analytic research finding non-significant or weak relationships between P-O fit and overall measures of performance.

Hypothesis 3a posited a significant positive relationship between P-O fit and organizational commitment. Although prior meta-analytic studies have generally reported moderate relationships with work attitudes, the strongest relationship has been with organizational commitment (estimated population correlation coefficients ranging from .31

(Arthur et al., 2006) to .51 (Kristof-Brown et al., 2005). Surprisingly, the current study failed to find a significant correlation (r = -.01). One potential reason for these results could be the conceptualization and measurement of P-O fit in the current study, to be addressed in detail later in the discussion. However, it is interesting to point out that organizational commitment did have a strong significant relationship with organizational climate (r = .72). As organizational climate scores increased (in terms of perceived quality of the environment), commitment to the organization increased as well. Organizational climate also had a significant relationship with job performance (r = .18). These findings are consistent with research indicating that the perceived quality of the work environment can have a significant association with positive employee outcomes such as organizational commitment and job performance (e.g., Kozlowski & Hults, 1987; Zohar, 2000).

Additional hypotheses posited that the relationships between P-O fit and organizational commitment and job performance would change when climate strength was taken into account. It was expected that strong climates would provide clearly defined roles, procedures, and practices, and consequently individuals who fit in with these expectations would be more likely to be committed to the organization (hypothesis 3b) and successfully perform on the job (hypotheses 1b and 2b). In other words, the highest ratings of organizational commitment and ratings of job performance would be for individuals experiencing high P-O fit in strong organizational climates. Examination of the coefficient estimates in Tables 2 and 3 indicate that climate strength did not have a direct moderating effect on the relationship between P-O fit and organizational commitment nor between P-O fit and performance. Although there are theoretical arguments that climate strength should moderate the relationships because it would heighten the importance of fitting in with the

practices, policies, and procedures of the strong situation, the current study did not support these arguments. In fact, the results are consistent with other research that failed to find a moderating effect of climate strength on person-environment constructs (e.g., Sinar, 2001).

Organizational commitment was hypothesized to partially mediate the relationship between P-O fit and performance in hypotheses 4a and 5a. Examination of Tables 2 and 3 and the paths labeled in Figure 2 indicate that organizational commitment did not mediate the relationship between P-O fit and performance. Organizational commitment was not significantly related to P-O fit; however, the path from organizational commitment to job performance was significant.

Finally, hypotheses 4b and 5b stated that climate strength would moderate the mediating effect of work attitudes on the relationship between P-O fit and performance such that the relationship between P-O fit and job performance would be weakened when organizational commitment was taken into account, with the greatest decrease occurring in strong organizational climates. As indicated in Tables 2 and 3 and the paths labeled in Figure 2, these hypotheses were not supported. Organizational commitment did not mediate the relationship between P-O fit and performance, and climate strength did not have any moderating effect.

Explanation of Results

Overall, the results suggest that P-O fit appears to have little to do with either organizational commitment or job performance. As these findings are counter to what was reported in prior meta-analytic research (e.g., Arthur et al., 2006; Kristof-Brown et al., 2005), this may suggest that the results could in part be due to problems with the measure of fit. These potential issues will be discussed in the limitations section. Aside from the

measurement of P-O fit, there are numerous possible reasons for why the results failed to support the hypothesized model.

First, researchers have argued that it can be very difficult to find moderators of relationships that involve fit constructs. In a recent symposium, aptly named "Fit Happens", Schneider (2007), argued that moderators are very difficult to find in field studies because there is not a great deal of variability. Studies that involve fit constructs require a great deal of variability because the concept of P-E fit is an interaction in and of itself and examining P-E fit with a moderator would require enough variability to measure the relationship between two interactions with an outcome. An additional complication when examining fit constructs is that restriction in range for either the person or the environment variable would make finding a significant effect quite difficult because the algebraic interaction term would be constrained (Schneider, 2001). To this end, it could be that individuals with an extremely poor fit have already left the organization, restricting the range of P-O fit scores. Thus, general methodological difficulties with examining P-O fit as a construct could have impacted the ability to fully test the model.

The lack of significant relationships between P-O fit and organizational outcomes could also be due to individual differences in fit. For example, individuals might have different sensitivities for how they react to misfit. The role of individual differences in sensitivity to misfit has not yet been examined in research. In addition, individuals could place different levels of importance on various fit constructs. Research has suggested that past experiences play a role in determining how much emphasis an individual places on the various types of fit (Kristof-Brown et al., 2002). Despite the potential for individual differences, meta-analytic studies report consistent relationships between P-O fit and

outcomes such as organizational commitment, intention to stay, and contextual performance (e.g., Arthur et al., 2006; Hoffman & Woehr, 2006; Kristof-Brown et al., 2005). Thus, it seems likely that there may be other explanations or other issues with the manner in which P-O fit was conceptualized or measured, to be addressed in a subsequent section.

Another reason why P-O fit appears to be unrelated to organizational outcomes could be because other types of fit are overriding the importance of P-O fit. The concept of "fit" is likely more complicated than merely focusing on P-O fit independently. It could be that high levels of fit with other constructs, such as fit with the job or fit with the supervisor, could substitute for poor P-O fit. Kristof-Brown et al. (2002) used a policy capturing design to explore how individuals combine information on person-job, person-work group, and person-organization fit when evaluating work environments. They found that individuals combine information about fit by using processes that are more complicated than a simple additive integration as two-way and three-way interactions explained additional variance across outcomes.

Recently, Jansen and Kristof-Brown (2006) developed a comprehensive model of multidimensional fit that delineates between the different types of fit. In their model, they argue that there are predictable situations where one type of fit would make a greater contribution to determining overall P-E fit than other types of fit. Each type of fit is thought to have a different degree of salience based on factors related to individual differences (e.g., personality characteristics, previous experiences, and personal values), environmental differences (e.g., culture strength, size, and level of hierarchy), and the temporal stage of the applicant/employee (e.g., job search phase versus post-entry socialization). Given this salience, the types of fit are combined to form multidimensional P-E fit, which would

theoretically impact a variety of individual-level outcomes. The current study sought to examine P-O fit in isolation as P-O fit is seen as the most salient during the selection process and the employee's long-term tenure (Jansen & Kristof-Brown, 2006). However, perhaps a more integrated approach by examining P-O fit in addition to P-J and P-S fit would have provided a more comprehensive picture of how fit constructs interact together to predict outcomes. Future research should take multiple fit constructs into account to examine the possibility that other fit constructs could override the importance of P-O fit regardless of organizational climate strength.

Alternatively, it could be that the situation overrides the influence of P-O fit on organizational outcomes. In strong organizational climates, the strength of the situation may be a better predictor of behaviors and outcomes regardless of how well the employee fits with the climate. Mischel (1977) would argue that individuals will be more likely to act in a manner congruent with the expectations in the environment when the climate is "strong" with clear expectations for behavior. Thus, regardless of how well one agrees with the expectations for behavior in the work environment, the strong situational cues could have a greater influence on behavior than fit. Perhaps there is a minimum threshold of fit required in the work environment, such that employees with a very poor fit either voluntary or involuntarily leave the organization.

Although there are several potential explanations for the results, there are also several issues related to how the study variables were conceptualized and assessed. In particular, the way in which P-O fit was measured could have a substantial impact on construct validity and explain why none of the hypothesized relationships were found in the current study. These methodological concerns and other study limitations are addressed in the next section.

Limitations

There are four key study limitations related to how P-O fit was conceptualized and measured. First, the current study conceptualized P-O fit in terms of values-based congruency because this content dimension appeared to have the largest effect sizes with a variety of outcomes (Arthur et al., 2006; Kristof-Brown et al., 2005; Verquer et al., 2003). Despite this conceptualization, many of the work preference values that were used to evaluate P-O fit may not vary within a particular work climate. For example, three values related to compensation and benefits would apply to the entire organization rather than a specific unit of climate. Thus, there will not be any variability in the strength of these values across climates because the values are implemented in the same way across the organization. Unfortunately, these values were necessary to include as work preferences in the current study, and there are no corrections that can be made to remove these values from the total rankings calculation to assess P-O fit.

The instructions for how to rank the work preference values are a second limitation in P-O fit measurement. The instructions asked participants to rank the items based on their importance in motivating the employee to work hard and remain with the organization. This instruction is a double-barreled item which is a threat to construct validity. The item is asking two different questions because what motivates people to work hard is not always what also motivates them to remain with the company. In fact, it could be the case that some employees work hard so that they can better position themselves to leave the company. There is an additional contradiction by combining the two question stems because the level of effort needed to remain in one's position is often much lower than working hard. Unfortunately, organizational constraints prevented modifying the instructions for the

purposes of the current study. Ideally, the study should have simplified the instruction to rank the items based on their importance to motivate employees to work hard or based on their importance to remain with the organization.

A third limitation in P-O fit measurement involves the use of ranking the work preferences rather than using a Likert-type scale. A rank-ordered approach was used because it was thought to create more variance in work preferences than rating each item on a Likert-scale. That being said, previous research suggests that participants might have had difficulty understanding how to rank order items (Lundquist et al., 2004). Thus, the use of rank-ordering procedures may have been more cognitively complex and other methods would have been more appropriate. Another issue the use of ranking procedures is that it assumes that the differences in importance ratings across values is equal. That is, if one ranks values 1, 2, and 3, the extent to which value 1 is more important that value 2 is equal to the extent to which value 2 is more important than value 3, and so on. Because this assumption is unlikely to be true, ranking procedures fail to capture information about true differences in importance ratings.

A fourth major limitation of P-O fit measurement is that no definitions were provided for the work preferences. Although most of the work preferences appear to be intuitive (e.g., compensation), many of the work preferences could be interpreted in different ways. For example, the work preference item regarding supportive management does not clarify if it is referring to an immediate supervisor, a division leader, or the executive board of the organization. As another example, the work preference item for teamwork could refer to either a preference to work in teams or to the quality of interaction the employee has with their team. As definitions were not provided, there is another threat to construct validity

because the same values may not be measured across employees if they have different reference points.

In addition to the limitations in P-O fit measurement, there were also limitations with some of the other variables included in the model. For example, there was little variance in job performance ratings. Research has shown that when performance evaluations are linked to administrative decisions, performance ratings are generally inflated (e.g., Bernadin & Villanova, 1986; Murphy, Balzer, Kellam, & Armstrong, 1984). As the performance ratings in the current study are used as part of the performance management system, there may have been less variability in ratings than if the ratings were made for another purpose. It would have been beneficial to collect performance ratings as additional research-only variables for the current study. Unfortunately because the third party vendor was used to link performance ratings to employee survey data, the collection of research-only performance ratings was not an option.

In addition to restricted variability, job performance ratings were limited in that ratings were not standardized per rater. Because supervisors could rate more than one job incumbent, there may be some additional common method bias due to the fact that a large amount of variance is attributed to the rater itself. Ideally, one employee should have been randomly sampled per rater to be included in the final dataset. However, because the third party vendor was used to link performance ratings to employee survey data, supervisory names were not identified or included in the dataset. As part of the confidentiality agreement between the company and the third-party vendor, there must be no personally identifiable information in the dataset containing employee survey responses. Supervisory information is contained in the dataset as a name rather than a numeric code or another anonymous

identifier. Prior to sending the dataset with employee opinion responses and performance ratings, all identifiers were removed. Supervisor names are still considered an identifier because it removes the anonymity of employee responses per the company contract.

Another study limitation is common method bias. Recall that the organizational climate measure, P-O fit measure, and organizational commitment measure were all assessed at the same time. Common method bias could occur because ratings on one measure may impact ratings on another measure because they were measured at one time.

A final limitation of the study variables is that the analytical framework used to test the relationships among the variables had one violation of the statistical assumptions. The residuals were correlated between two sets of study variables. This violation was not corrected in the current study because the methods to do so have not been adequately studied in a mediated moderation framework. Thus, the model may not represent the best estimations of the relationships between study variables because of the correlated residuals.

Study Implications

Although organizations have traditionally focused on measuring P-J fit in selection processes, there has been recent interest to incorporate measures of P-O fit based on the changing nature of work (e.g., Borman et al., 1997; Werbel & Gilliland, 1999), and the importance of contextual performance to organizational effectiveness (e.g., Borman & Motowidlo, 1993). Although meta-analytic evidence suggests that a greater fit between the person and the organization is significantly related to a variety of positive work attitudes and contextual performance (e.g., Arthur et al., 2006; Hoffman & Woehr, 2004, 2006; Kristof-Brown et al., 2005; Verquer et al., 2003), the relationship between P-O fit and job performance has been inconsistent. One of the goals of the current study was to examine a

potential situational moderator of the relationship between P-O fit and job performance to evaluate the utility of including P-O fit in the selection process.

Arthur et al. (2006) argued against the use of P-O fit in selection because its relationship with job performance does not adhere to legal standards of employee decision making. There were two specific concerns. First, standards state that selection tests need to be validated against individually-based criteria rather than organizational-based criteria (CRA, 1964, 1991; EEOC, 1978). This would imply that relationships between P-O fit and contextual performance may not be appropriate to deem its use in selection. Although some researchers encourage cross-level thinking to consider how selection procedures are related to both individual-level and organizational-level criteria, (e.g., Schneider, Smith, & Sipe, 2000), current legal standards deem only individual-level criteria as appropriate in selection. That being said, some organizations are starting to include tasks related to contextual performance as part of a job analysis. Although these tasks are usually included to tap into personality constructs, it could also justify the relevance of contextual performance should the tasks be appropriately validated in a job analysis. Second, as previously mentioned, these standards also state that test validation needs to involve job-related criteria such as work performance, production rate, tardiness, absenteeism, or length of service.

If P-O fit would be a valid predictor of performance for strong organizational climates, then it could be considered a useful tool in the selection process. However, the current study did not find any evidence to support the inclusion of P-O fit in selection. There were no significant relationships between P-O fit and any outcomes, implying that P-O fit does not have an impact on relevant individual outcomes. Thus, there is no evidence to contradict Arthur et al.'s statement that P-O fit is not appropriate criteria for selection.

Despite this conclusion, prior meta-analytic research would still indicate that P-O fit is an important construct to measure. A greater fit between the person and the organization is significantly related to job satisfaction, organizational commitment, intent to stay with the organization, and contextual performance (Arthur et al., 2006; Hoffman & Woehr, 2004, 2006; Kristof-Brown et al., 2005; Verquer et al., 2003). Thus, fit appears to have some utility to the organization even if it is only with current job incumbents. This implies that socialization practices either during orientation or through everyday interactions with the work unit are important to developing fit perceptions. As a result of these fit perceptions, beneficial outcomes can occur that save the organization time and resources by reduced hiring, recruiting, and training efforts required when an employee leaves the organization. In addition, the benefits of contextual performance can facilitate overall organizational effectiveness by addressing the extra role components that may not be a part of the formal job requirements.

Future Research

Future research should incorporate modifications to the current study's design in order to better evaluate the relationships between P-O fit, organizational commitment, climate strength, and job performance. Specifically, future research should refine the measurement of P-O fit to include values that can vary across organizational units and better define the work preferences and ranking instructions that are used to assess P-O fit. In addition, performance ratings for non-administrative purposes should be collected in tandem with climate survey ratings in order to have greater variance across employees.

In addition to methodological changes, future research should further explore the nature of P-O fit in context with other fit constructs. The trend in fit research appears to be

moving towards examining multiple fit constructs in the same study rather than independently. Jansen and Kristof-Brown's (2006) multidimensional model of fit provides an excellent framework that integrates the literature and provides a guide for future research. The assessment of multiple fit constructs simultaneously will provide a better understanding of how fit constructs can compensate for one another, can change over time, or have different levels of importance for individuals.

Future research should also continue to focus on potential moderators of the relationship between fit and performance. Meta-analytic research has mostly examined methodological moderators, but a large percentage of the variance remains unaccounted for which suggests the presence of additional moderators (Arthur et al., 2006; Hoffman & Woehr, 2004, 2006; Kristof-Brown et al., 2005; Verquer et al., 2003). Other situational and individual difference variables should be examined as potential moderators. As previously mentioned, there could be individual differences in sensitivity to fit/misfit or by types of jobs. In addition, other variables, such as tenure with the company or age could have an impact on P-O fit. For example, it could be that P-O fit plays a stronger role during the first stages of employment with the company; employees who have been with the company for an extended period of time may have other factors that have a greater impact on performance, such as the presence of established relationships or promotional opportunities. Similarly, employee age could also play a role on the impact of P-O fit on job performance. Generational differences could exist in terms of employee expectations and desires from the company. For example, employees from Generation X (born between 1961 and 1980) tend to appreciate flexibility and seek work/life balance, whereas Baby Boomers (born between 1945 and 1960) tend to be more competitive and concerned with fair treatment (Noe, 2005). Thus, generations could

have different desires from the company if certain generations are less interested in how well they "fit" with the company as long as there is work/life balance or a clear career path.

In addition to individual difference variables, other situational variables may also moderate the impact of P-O fit on job performance. Industry type may impact the relationship to the extent that the individual has control over his or her own performance. For example, Chatman (1989) found that P-O fit did not impact performance in a manufacturing plant when the task was highly interdependent on other individuals. Thus, the type of work and industry may moderate how P-O fit can impact job performance. Future research should incorporate how other individual differences and situational variables can moderate this relationship.

Fit constructs have been one of the most heavily researched areas in industrial-organizational psychology. Over the years, models have become more complex to test and illustrate how the complex interaction of fit between the person and the environment can vary across situations. Although the current study did not find evidence to support P-O fit having significant relationships with work-related outcomes, a wealth of research does exist to imply that fit does matter and should continue to be examined in applied settings.

References

Adkins, C. L., Russell, C. J., & Werbel, J. D. (1994). Judgments of fit in the selection process: The role of work value congruence. *Personnel Psychology, 47,* 605-623.

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50,* 179-211.

Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin, 84,* 888-918.

Allen, T. D., & Rush, M. C. (1998). The effects of organizational citizenship behavior on performance judgments: A field study and a laboratory experiment. *Journal of Applied Psychology, 83,* 247-260.

Arthur, W., Jr., Bell, S. T., Villado, A. J., & Doverspike, D. (2006). The use of person-organization fit in employment decision making: An assessment of its criterion-related validity. *Journal of Applied Psychology, 91*(4), 786-801.

Autry, C. W. (2001). *The person-organization fit of warehouse operations employees.* Unpublished doctoral dissertation, University of Oklahoma.

Barber, A. E., & Wesson, M. J. (1998). Using verbal protocol analysis to assess the construct validity of an empirical measure: An examination of the Organizational Culture Profile (OCP). *Advances in Qualitative Organization Research, 1,* 67-104.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal*

of Personality and Social Psychology, 51(6), 1173-1182.

Barrett, R. S. (1995). Employee selection with the performance priority survey. *Personnel Psychology, 48*, 653-662.

Bateman, T. S., & Organ, D. W. (1983). Job satisfaction and the good soldier: The relationship between affect and employee "citizenship." *Academy of Management Journal, 26*, 587-595.

Beaty, J. C., Cleveland, J. N., & Murphy, K. R. (2001). The relation between personality and contextual performance in "strong" versus "weak" situations. *Human Performance, 14*(2), 125-148.

Bernadin, H. J. (1989). Innovative approaches to personnel selection and performance appraisal. *Journal of Management Systems, 1*, 25-36.

Bernadin, H. J., & Villanova, P. (1986). Performance appraisal. In E. Locke (Ed.), *Generalizing from laboratory to field settings*. Lexington, MA: Lexington Books.

Borman, W. C., & Motowidlo, S. J. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt & W. C. Borman (Eds.), *Personnel selection in organizations* (pp. 71-98). San Francisco: Jossey-Bass.

Borman, W. C., Hanson, M. A., & Hedge, J. W. (1997). Personnel selection. *Annual Review of Psychology, 48*, 299-337.

Borman, W. C., & Motowidlo, S. J. (1997). Task performance and contextual performance: The meaning for personnel selection research. *Human Performance, 10*(2), 99-109.

Borman, W. C., Hedge, J. W., Ferstl, K. L., Kaufman, J. D., Farmer, W. L., & Bearden, R. M. (2003). Current directions and issues in personnel selection and classification. *Research in Personnel and Human Resources Management, 22*, 287-355.

Bowen, D. E., Ledford, G. E., & Nathan, B. R. (1991). Hiring for the organization, not the job. *Academy of Management Executive, 5*, 35-51.

Bowen, D. E., & Ostroff, C. (2004). Understanding HRM-firm performance linkages: The role of the "strength" of the HRM system. *Academy of Management Review, 29*(2), 203-221.

Bretz, R. D., Rynes, S. L., & Gerhart, B. (1993). Recruiter perceptions of applicant fit: Implications for individual career preparation and job search behavior. *Journal of Vocational Behavior, 43*, 310-327.

Bretz, R. D., & Judge, T. A. (1994). Person-organization fit and the theory of work adjustment: Implications for satisfaction, tenure, and career success. *Journal of Vocational Behavior, 44*, 32-54.

Brief, A. P., & Motowidlo, S. J. (1986). Prosocial organizational behaviors. *Academy of Management Review, 11*, 710-725.

Cable, D. M., & Judge, T. A. (1996). Person-organization fit, job choice decisions, and organizational entry. *Organizational Behavior and Human Decision Processes, 67*(3), 294-311.

Cable, D. M., & Judge, T. A. (1997). Interviewers' perceptions of person-organization fit and organizational selection decisions. *Journal of Applied Psychology, 82*, 546-561.

Cable, D. M., & DeRue, D. S. (2002). The convergent and discriminant validity of subjective fit perceptions. *Journal of Applied Psychology, 87*(5), 875-884.

Cable, D. M., & Edwards, J. R. (2004). Complementary and supplementary fit: A theoretical and empirical integration. *Journal of Applied Psychology, 89*(5), 822-834.

Cantwell, A. R., Mullen, T. R., & Smith, L. A. (2007). *Subcultures tell the story:*

Perceptions of innovation-capacity culture. Paper presented at the 22nd Annual Meeting of the Society for Industrial and Organizational Psychology, New York, NY.

Carr, J. Z., Schmidt, A. M., Ford, K., & DeShon, R. P. (2003). Climate perceptions matter: A meta-analytic path analysis relating molar climate, cognitive and affective states, and individual level work outcomes. *Journal of Applied Psychology, 88*(4), 605-619.

Chan, D. (1998). Functional relations among constructs in the same content domain at different levels of analysis: A typology of composition models. *Journal of Applied Psychology, 83*(2), 234-246.

Chapman, D. S., Uggerslev, K. L., Carroll, S. A., Piasentin, K. A., & Jones, D. A. (2005). Applicant attraction to organizations and job choice: A meta-analytic review of the correlates of recruiting outcomes. *Journal of Applied Psychology, 90*(5), 928-944.

Chatman, J. A. (1989). Improving interactional organizational research: A model of person-organization fit. *Academy of Management Review, 14*(3), 333-349.

Chatman, J. A. (1991). Matching people and organizations: Selection and socialization in public accounting firms. *Administrative Science Quarterly, 36*, 459-484.

Chuang, A. (2001). *The perceived importance of person-job fit and person-organization fit between and within interview stages*. Unpublished doctoral dissertation, University of Minnesota.

Chuang, A., & Sackett, P. R. (2005). The perceived importance of person-job fit and person-organization fit between and within interview stages. *Social Behavior and Personality, 33*(3), 209-226.

Civil Rights Act of 1964 (Pub. L. 88-352), U.S. C. § 2000d et seq.; 28 C. F. R. § 42.101 et seq., 34 C. F. R. § 100.1 et seq., and 45 C. F. R. § 80.1 et seq.

Civil Rights Act of 1991, Pub. L. No. 102-166, 105 Stat. 1071 (Nov. 21, 1991).

Cohen, J. (1978). Partialed products are interactions: Partialed powers are curve components. *Psychological Bulletin, 85*, 858-866.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.

Colquitt, J. A., Noe, R. A., & Jackson, C. L. (2002). Justice in teams: Antecedents and consequences of procedural justice climate. *Personnel Psychology, 55*, 83-109.

Cronbach, L. J., & Gleser, G. C. (1953). Assessing similarity between profiles. *Psychological Bulletin, 50*, 456-473.

Cronbach, L. J., & Gleser, G. C. (1957). *Psychological tests and personnel decisions*. Urbana, IL: University of Illinois Press.

Dawis, R. V., & Lofquist, L. H. (1984). *A psychological theory of work adjustment: An individual-differences model and its applications*. Minneapolis, MN: University of Minnesota Press.

Edwards, J. R. (1991). Person-job fit: A conceptual integration, literature review, and methodological critique. In *International Review of Industrial and Organizational Psychology* (Vol. 6, pp. 283-357). London: Wiley.

Edwards, J. R. (1993). Problems with the use of profile similarity indices in the study of congruence in organizational research. *Personnel Psychology, 46*, 641-665.

Edwards, J. R. (1994). The study of congruence in organizational behavior research: Critique and a proposed alternative. *Organizational Behavior and Human Decision Processes, 58*, 51-100.

Edwards, J. R. (1996). An examination of competing versions of the person-environment fit approach to stress. *Academy of Management Journal, 39*(2), 292-339.

Edwards, J. R. (2002). Alternate to difference scores: Polynomial regression analysis and response surface methodology. In F. Drasgow & N. Schmitt (Eds.), *Measuring and analyzing behavior in organizations* (pp. 350-400). San Francisco, CA: Jossey-Bass.

Edwards, J. R., & Lambert, L. S. (2007). Methods for integrating moderation and mediation: A general analytical framework using moderated path analysis. *Psychological Methods, 12*(1), 1-22.

Endler, N. S., & Magnussen, D. (1976). *Interactional psychology and personality*. Washington, DC: Hemisphere.

Equal Employment Opportunity Commission. (1978). Adoption by four agencies of uniform guidelines on employee selection procedures. *Federal Register, 43*, 38290-38315.

Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.

Fleiss, J. L. (1971). Measuring nominal scale agreement among many raters. *Psychological Bulletin, 76(5),* 378-382.

French, J. R. P. J., Caplan, R. D., & Harrison, R. V. (1982). *The mechanisms of job stress and strain*. New York: Wiley.

Gatewood, R. D., & Feild, H. S. (2001). *Human resource selection* (5th ed.). Mason, OH: South-Western.

Glick, W. H. (1985). Conceptualizing and measuring organizational and psychological climate: Pitfalls in multi-level research. *Academy of Management Review, 10*, 601-616.

Glick, W. H. (1988). Response: Organizations are not central tendencies: Shadowboxing in the dark, Round 2. *Academy of Management Review, 13,* 133-137.

González-Romá, V., Peiró, J. M., & Tordera, N. (2002). An examination of the antecedents and moderator influences of climate strength. *Journal of Applied Psychology, 87*(3), 465-473.

Goodman, S. A., & Svyantek, D. J. (1999). Person-organization fit and contextual performance: Do shared values matter. *Journal of Vocational Behavior, 55*, 254-275.

Hackman, J. R. (1992). Group influences on individuals in organizations. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (2nd ed., Vol. 3, pp. 199-267). Palo Alto, CA: Consulting Psychologists Press.

Hicks, L. E. (1970). Some properties of ipsative, normative, and forced-choice normative measures. *Psychological Bulletin, 74*, 167-184.

Hoffman, B. J., & Woehr, D. J. (2004, April). *Person-environment fit: A meta-analytic review of outcomes and moderators.* Paper presented at the 19th Annual Meeting of the Society for Industrial and Organizational Psychology, Chicago, IL.

Hoffman, B. J., & Woehr, D. J. (2006). A quantitative review of the relationship between person-organization fit and behavioral outcomes. *Journal of Vocational Behavior, 68*, 389-399.

Holland, J. L. (1985). *Making vocational choices: A theory of careers* (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Holland, J. L. (1997). *Making vocational choices: A theory of vocational personalities and work environments* (3rd ed.). Odessa, FL: Psychological Assessment Resources.

Holmbeck, G. N. (1997). Toward terminological, conceptual, and statistical clarity in the

study of mediators and moderators: Examples from the child-clinical and pediatric psychology literatures. *Journal of Consulting and Clinical Psychology, 65*, 599-610.

Hough, L. M., & Schneider, R.J. (1996). Personality traits, taxonomies and applications inorganizations. In K. R. Murphy (Ed.), *Individual differences and behavior in organizations* (pp. 31-88). San Francisco, CA: Jossey-Bass.

House, R., Rousseau, D. M., & Thomas-Hunt, M. (1995). The meso paradigm: A framework for the integration of micro and macro organizational behavior. *Research in Organizational Behavior, 17*, 71-114.

Hunter, J., & Hunter, R. (1984). Validity and utility of alternative predictors of job performance. *Psychological Bulletin, 96*, 72-98.

Hutcheson, J. M. (1999). *An examination of three levels of person-environment fit.* Unpublished doctoral dissertation, University of Houston.

Jackofsky, E. F., & Slocum, J. W., Jr. (1988). A longitudianal study of climates. *Journal of Organizational Behavior, 8*, 319-334.

James, L. R. (1982). Aggregation bias in estimates of perceptual agreement. *Journal of Applied Psychology, 67*, 219-229.

James, L. R., Demaree, R. G., & Wolf, G. (1984). Estimating within-group interrater reliability with and without response bias. *Journal of Applied Psychology, 69*, 85-98.

James, L. R., Demaree, R. G., & Wolf, G. (1993). r_{wg}: An assessment of within-group interrater agreement. *Journal of Applied Psychology*, *78*(2), 306-309.

James, L. R., & Jones, A. P. (1974). Organizational climate: A review of theory and research. *Psychological Bulletin, 81*, 1096-1112.

James, L. R., Joyce, W. F., & Slocum, J. W., Jr. (1988). Comment: Organizations do not

cognize. *Academy of Management Review, 13,* 129-132.

Jansen, K. J., & Kristof-Brown, A. (2006). Toward a multidimensional theory of person-environment fit. *Journal of Managerial Issues, 18*(2), 193-212.

Jermier, J. M., Slocum, J. W., Fry, L. W., & Gaines, J. (1991). Organizational subcultures in a soft bureaucracy: Resistance behind the myth and facade of an official culture. *Organizational Studies, 2,* 170-194.

Johnson, C. E., Wood, R., & Blinkhorn, S. F. (1988). Spuriouser and suprioser: The use of ipsative personality tests. *Journal of Occupational Psychology, 61,* 153-162.

Joyce, W. F., & Slocum, J. W., Jr. (1984). Collective climate: Agreement as a basis for defining aggregate climates in organization. *Academy of Management Journal, 27*(4), 721-742.

Judge, T. A., & Ferris, G. R. (1992). The elusive criterion of fit in human resources staffing decisions. *Human Resource Planning, 15*, 47-67.

Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction-job performance relationship: A qualitative and quantitative review. *Psychological Bulletin, 127*, 376-407.

Kalliath, T. J., Bluedorn, A. C., & Strube, M. J. (1999). A test of value congruence effects. *Journal of Organizational Behavior, 20*(7), 1175-1198.

Klein, K. J., Conn, A. B., Smith, D. B., & Sorra, J. S. (2001). Is everyone in agreement? An exploration of within-group agreement in employee perceptions of the work environment. *Journal of Applied Psychology, 86*(1), 3-16.

Kozlowski, S. W. J., & Hattrup, K. (1992). A disagreement about within-group agreement: Disentangling issues of consistency versus consensus. *Journal of Applied Psychology,*

77, 161-167.

Kozlowski, S. W. J., & Hults, B. M. (1987). An exploration of climates for technical updating and performance. *Personnel Psychology, 40*, 539-563.

Kristof, A. L. (1996). Person-organization fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology, 49*, 1-49.

Kristof-Brown, A. L. (1998). The goldilocks pursuit in organizational selection: How recruiters form and use judgments of person-organization fit. *Dissertation Abstracts International, 58*(11-A).

Kristof-Brown, A. L. (2000). Perceived applicant fit: Distinguishing between recruiters' perceptions of person-job and person-organization fit. *Personnel Psychology, 53*, 643-671.

Kristof-Brown, A. L., Jansen, K. J., & Colbert, A. E. (2002). A policy-capturing study of the simultaneous effects of fit with jobs, groups, and organizations. *Journal of Applied Psychology, 87*(5), 985-993.

Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology*, *58*, 281-342.

La Police, C. C., & Sharpe, J. P. (2004, April). *P-O fit and work attitudes: Examining multiple value dimensions.* Paper presented at the 19th Annual Meeting of the Society for Industrial and Organizational Psychology, Chicago, IL.

Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, *33*, 159-174.

Lauver, K. J., & Kristof-Brown, A. (2001). Distinguishing between employees' perceptions

of person-job and person-organization fit. *Journal of Vocational Behavior, 59,* 454-470.

Lawrence, A. D., Doverspike, D., & O'Connell, M. S. (2004, April). *An examination of the role job fit plays in selection.* Paper presented at the 19th Annual Meeting of the Society for Industrial and Organizational Psychology, Chicago, IL.

Lewin, K. (1935). *A dynamic theory of personality*. New York, NY: McGraw-Hill.

Lindell, M. K., & Brandt, C. J. (1997). Measuring interrater agreement for ratings of a single target. *Applied Psychological Measurement, 21*(3), 271-278.

Lindell, M. K., & Brandt, C. J. (2000). Climate quality and climate consensus as mediators of the relationship between organizational antecedents and outcomes. *Journal of Applied Psychology, 85*(3), 331-348.

Lundquist, C., Kudisch, J. D., Fleming, K., & Fortunato, V. (2004, April). *Person-environment fit: Assessing validity, adverse impact, and test-taker reactions.* Paper presented at the 19th Annual Meeting of the Society for Industrial and Organizational Psychology, Chicago, IL.

Malamut, A. B. (2002). *Socialization and perceptual agreement: Testing a bottom-up emergence model of organizational climate formation.* Unpublished doctoral dissertation, George Washington University.

Marsh, L. C., & Cormier, D. R. (2002). *Spline regression models*. Thousand Oaks, CA: Sage.

Maslow, A. H. (1987). *Motivation and personality* (3rd ed.). New York, NY: Harper.

McCulloch, M. C., & Turban, D. B. (2002, April). *Comparing person-organization fit and cognitive ability in a selection battery.* Paper presented at the Society for Industrial and Organizational Psychology, Toronto, ON.

McCulloch, M. C., & Turban, D. B. (2007). Using person-organization fit to select employees for high-turnover jobs. *International Journal of Selection and Assessment, 15*(1), 63-71.

Meglino, B. M., Ravlin, E. C., & Adkins, C. L. (1989). A work values approach to corporate culture: A field test of the value congruence process and its relationship to individual outcomes. *Journal of Applied Psychology, 74*(3), 424-432.

Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review, 1*, 61-89.

Mischel, W. (1977). The interaction of person and situation. In D. Magnusson & N. S. Endler (Eds.), *Personality at the crossroads: Current issues in interactional psychology* (pp. 333-352). Hillsdale, NJ: LEA.

Morris, S. G. (1995). *Turnover among professionals: The role of person-culture fit and mentoring.* Unpublished doctoral dissertation, University of Denver.

Motowidlo, S. J., & Van Scotter. J. R. (1994). Evidence that task performance should be distinguished from contextual performance. *Journal of Applied Psychology, 79*, 475-480.

Muchinsky, P. M., & Monahan, C. J. (1987). What is person-environment congruence? Supplementary versus complementary models of fit. *Journal of Vocational Behavior, 31*(3), 268-277.

Murphy, K. R., Balzer, W. K., Kellam, K. L., & Armstrong, J. (1984). Effect of purpose of rating on accuracy in observing teacher behavior and evaluating teaching performance. *Journal of Educational Psychology, 76*, 45-54.

Noe, R. A. (2005). *Employee training and development*. New York, NY: McGraw-Hill.

Nunnally, J. C. (1978). *Psychometric theory*. New York, NY: McGraw-Hill.

O'Reilly, C. A., Chatman, J., & Caldwell, D. F. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit. *Academy of Management Journal, 34*, 487-516.

Ostroff, C. (1993). The effects of climate and personnel influences on individual behavior and attitudes in organizations. *Organizational Behavior and Human Decision Processes, 56*, 56-90.

Ostroff, C., Kinicki, A. J., & Tamkins, M. M. (2003). Organizational culture and climate. In W. C. Borman, D. R. Ilgen, & R. J. Klimoski (Eds.), *Handbook of psychology: Industrial and organizational psychology* (Vol. 12, pp. 565-593). Hoboken, NJ: John Wiley & Sons.

Parkington, J. J., & Schneider, B. (1979). Some correlates of experienced job stress: A boundary role study. *Academy of Management Journal, 22*(2), 270-281.

Patterson, M., Payne, R., & West, M. (1996). Collective climates: A test of their sociopsychological significance. *Academy of Management Journal, 39*(6), 1675-1691.

Payne, R. (1990). Madness in our method: A comment on Jackofsky and Slocum's paper "A longitudinal study of climates". *Journal of Organizational Behavior, 11*, 77-80.

Pervin, L. A. (1968). Performance and satisfaction as a function of individual-environment fit. *Psychological Bulletin, 69*(1), 56-68.

Pervin, L. A. (1989). Persons, situations, interactions: The history of a controversy and a discussion of theoretical models. *Academy of Management Review, 14*(3), 350-360.

Piasentin, K. A., & Chapman, D. S. (2006). Subjective person-organization fit: Bridging the

gap between conceptualization and measurement. *Journal of Vocational Behavior, 69,* 202-221.

Poling, T. L., Mericac, J. P., & Woehr, D. J. (2007, April). *Contagious justice: Components, antecedents, and cross-level effects of procedural justice climate.* Paper presented at the 22nd Annual Meeting of the Society for Industrial and Organizational Psychology, New York, NY.

Posner, B. Z. (1992). Person-organization values congruence: No support for individual differences as a moderating influence. *Human Relations, 45*(4), 351-462.

Putka, D. J. (2005, April). Using spline regression models to examine person-environment fit. In C. Sager (Chair), *Assessing person-environment fit for selection*. Symposium conducted at the 20th Annual Meeting of the Society for Industrial and Organizational Psychology, Los Angeles, CA.

Ravlin, E. C., & Meglino, B. M. (1987). Effects of work values on perception and decision making: A study of alternative work value measures. *Journal of Applied Psychology, 72,* 666-673.

Reichers, A. E., & Schneider, B. (1990). Climate and culture: An evolution of constructs. In B. Schneider (Ed.), *Organizational climate and culture* (pp. 5-39). San Francisco, CA: Jossey-Bass.

Ryan, A., & Kristof-Brown, A. (2003). Focusing on personality in person-organization fit research: Unaddressed issues. In M. Barrick, & A. Ryan (Eds.), *Personality and work: Reconsidering the role of personality in organizations*. San Francisco, CA: Jossey-Bass.

Rynes, S., & Gerhart, B. (1990). Interviewer assessments of applicant "fit": An exploratory

investigation. *Personnel Psychology, 43*, 13-36.

Saks, A. M., & Ashforth, B. E. (1997). A longitudinal investigation of the relationships between job information sources, applicant perceptions of fit, and work outcomes. *Personnel Psychology, 50*, 395-426.

Salancik, G. R., & Pfeffer, J. (1977). An examination of need-satisfaction models of job attitudes. *Administrative Science Quarterly, 22*(3), 427-456.

Savin, N. E., & White, K. J. (1977). The Durbin-Watson test for serial correlation with extreme sample sizes or many regressors. *Econometrica, 45*, 1989-1996.

Scarpello, V., & Campbell, J. P. (1983). Job satisfaction and the fit between individual needs and organizational rewards. *Journal of Occupational Psychology, 56*, 315-328.

Schein, E. H. (1992). *Organizational culture and leadership* (2nd ed.). San Francisco, CA: Jossey-Bass.

Schmidt, F. L., & Hunter, J. E. (1989). Interrater reliability coefficients cannot be computer when only one stimulus is rated. *Journal of Applied Psychology, 74*, 368-370.

Schmidt, F. L., & Hunter, J. E. (1998). The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. *Psychological Bulletin, 124*, 262-274.

Schmidt, F. L. (2002). The role of general cognitive ability and job performance: Why there cannot be a debate. *Human Performance, 15*, 187-211.

Schneider, B. (1987). The people make the place. *Personnel Psychology, 40*(3), 437-453.

Schneider, B. (1990). The climate for service: An application of the climate construct. In B. Schneider (Ed.), *Organizational climate and culture* (pp. 383-412). San Francisco, CA: Jossey-Bass.

Schneider, B. (2007, April). *Fit happens: Exploring person-environment fit during the employment life cycle.* Paper presented at the Society for Industrial and Organizational Psychology, New York, NY.

Schneider, B., & Bowen, D. (1985). Employee and customer perceptions of service in banks: Replication and extension. *Journal of Applied Psychology, 70,* 423-433.

Schneider, B., & Reichers, A. E. (1983). On the etiology of climates. *Personnel Psychology, 36,* 19-39.

Schneider, B., Smith, D. B., & Sipe, W. P. (2000). Personnel selection psychology: Multilevel considerations. In K. J. Klein, & S. W. J. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations* (pp. 91-120). San Francisco, CA: Jossey-Bass.

Schneider, B., Salvaggio, A. N., & Subirats, M. (2002). Climate strength: A new direction for climate research. *Journal of Applied Psychology, 87*(2), 220-229.

Schneider, B., Hanges, P. J., Smith, D. B., & Salvaggio, A. N. (2003). Which comes first: Employee attitudes or organizational financial and market performance? *Journal of Applied Psychology, 88*(5), 836-851.

Shantz, C. A. (2003). *Person-organization fit: Individual differences, socialization, and outcomes.* Unpublished doctoral dissertation, Wayne State University.

Sinar, E. F. (2001). *Value centrality as a moderator of the effects of person-environment congruence on job satisfaction and performance.* Unpublished doctoral dissertation, Bowling Green State University.

Smith, A. C., Organ, D. W., & Near, J. P. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology, 68,* 653-663.

Society for Industrial and Organizational Psychology, Inc. (2003). *Principles for the validation and use of personnel selection procedures*. (4th ed.). Bowling Green, OH: Author.

Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes, and consequences*. Thousand Oaks, CA: Sage.

SPSS, Inc. (2005). SPSS (Version 14.0) [Computer software]. Chicago: Author.

Stanford University (December 15, 2008). Critical values for the Durbin-Watson test. Retrieved from: http://www.stanford.edu/~clint/bench/dwcrit.htm.

Stine, R. (1989). An introduction to bootstrap methods. *Sociological Methods & Research, 18,* 243-291.

Svyantek, D. J., & Bott, J. P. (2006). Organizational climate, personality interactions, and organizational behavior. In J. C. Thomas, & D. L. Segal (Eds.), *Comprehensive handbook of personality and psychopathology* (Vol. 1, pp. 412-431). Hoboken, NJ: John Wiley & Sons.

Tubre, T. C., & Collins, J. M. (2000). Jackson and Schuler (1985) revisited: A meta-analysis of the relationships between role ambiguity, role conflict, and job performance. *Journal of Management, 26*(1), 155-169.

Van Vianen, A. E. M., Bechtoldt, M. N., De Pater, I. E., & Evers, A. V. A. M. (2007, April). *Climate strength and quality: Do they affect individual affective commitment?* Paper presented at the Society for Industrial and Organizational Psychology, New York, NY.

Vancouver, J. B., & Schmitt, N. W. (1991). An exploratory examination of person-organization fit: Organizational goal congruence. *Personnel Psychology, 44*, 333-

352.

Verquer, M. L., Beehr, T. A., & Wagner, S. H. (2003). A meta-analysis of relations between person-organization fit and work attitudes. *Journal of Vocational Behavior, 63*, 473-489.

Villanova, P., Bernardin, H. J., Johnson, D. L., & Dahmus, S. A. (1994). The validity of a measure of job compatibility in the prediction of job performance and turnover of motion picture theater personnel. *Personnel Psychology, 47*, 73-90.

Werbel, J., & Gilliland, S. W. (1999). Person-environment fit in the selection process. In G. R. Ferris (Ed.), *Research in personnel and human resources management* (Vol. 17, pp. 209-243).

Xie, Y. Z., Han, X., Zhang, X., & Shi, K. (2006). Person-job fit, person-organization fit, and job satisfaction: The moderating role of leader-member exchange. *Chinese Journal of Clinical Psychology*, *14*(5), 495-498.

Zander, D. (1994). *Making groups effective* (2nd ed.). San Francisco, CA: Jossey-Bass.

Zohar, D. (2000). A group-level model of safety climate: Testing the effect of group climate on microaccidents in manufacturing jobs. *Journal of Applied Psychology, 85*(4), 587-596.

Zohar, D., & Luria, G. (2004). Climate as a social-cognitive construction of supervisory safety practices: Scripts as proxy of behavior patterns. *Journal of Applied Psychology, 89*(2), 322-333.

Zohar, D., & Luria, G. (2005). A multilevel model of safety climate: Cross-level relationships between organization and group-level climates. *Journal of Applied Psychology, 90*(4), 616-628.

Table 1

Descriptive Statistics, Correlations, and Reliability of Study Variables

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Gender	1.45	0.50	--												
2. Age	42.95	8.40	.04	--											
3. Tenure	10.88	7.72	.01	.53**	--										
4. Organizational Climate	4.92	0.66	.03	.18**	.25**	(.95)									
5. Climate Strength	0.67	0.15	.00	.15*	.17**	.02	--								
6. Person-Organization Fit	0.57	0.28	-.03	-.12*	-.07	.02	.05	--							
7. Organizational Commitment	5.33	0.73	-.04	.11	.17**	.72**	.00	-.01	(.87)						
8. Overall Job Performance	29.72	5.04	-.01	-.00	.04	.18**	-.11	.02	.16**	--					
Personal Importance Rankings															
9. Immediate Supervisor	4.11	2.33	.10	-.11	-.21**	-.10	-.12*	-.27**	-.09	-.02	--				
10. Work/Life Balance	4.14	2.73	.04	.19**	.03	.03	-.05	-.47**	.04	.08	-.05	--			
11. Medical Benefits	6.75	2.46	-.01	-.10	-.12	-.09	-.10	.12	-.05	.10	-.14*	-.14*	--		
12. Pay	3.22	2.00	-.13*	.05	.13*	.06	.07	-.36**	.11	.00	-.21**	-.21**	.17**	--	
13. Retirement Benefits	6.86	2.39	.00	-.17**	-.13*	-.03	.05	.24**	.03	.15**	-.25**	-.25**	.46**	.18**	--
14. Work	3.17	2.31	.05	-.04	.05	.06	.07	-.40**	.04	-.08	-.04	-.04	-.44**	-.05	-.43**
15. Ideas/Innovation	6.33	2.46	-.03	.03	.11	-.09	.02	.12*	-.00	-.09	-.14*	-.27**	-.29**	-.29**	-.29**
16. Senior Leadership	7.16	2.72	-.12*	-.11	-.06	.01	-.07	.47**	-.06	-.12*	.04	-.42**	-.30**	-.28**	-.28**
17. Teamwork	6.45	2.11	.13*	-.08	.06	-.01	.03	.23**	-.04	-.03	-.02	-.17**	-.29**	-.36**	-.19**
18. Training	6.78	2.65	-.04	.28**	.15*	.16**	.12*	.25**	.05	.02	-.17**	-.18**	-.26**	-.08	-.18**
Climate Importance Rankings															
19. Immediate Supervisor	4.06	0.63	.06	-.11	-.13*	-.19**	-.24**	-.03	-.10	-.09	.26**	.02	.07	-.09	-.05
20. Work/Life Balance	3.96	0.86	.09	.10	-.03	.08	-.25**	-.09	.04	.14*	-.00	.31**	.08	.02	-.03
21. Medical Benefits	6.61	0.65	-.03	-.20**	-.18**	-.06	-.14*	.10	-.06	.10	-.01	.04	.31**	.04	.21**
22. Pay	3.34	0.65	.02	-.05	.05	.07	.19**	-.08	.05	.05	-.08	.01	-.06	.24**	-.01
23. Retirement Benefits	6.80	0.72	-.00	-.25**	-.16**	-.12*	.08	.08	-.12*	.04	-.01	-.09	.10	.02	.24**
24. Work	3.41	0.54	.06	.08	.19**	.03	.16**	-.11	.07	-.08	-.07	-.14*	-.24**	.08	-.13*
25. Ideas/Innovation	6.41	0.55	.01	.15**	.11	.04	-.01	.03	.01	.02	-.10	-.07	-.12*	-.04	-.04
66. Senior Leadership	7.16	0.70	-.18**	-.02	-.05	.06	-.13*	.08	.02	-.11	-.03	-.04	-.02	-.05	.02
27. Teamwork	6.42	0.58	-.04	.06	.16**	-.00	.30**	.06	.06	-.14*	.02	-.11	-.09	-.13*	-.05
28. Training	6.82	0.82	.01	.23**	.11	.07	.12*	-.04	.05	.01	.00	-.05	-.11	-.08	-.18**

Note: Reliabilities are shown in parentheses on the diagonal. *p<.05 **p<.01

Table 1 (Continued)

Descriptive Statistics, Correlations, and Reliability of Study Variables

	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1. Gender															
2. Age															
3. Tenure															
4. Organizational Climate															
5. Climate Strength															
6. Person-Organization Fit															
7. Organizational Commitment															
8. Overall Job Performance															
Personal Importance Rankings															
9. Immediate Supervisor															
10. Work/Life Balance															
11. Medical Benefits															
12. Pay															
13. Retirement Benefits															
14. Work	--														
15. Ideas/Innovation	.22**	--													
16. Senior Leadership	-.04	.13*	--												
17. Teamwork	.07	.05	.03	--											
18. Training	-.06	-.14*	.00	-.03	--										
Climate Importance Rankings															
19. Immediate Supervisor	-.14*	-.15*	-.01	.05	.04	--									
20. Work/Life Balance	-.14*	-.05	-.09	-.08	-.06	-.01	--								
21. Medical Benefits	-.21**	-.16**	.02	-.04	-.19**	-.06	.08	--							
22. Pay	.04	-.05	.01	-.04	-.01	-.38**	.17**	.11	--						
23. Retirement Benefits	-.01	-.05	.05	.00	-.22**	-.15**	-.30**	.52**	.15*	--					
24. Work	.31**	.15**	-.08	.09	.07	-.25**	-.33**	-.53**	.23**	-.15**	--				
25. Ideas/Innovation	.15*	.30**	-.01	.02	-.08	-.42**	-.23**	-.32**	-.33**	-.19**	.37**	--			
66. Senior Leadership	-.07	-.01	.27**	-.09	-.03	-.07	-.18**	-.08	-.24**	-.06	-.29**	.08	--		
27. Teamwork	.10	.07	-.09	.21**	.09	.20**	-.44**	-.30**	-.46**	-.20**	.26**	.25**	-.28**	--	
28. Training	.08	.04	-.06	-.05	.36**	.08	-.14*	-.55**	-.29**	-.60**	.08	.09	.03	.24**	--

Note: Reliabilities are shown in parentheses on the diagonal. *p<.05 **p<.01

Table 2

Coefficient Estimates

Moderator Variable	a_{05}	a_{X5}	a_{Z5}	a_{XZ5}	R^2	b_{06}	b_{X6}	b_{Z6}	b_{XZ6}	b_{M6}	R^2
Climate Strength	-.003	.012	-.047	.609	.001	-.014	.835	-4.020*	4.046	1.061*	.041*

Note. $N = 288$. Coefficient estimates that begin with *a* are from Equation 5 from Edwards & Lambert (2007) where work attitudes was the dependent variable. Coefficient estimates that begin with *b* are from Equation 6 from Edwards & Lambert (2007) where the dependent variable was job performance. Individual coefficients were tested using the standard errors from the original regression analysis. Products of coefficients were tested using the bias-corrected confidence intervals derived from the bootstrap coefficient estimates produced by the CNLR analysis.

* $p < .05$.

Table 3

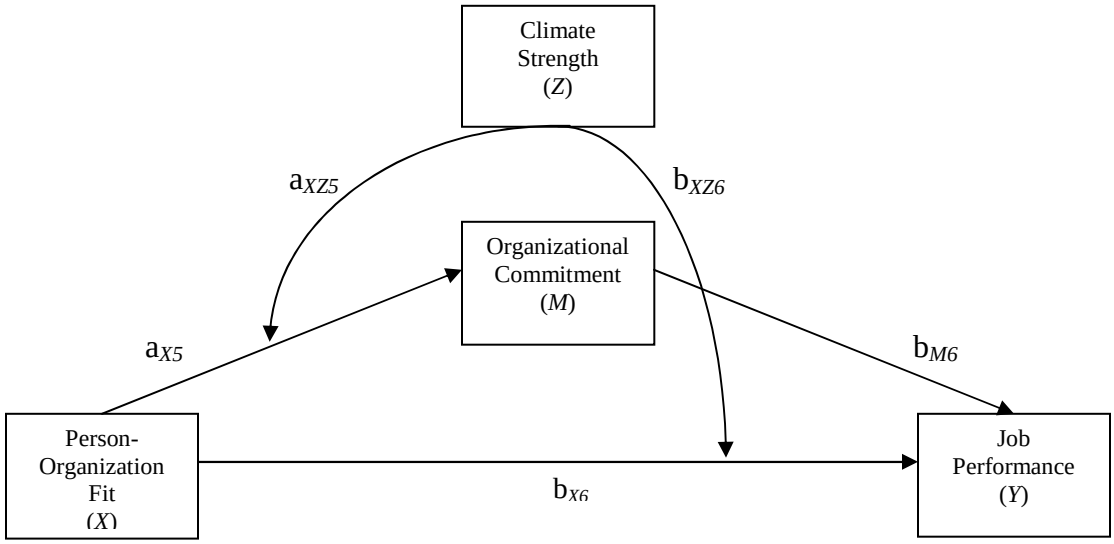
Analysis of Simple Effects

Moderator Variable	First Stage	Direct Effect
Climate Strength		
Low	0.33	2.94
High	0.51	4.15
Differences	0.18	1.21

Note. $N = 288$. Table entries are simple effects computed from Equation 19 from Edwards & Lambert (2007) using the estimated coefficients from Table 1. $Z = 0.52$ and 0.82 for low and high climate strength, respectively, which reflects one standard deviation below and above the mean. Differences in simple effects were derived from subtracting low climate strength from high climate strength. Tests of these effects were based on the bias-corrected confidence intervals derived from the bootstrap coefficient estimates produced by the CNLR analysis. No simple effects reached significance at the .05 level.

Figure 1

Mediated Moderation Model of Person-Organization Fit and Job Performance

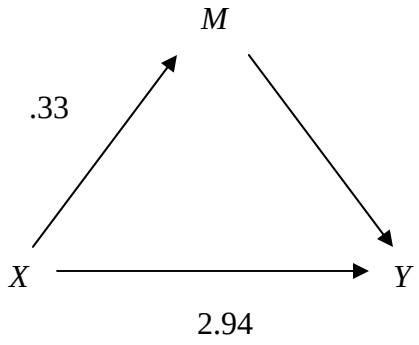


Note: Coefficients *a* and *b* identify whether the coefficients are from equations where the dependent variable is organizational commitment (*M*) or job performance (*Y*), respectively. The subscripts of the coefficients identify the variable to which they belong.

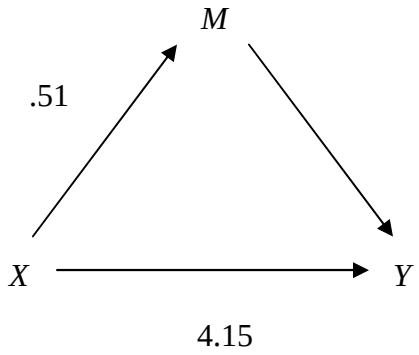
Figure 2

Path Models of the Simple Effects for Low and High Climate Strength

A – Simple Effects for Low Climate Strength



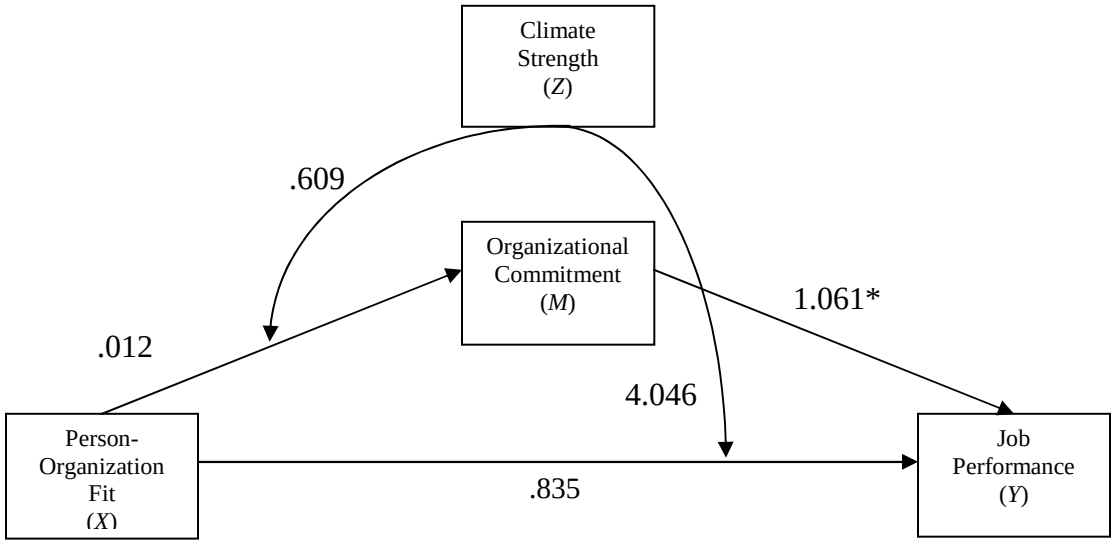
B – Simple Effects for Low Climate Strength



Note. Path coefficients from organizational commitment (*M*) to job performance (*Y*) are not presented as climate strength was not hypothesized to moderate this relationship.

Figure 3

Path Coefficient Estimates of the Mediated Moderation Model



Note. * $p < .05$.

Appendix A

Results from Extreme Groups Comparisons of Datasets Varying by Department Size

Study Variable	Entire Dataset (Department Size Ranging from 4 to 522)	Reduced Dataset (Department Size Ranging from 8 to 100)
Value 1	$F(2,85) = .407$, $p = .667$	$F(2,59) = .196$, $p = .822$
Value 2	$F(2,85) = .216$, $p = .806$	$F(2,59) = .333$, $p = .718$
Value 3	$F(2,85) = 1.108$, $p = .366$	$F(2,59) = 1.604$, $p = .210$
Value 4	$F(2,85) = .069$, $p = .993$	$F(2,59) = .740$, $p = .482$
Value 5	$F(2,85) = 3.665$, $p < .05$	$F(2,59) = .592$, $p = .557$
Value 6	$F(2,85) = 4.915$, $p < .05$	$F(2,59) = 1.337$, $p = .270$
Value 7	$F(2,85) = .555$, $p = .576$	$F(2,59) = 1.214$, $p = .304$
Value 8	$F(2,85) = .484$, $p = .618$	$F(2,59) = .460$, $p = .663$
Value 9	$F(2,85) = 3.484$, $p < .05$	$F(2,59) = .234$, $p = .792$
Value 10	$F(2,85) = 1.436$, $p = .244$	$F(2,59) = 2.284$, $p = .111$
Organizational Commitment	$F(2,85) = 1.422$, $p = .247$	$F(2,59) = .529$, $p = .592$
Organizational Climate	$F(2,85) = 3.923$, $p < .05$	$F(2,59) = .001$, $p = .999$
Climate Strength	$F(2,85) = 3.666$, $p < .05$	$F(2,59) = 2.564$, $p = .086$

Appendix B

Formulas to Construct Confidence Intervals

	Path Coefficient (e.g., a05)
	Estimated Path
BOOTSTRAP RESULTS	
AVG	=AVERAGE(B39:B1039)
MEDIAN	=MEDIAN(B39:B1039)
MIN	=MIN(B39:B1039)
MAX	=MAX(B39:B1039)
STD	=STDEV(B39:B1039)
SKEW	=SKEW(B39:B1039)
KURT	=KURT(B39:B1039)
T	=(Estimated Path/STD)
NORMAL APPROXIMATION	
-1.645*STD	=Estimated Path-1.654*STD
+1.645*STD	=Estimated Path+1.654*STD
-1.960*STD	=Estimated Path-1.960*STD
+1.960*STD	=Estimated Path+1.960*STD
-2.576*STD	=Estimated Path-2.576*STD
+2.576*STD	=Estimated Path+2.576*STD
PERCENTILE METHOD	
5%	=PERCENTILE(B39:B1039,0.05)
95%	=PERCENTILE(B39:B1039,0.95)
2.5%	=PERCENTILE(B39:B1039,0.025)
97.5%	=PERCENTILE(B39:B1039,0.975)
0.5%	=PERCENTILE(B39:B1039,0.005)
99.5%	=PERCENTILE(B39:B1039,0.995)
BIAS CORRECTED PERCENTILE METHOD	
p(Q*<Q)	=PERCENTRANK(B:39:B1039,Estimated Path)
Zo	=NORMSINV(p(Q*<Q))
BC 5%	=PERCENTILE(B$39:B$1039,NORMSDIST (2*=NORMSINV(p(Q*<Q))-1.645))
BC 95%	=PERCENTILE(B$39:B$1039,NORMSDIST (2*=NORMSINV(p(Q*<Q))+1.645))
BC 2.5%	=PERCENTILE(B$39:B$1039,NORMSDIST (2*=NORMSINV(p(Q*<Q))-1.96))
BC 97.5%	=PERCENTILE(B$39:B$1039,NORMSDIST (2*=NORMSINV(p(Q*<Q))+1.96))
BC 0.5%	=PERCENTILE(B$39:B$1039,NORMSDIST (2*=NORMSINV(p(Q*<Q))-2.576))
BC 99.5%	=PERCENTILE(B$39:B$1039,NORMSDIST (2*=NORMSINV(p(Q*<Q))+2.576))

Note: B39:B1039 represents the 1,000 estimated bootstrap samples for the path coefficient.