# AN INTEGRATIVE INVESTIGATION OF PERSON-VOCATION FIT, PERSON-ORGANIZATION FIT, AND PERSON-JOB FIT PERCEPTIONS

Michael Kennedy, B.A.

Dissertation Prepared for the Degree of DOCTOR OF PHILOSOPHY

# UNIVERSITY OF NORTH TEXAS

May 2005

# APPROVED:

Joseph Huff, Major Professor
Michael Beyerlein, Committee Member and
Interim Chair of Industrial and
Organizational Psychology Program
Douglas Johnson, Committee Member
Joel Quintela, Committee Member
Linda Marshall, Interim Chair, Department of
Psychology
Sandra L. Terrell, Dean of the Robert B.
Toulouse School of Graduate Studies

Kennedy, Michael, <u>An integrative investigation of person-vocation fit, person-organization fit, and person-job fit perceptions.</u> Doctor of Philosophy (Industrial and Organizational Psychology), May 2005, 264 pp., 26 tables, 8 illustrations, references, 188 titles.

Person-environment (PE) fit has been considered one of the most pervasive concepts in psychology. This study presents an integrative investigation of three levels of PE fit: person-vocation (PV) fit, person-organization (PO) fit, and person-job (PJ) fit, using multiple conceptualizations (e.g., value congruence, needs-supplies fit) of each fit level. While a trend in the PE fit literature has been the inclusion of only one fit level with a single conceptualization, researchers call for the addition of multiple conceptualizations of multiple fit levels in a single study. Traditionally, PO fit has been conceptualized as value congruence, whereas PV fit has remained untouched in the literature investigating the direct measurement of fit perceptions. Therefore, new fit perceptions scales assessing PO fit using a needs-supplies fit conceptualization and PV fit using a variety of conceptualizations were introduced. To address the limitation of employing direct measures, common method variance was modeled with a positive affect factor. The study accomplished two objectives. First, a previously supported three-factor model of fit perceptions consisting of PO value congruence (PO-VC), PJ needs-supplies (PJ-NS), and PJ demands-abilities (PJ-DA) fit was strongly replicated. Second, this model was expanded by examining additional conceptualizations (needs-supplies, demands-abilities fit, value, personality, and interest congruence) of fit levels (PV, PO,

and PJ fit). Results suggested that professionals make distinctions based on both the fit level and fit conceptualization and these fit perceptions uniquely influence their attitudes and behaviors. A six-factor model (PO-VC, PJ-NS, PJ-DA, PO needs-supplies fit [PO-NS], PV demands-abilities fit [PV-DA], and general PV fit) best fit the data. Providing ample evidence of construct validity, PO fit perceptions (PO-VC and PO-NS fit) were related to the organization-focused outcome of organizational identification, whereas the profession-focused outcome of occupational commitment was exclusively predicted by PV fit perceptions (PV-DA and general PV fit). As expected, both needs-supplies fit perceptions (PO-NS and PJ-NS fit) predicted intentions to quit and job satisfaction. Recommendations for future research are suggested.

# TABLE OF CONTENTS

	Page
LIST (	OF TABLESiv
LIST (	OF FIGURES vi
Chapte	er
1.	INTRODUCTION1
	Levels of Fit Conceptualizations of Fit Measurement of Fit Detailed Review of Fit Levels Current Study and Research Questions
2.	METHOD59
	Participants Procedure Study Variables
3.	RESULTS68
	Data Analytic Strategy Data Screening Fit Models Descriptive Statistics Common Method Variance Analyses Full Structural Model Analyses Multiple Regression Analyses for Other-Rated Behavior
4.	DISCUSSION
	Model Replication Model Expansion Convergent and Discriminant Validity of Fit Scales Post Hoc Model Expansion Analyses

Limitations Future Research Practical Implications Conclusions

APPENDIX	
REFERENCES	24

# LIST OF TABLES

		Page
Table 1	Conceptualizations of PE Fit Levels	12
Table 2	Measurement of PE Fit Levels	19
Table 3	Fit Factors and Hypothesized Relationships to Outcomes	57
Table 4	Model Replication: Fit Statistics for Alternative Models	72
Table 5	Model Expansion: Fit Statistics for Alternative Models	74
Table 6	Expanded Hypothesized Relationships to Reflect Six-Factor Model	75
Table 7	Descriptive Statistics, Intercorrelations, and Internal Reliability	
	Estimates	78
Table 8	Completely Standardized Parameter Estimates for Confounded	
	Model 1b	85
Table 9	Interfactor Correlations Between Substantive Variables	89
Table 10	Fit Statistics for Confounded and Congeneric Models	92
Table 11	Indicator Loadings for the Hypothesized Measurement Model	100
Table 12a	Interfactor Correlations for the Hypothesized Measurement Model	103
Table 12b	Structural Parameters of Fit and Positive Affect Predictors and	
	Outcomes	110
Table 13	Subjective Fit Perceptions Prediction of Other-Rated OCBs and Job	
	Performance	112

Table 14	Post Hoc Model Expansion: Alternative Models	.132
Table 15	Post Hoc Model Expansion: Fit Statistics for Alternative Models	.133
Table 16a	Post Hoc Model Expansion: PV Value Congruence and Reduced	
	General PV Fit Scales	.135
Table 16b	Structural Parameters of Alternative Model 7b	.139
Table 17	Sources of Initial 43 Fit Items.	.166
Table 18	Factor Loadings for the Remaining 30 Fit Items	.168
Table 19	Factor Loadings for the Remaining 30 Fit Items (Forced Four-Factor	
	Model)	.170
Table 20	Factor Loadings for the Remaining 30 Fit Items (Forced Three-Factor	
	Model)	.171
Table 21	Negatively and Comparatively Worded PV Fit Items	.172
Table 22	Item Revisions for Negatively Worded PV Fit Items Loading on Facto	r
	Two	.173
Table 23	Descriptive Statistics, Intercorrelations, and Internal Reliability	
	Estimates	.174
Table 24	Convergent and Discriminant Validity of Subjective Fit Perceptions	.175

# TABLE OF FIGURES

		Page
Figure 1	Conceptual Distinctions Between Supplementary and Complement	ntary Fit
	Perspectives	6
Figure 2	Full Model of Fit Factors and Hypothesized Relationships to	
	Outcomes	58
Figure 3	Confounded Confirmatory Factor Model	83
Figure 4	Congeneric Complex Structural Model	94
Figure 5	Proposed Structural Model with Hypothesized Relationships	98
Figure 6	Structural Model of Fit and Positive Affect Predictors and	
	Outcomes	109
Figure 7	Structural Parameters of Alternative Model 7b	138
Figure 8	Scree Plot for the Remaining 30 Fit Items	169

#### CHAPTER 1

# INTRODUCTION

Person-environment (PE) fit, or the congruence/fit between a person and his or her work environment, has been extensively researched during the past decade (e.g., Bowen, Ledford, & Nathan, 1991; Cable & DeRue, 2002; Chatman, 1991; Edwards, 1991; Judge & Cable, 1997; Kristof, 1996; Kristof-Brown, 2000; Kristof-Brown, Jansen, & Colbert, 2002; Lauver & Kristof-Brown, 2001; Saks & Ashforth, 1997, 2002). Schneider (2001), one of the leaders in the field of fit research, has identified the concept as one of the most pervasive concepts in psychology (Walsh, Craik, & Price, 2000), relating to personality theory (Endler & Magnusson, 1976; Magnusson & Endler, 1977; Pervin & Lewis, 1978) vocational psychology (Holland, 1997), personnel selection (Schmitt & Borman, 1993), and social psychology (Aronoff & Wilson, 1985). Researchers within the areas of industrial/organizational (I/O) psychology, organizational behavior (OB), and vocational psychology have extended the investigation of PE fit by examining fit between individuals and various aspects of their environment (Feij, Van Der Velde, Taris, & Taris, 1999; Kristof-Brown et al., 2002).

PE fit is a discipline that lies at the crossroads of several theories such as interaction theory (Lewin, 1951), need-press theory (Murray, 1938), the Theory of Work Adjustment (TWA; Dawis & Lofquist, 1984), the attraction-selection-attrition (ASA; Schneider, 1987) model, and Holland's (1973, 1997) theory of vocational behavior.

Lewin's (1951) interaction theory states that an individual's behavior (B) is determined by the interaction between the individual (P) and the environment (E) represented by the equation: B = f(P, E) (Kristof-Brown et al., 2002; Schneider, 2001). For example, theories of PE fit contain a central tenet stating that the individual's positive experience is due to that individual working in an environment well-suited to his or her personal characteristics (Kristof-Brown et al., 2002). In need-press theory (Murray, 1938), environmental "presses" aid or block individuals from meeting their psychological and physical needs. Therefore, fit is determined by the degree to which an individual's needs are fulfilled by the environment (Kristof, 1996). Based on the TWA, "individuals and environments impose requirements of one another that 'successful' work relations are the result of adjustments intended to create a state of correspondence between individual and environmental characteristics" (Bretz & Judge, 1994, p. 32). Furthermore, according to the third proposition of the TWA, increased job satisfaction results from the correspondence (or "fit") between individual and environmental characteristics. Schneider's (1987) ASA model "rests on the fundamental assumption that people in any organization are unique in that they are the ones attracted to, chosen by, and who choose to remain with an organization" (Schneider, Smith, Taylor, & Fleenor, 1998, p. 463). Thus, fit is determined by the congruence between the personality of the individual and that of the organization. Finally, Holland's (1973, 1997) theory of vocational behavior posits that an individual's vocational satisfaction, stability, and achievement are determined by the congruence between the individual's interests and his or her vocational environment.

Practitioners and researchers are most interested in PE fit for the relationship between fit and positive employee attitudes and behavior (Lauver & Kristof-Brown, 2001). For example, research has shown that PE fit is positively related to individuals' career involvement, job satisfaction, organization commitment, organizational effectiveness, health and adaptation, and career success. Conversely, a negative relationship has been found between fit and turnover intentions and stress (Blau, 1987; Bretz & Judge, 1994; Cable & Judge, 1996; Chatman, 1991; Edwards & Cooper, 1990; Harris & Mossholder, 1996; Hollenbeck, 1989; Kristof, 1996; Lauver & Kristof-Brown, 2001; Meglino, Ravlin, & Adkins, 1989; Moos, 1987; O'Reilly, Chatman, & Caldwell, 1991; Ostroff, 1993; Stumpf & Hartman, 1984; Vancouver & Schmitt, 1991). Additionally, research indicates that fit perceptions positively affect job applicants' preferences for training and advancement opportunities (Bretz, Ash, & Dreher, 1989; Judge & Bretz, 1992; Rynes, Bretz, & Gerhart, 1991) as well as recruiters' and interviewers' perceptions of applicants' qualifications (Bretz, Rynes, & Gerhart, 1993; Cable & Judge, 1997; Rynes & Gerhart, 1990).

# Levels of Fit

Up to this point, fit has been presented as a unitary construct; however, multiple levels of PE fit have been defined: person-vocation (PV) fit, person-organization (PO) fit, person-group (PG) fit, and person-job (PJ) fit (Kristof, 1996). PV fit is the broadest level of environmental fit, generally defined by the compatibility of individuals' with their vocations/professions. The majority of researchers broadly define PO fit as the compatibility between individuals and organizations. PG fit is defined as the

compatibility between an individual and his or her work group, where the group can range from a specific work group to departments, regions, or divisions of an organization. Edwards (1991) defines PJ fit as the fit between an individual's abilities and the demands of the job and/or the fit between an individual's desires and the attributes of a job. Although conceptually distinct, overlap between these four levels of PE fit exists; however, conceptual and empirical evidence provides support for the differentiation between the four levels of fit (Kristof, 1996; Lauver & Kristof-Brown, 2001; Saks & Ashforth, 1997, 2002; Werbel & Gilliland, 1999). The focus of the current study involves an integrative empirical study of three fit levels: PV, PO, and PJ fit. Each of these constructs will be discussed in detail later in the study. PG fit is excluded from the current study to allow for a more comprehensive discussion and analysis of PV, PO, and PJ fit.

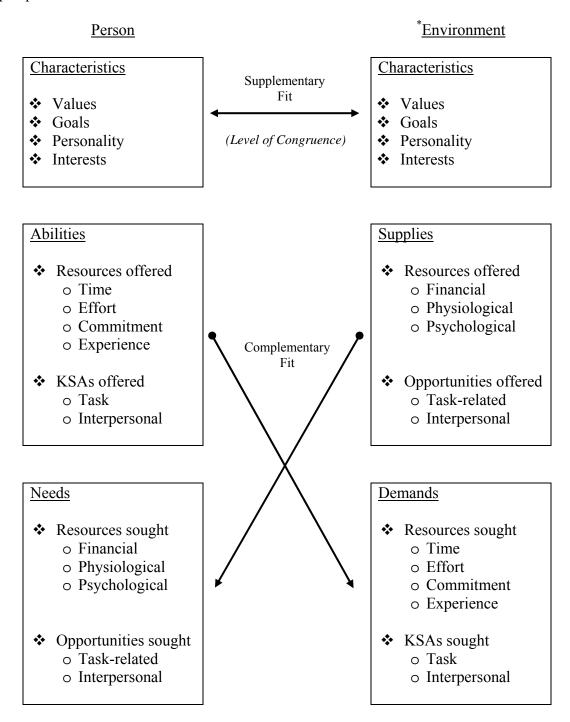
# Conceptualizations of Fit

Levels (PV, PO, and PJ) of fit have been conceptualized in multiple ways over the years (Edwards; 1991; Kristof, 1996; Muchinsky & Monahan, 1987; Schneider, 2001; Werbel & Gilliland, 1999). The concept of fit has many manifestations and takes many forms depending on the level of fit (e.g., PO or PJ fit) and the underlying conceptualization (Schneider, 2001). Although there are a number of ways to conceptualize levels of fit, Muchinsky and Monahan (1987) provided a common distinction that organizes these conceptualizations into two perspectives: *supplementary* fit and *complementary* fit.

Supplementary fit occurs when an individual "supplements, embellishes, or possesses characteristics which are similar to other individuals" in an environment (Muchinsky & Monahan, 1987, p. 269). This fit perspective is represented as the similarities between individual characteristics (e.g., values, goals, personality, and interests) and organizational and vocational characteristics (e.g., values, goals, personality, and interests). For example, supplementary fit indicates that an individual perceives that he or she "fits in" with the environment because of similar characteristics (e.g., values, personality) with others in environment. The following is an example of an item used to assess supplementary fit, "My personal values match my organization's values and culture."

Conversely, complementary fit occurs when an individual's characteristics "make whole" the environment or add to it what is missing (Muchinsky & Monahan, 1987, p. 271). For example, complementary fit indicates that an individual adds strength to a deficient environment with the addition of his or her resources (e.g., time, effort, and specific KSAs). The following is an example of an item used to assess complementary fit, "The match is very good between the demands of my job and my personal skills." As presented by Kristof (1996), Figure 1 illustrates the distinction between supplementary and complementary fit perspectives in PE fit research.

Figure 1. Conceptual distinctions between supplementary and complementary fit perspectives.



<sup>\*</sup>Represents general organizational (PO fit), occupational (PV fit), and job (PJ fit) attributes.

The following six common conceptualizations of fit are based on the distinction between supplementary and complementary fit perspectives (Kristof, 1996). This conceptual distinction between fit perspectives helps provide an organizational framework around these conceptualizations. While fit has been conceptualized in numerous ways (Edwards, 1991; Holland, 1997; Kristof, 1996), six conceptualizations (value congruence, needs-supplies, demands-abilities, goal congruence, personality congruence, and interest congruence) of fit are discussed frequently in the literature relating to PV, PO, and PJ fit. Therefore, these conceptualizations are relevant to the current study and require a brief introduction. These conceptualizations are discussed in further detail later within discussions each of the three fit levels under review (PV, PO, and PJ fit).

# Value Congruence

Value congruence is a conceptualization based on the supplementary fit perspective (Kristof, 1996). Applied to PO fit, this conceptualization is most commonly defined as the congruence between an employee's values and the values of the employee's organization. Value congruence is a highly regarded conceptualization of fit because values are long-lasting characteristics of the individual and organization (Chatman, 1991) that influence employee behavior and organizational performance (Schein, 1992). Fit researchers typically define a value as something that individuals believe is important in an organization, such as being team-oriented or innovative (Cable & Edwards, 2004; Chatman, 1989). There is no indication that a value congruence conceptualization has been applied to the measurement of either PJ or PV fit.

# Goal Congruence

Resembling value congruence, goal congruence is another conceptualization of fit based on the supplementary fit perspective (Kristof, 1996). Like value congruence, goal congruence has been used most commonly to conceptualize PO fit, defined as the similarity of individuals' goals with those of organizational leaders and employees' peers (Vancouver, Millsap, & Peters, 1994; Vancouver & Schmitt, 1991; Witt & Nye, 1992; Witt & Silver, 1995). Schneider's (1987) ASA model suggests "people are differentially attracted to organizations on the basis of an organization's character and the character's manifestations in organizational structure, strategy, and culture" (Schneider et al., 1998, p. 463). Thus, the organization's goals are considered part of the strategy of the organization with which the individual will seek congruence. Once again, there is no indication that a goal congruence conceptualization has been applied to the measurement of either PJ or PV fit.

# Personality Congruence

Personality congruence is yet another conceptualization of fit based upon the supplementary fit perspective (Kristof, 1996). Applied strictly to the conceptualization of PO fit, this conceptualization defines fit as the congruence between the characteristics of an individual and the organizational climate (Bowen et al., 1991; Burke & Deszca, 1982; Ivancevich & Matteson, 1984; Tom, 1971; Westerman & Cyr, 2004). Therefore, congruence lies in the similarity of the characteristics of the individual and others (e.g., organizational members or members of the same profession) in the environment. Similar to goal congruence, this conceptualization draws heavily from Schneider's (1987) ASA

model positing individuals are attracted to organizations with similar personalities. There is no indication that a personality congruence conceptualization has been applied to the measurement of PV fit.

# Interest Congruence

Interest congruence is the fourth conceptualization of fit based on the supplementary fit perspective (Muchinsky & Monahan, 1987). This conceptualization is used most frequently to conceptualize PV fit, defining fit as the congruence between the interests of the individual and the interests of others in the occupation (Campbell & Borgen, 1999; Holland 1997). Interest congruence was supported by Holland's (1973) theory of vocational choice, advocating that individuals would be most satisfied working in occupations populated by others who share the same interests. There is no indication that an interest congruence conceptualization has been applied to the measurement of either PJ or PO fit.

# *Needs-Supplies Fit*

Needs-supplies fit is a conceptualization based on the complementary fit perspective. This conceptualization defines fit as the satisfaction of individuals' needs, desires, or preferences by a particular entity (e.g., job, vocation, and organization). Environmental supplies (e.g., financial, physical, and psychological resources) are considered in relation to individuals' needs (e.g., pay, benefits, and training) to determine the degree of fit (Edwards, 1991). This conceptualization stems from need-press theory (Murray, 1938) and the TWA (Dawis & Lofquist, 1984). Needs-supplies fit has been applied to PV fit (e.g., Rounds, Dawis, Lofquist, 1987), PO fit (e.g., Bretz, et al., 1989;

Cable & Judge, 1994; Turban & Keon, 1993; Westerman & Cyr, 2004), and PJ fit (Cable & DeRue, 2002).

# Demands-Abilities Fit

Demands-abilities fit is second common conceptualization based on the complementary fit perspective. This conceptualization defines fit as the individuals' possession of abilities required by a particular entity (e.g., job, vocation, and organization). Job, organizational, and vocational demands (e.g., time, efforts, commitment, knowledge, skills, and abilities) are considered in relation to individuals' characteristics that fulfill these demands (Kristof, 1996). Employees' abilities are typically defined as employee aptitudes (Dawis & Lofquist, 1984) or surrogate measures of aptitudes, such as amount of experience (French, Caplan, & Harrison, 1982) and education level (French et al., 1982). Job demands simply refer to the requirements for adequate job performance (Edwards, 1991), typically determined by job analysis. Primarily employed within personnel selection<sup>1</sup>, the demands-abilities conceptualization of PJ fit has been the most common use of this conceptualization, resulting in the strong prediction of performance (Waldman & Spangler, 1989) and retention and promotion (Dawis & Lofquist, 1984). Demands-abilities fit has also been applied to PV fit (Converse, Oswald, Gillespie, Field, & Bizot, 2004; Reeve & Heggestad, 2004) and PO fit (Bretz & Judge, 1994).

\_

<sup>&</sup>lt;sup>1</sup> Please note that a wealth of research exists for the study of PJ fit in the personnel selection literature. However, the current study only examines the traditional fit literature. Therefore, while PJ fit in personnel selection is recognized and discussed in the current study, PJ fit as investigated in the fit literature is the main focus of the study.

# Summary of Conceptualizations

The conceptualizations presented above represent common conceptualizations applied to PV, PO, and PJ fit (Edwards; 1991; Kristof, 1996; Muchinsky & Monahan, 1987; Schneider, 2001; Werbel & Gilliland, 1999). As fit has been conceptualized in many ways, researchers (Muchinsky & Monahan, 1987) have grouped these conceptualizations into fit perspectives (supplementary and complementary fit) to improve the clarity of discussions surrounding the use of fit conceptualizations. Because the concept of fit has many manifestations and takes many forms depending on the fit level and the underlying conceptualization (Schneider, 2001), these conceptualizations are discussed in further detail later within discussions each of the three fit levels under review (PV, PO, and PJ fit). Table 1 summarizes the various conceptualizations of fit and their respective fit perspectives, along with the applications of these conceptualizations to fit levels based on previous research. The table highlights conceptual approaches to measuring fit levels based on previous research. As presented, three conceptualizations (needs-supplies, demands-abilities fit, and personality congruence) have been applied to PJ fit. (The value congruence conceptualization of PJ fit is theoretically not plausible as the values of the job would most likely be represented by the values of the organization.) While only three conceptualizations (needs-supplies, demands-abilities fit, and interest congruence) have been applied to PV fit, a wider representation of five conceptualizations (needs-supplies, demands-abilities fit, value, goal, and personality congruence) has been applied to PO fit.

Table 1

Conceptualizations of PE Fit Levels

		PE Fit Levels		
Conceptualization	Fit Perspective	PJ Fit	PO Fit	PV Fit
Needs- Supplies Fit	Complementary	V	V	$\sqrt{}$
Demands- Abilities Fit	Complementary	$\sqrt{}$	$\sqrt{}$	V
Value Congruence	Supplementary	n/a	$\sqrt{}$	?
Goal Congruence	Supplementary	?	$\sqrt{}$	?
Personality Congruence	Supplementary	$\sqrt{}$	V	?
Interest Congruence	Supplementary	?	?	$\sqrt{}$

 $<sup>\</sup>sqrt{\phantom{}}$  = Indicates research conducted using conceptualization.

Note. Person-group fit level not included. Please note that the conceptualization of a fit level does not necessarily imply that a scale dedicated solely to a single conceptualization was used in previous research. Several fit studies (e.g., see Bretz and Judge [1994] and Saks and Ashforth [2002]) have included multiple fit items based on multiple conceptualizations in single scale to measure a fit level.

#### Measurement of Fit

Researchers have attempted to assess fit levels (PV, PO, and PJ) in numerous ways; unfortunately, very little empirical research has been conducted to support one measurement approach over another (Cooper-Thomas, Van Vianen, & Anderson, 2004; Kristof, 1996; Werbel & Gilliland, 1999). The selection of parallel or corresponding

n/a = Indicates conceptualization is not theoretically plausible.

<sup>? =</sup> Indicates conceptualization is theoretically plausible but no research has been conducted. *Note*. Person-group fit level not included. Please note that the conceptualization of a fit level does not

individual and environmental characteristics is a fundamental principle of fit measurement (Edwards, 1991; Kristof, 1996; Schneider, 2001). For example, researchers select characteristics (e.g., values, needs, personality, and abilities) of the individual and characteristics (e.g., values, supplies, and demands) of the environment (e.g., vocation, organization, group, or job) for inclusion into the fit analysis. Upon selecting individual and organizational characteristics for analysis, researchers must select a measurement approach to assess the degree of fit between these identified characteristics under review. There are two measurement approaches typically used to assess fit: *direct* and *indirect* measurement (Kristof, 1996).

# Direct Measurement

Direct measures include the comparison of the individual and the environment within a single item (Edwards, 1991). The direct measurement of fit is most appropriate for research questions investigating subjective fit or the "judgment" of whether or not a person perceives he or she fits well in his or her environment (e.g., vocation, organization, group, or job). "Good" fit is said to exist only when the individual *perceives* that he or she complements or supplements environmental characteristics (Kristof, 1996). For example, a direct measurement of PJ fit may include the item, "My skills meet the demands of my job." Researchers have also used direct measurement to assess interviewers' perceptions of job applicants' degree of PO fit (Cable & Judge, 1997) as well as to assess existing employees' perceptions of their own PO and PJ fit (Cable & DeRue, 2002). In accordance with the propositions of the ASA framework (Schneider,

1987), job applicants have been shown to select places of employment based on their perceived fit with the job and the organization (Saks & Ashforth, 1997).

# Indirect Measurement

Indirect measures statistically assess the actual fit between independently rated individual and environmental characteristics. There are two levels of indirect measurement: individual-level and cross-levels. Indirect, individual-level measurement requires two independent assessments. The first assessment is that of an individual's perceptions of his or her personal characteristics (e.g., needs, values, and abilities), while the second assessment is the same individual's "organizational" perceptions of corresponding environmental characteristics (e.g., organizational supplies, organizational values, and job demands) (Kristof, 1996). A sample indirect, individual-level question may ask, "How much pay would you like to receive"? A sample corresponding organizational supplies question may ask, "How much pay do you receive"? Using a variety of statistical methods (e.g., interactions, difference scores, and polynomial regression), the comparison of these two assessments provides an indication of fit (Edwards, 1991). In the sample items presented above, the measurement approach would be described as an indirect, individual-level measurement of PO fit using a needssupplies conceptualization.

Indirect cross-levels measurement is used to assess characteristics (e.g., values or goals) at two levels of analysis (e.g., organizational level and individual level). Whereas indirect individual-level measurement requires two assessments provided by a single individual, cross-levels measurement requires an assessment from the individual and the

use of an assessment representing the environment as a whole (e.g., organization or group). For example, a cross-levels measurement of PO fit conceptualized as value congruence would ask an employee, "What do you value"? The organizational assessment could consist of an aggregate of a substantially large number of employees' or supervisors' responses to the question, "What does your organizational value"? After ensuring adequate levels of agreement exist among employees regarding the organizational assessment, researchers then compare individual ratings to an aggregate "organizational" value score as an indicator of fit (James, Joyce, & Slocum, 1988). It should also be noted that there are several ways (e.g., forced choice measures or rank order) the environmental variable may be represented using cross-levels measurement (Kristof, 1996; O'Reilly et al., 1991).

#### Direct Versus Indirect Measurement

Within the fit literature, direct measurement is synonymous with the terms subjective or perceived fit, while indirect measurement is synonymous with the terms objective or actual fit. Indirect measurement is considered to be a more objective assessment of fit than direct measurement, as indirect measures yield information without assessing implicit judgments of those involved. However, direct measures are beneficial in predicting interviewers' hiring decisions. For example, Cable and Judge (1997) found that direct measures of fit perceptions influenced interviewers' decisions to hire job applicants more strongly than actual fit indications, measured using independently reported fit ratings of the job applicant and organizational members.

Advocates of indirect measures have provided a number of criticisms of direct measures. For example, Edwards (1991) criticizes the use of direct measures because they confound the person and the environment since a "true" environmental assessment is lacking. Thus, the independent effects of the person and environment cannot be examined separately.

Another caveat of direct measures is common method variance that can occur when using direct measures to assess fit and outcome variables in the same study (Kristof, 1996; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Common method variance is defined as the "variance that is attributable to the measurement method rather than to the constructs the measures represent" (Podsakoff et al., 2003, p. 879). Method biases cause measurement error, creating either the interpretation of a normally stronger or weaker relationship between variables. Podsakoff et al. (2003) recommend the use of social desirability, negative affectivity, and positive affectivity scales to account for common method variance using statistical modeling procedures. Currently, fit research has not investigated the control of common method variance in studies using direct measures and self-rated outcome variables. Many of the relationships between fit and outcomes using direct measures could be inflated due to common method variance.

Researchers have not established empirical support determining whether or not subjective fit (using direct measures) or objective fit (using indirect measures) is measuring the same fit constructs in different ways (Kristof, 1996; Saks & Ashforth, 2002). For example, Chatman (1989) posited that subjective fit is even based on objective fit; thus, with the measurement of subjective fit, researchers are also tapping into

objective fit. Whereas direct measures are typically used to avoid the problems with difference scores (i.e., scores formed by subtracting a measure from the individual and a measure from the environment) (Brkich, Jeffs, & Carless, 2002; Edwards, 1991; Rounds et al., 1987), Edwards (1991) suggests that respondents may implicitly calculate the difference between individual and environmental characteristics. Therefore, direct measures may prime an individual to consider actual and desired levels of the environmental attributes.

While additional research is needed to investigate this issue, Judge and Cable (1997) found that the influence of objectively defined fit on organizational attraction was accounted for by direct measures of job seekers' fit perceptions. Direct fit perceptions are considered valuable because individuals' fit perceptions drive cognitive decision and reactions to environments (e.g., Nisbett & Ross, 1980). For example, Cable and DeRue (2002) conclude that existing employees rely on subjective and not objective perceptions to guide them throughout their employment by determining attitudes and behavior (Cable & DeRue, 2002). Thus, further evidence is needed to determine whether or not subjective fit may in fact account for incremental variance in outcomes such as job satisfaction, stress, and commitment over objective fit indications. Regardless of whether direct or indirect measures are applied, researchers are advised to align fit measures closely to the constructs under investigation (Kristof, 1996).

# Summary of Measurement

Researchers have assessed fit levels in a variety of ways (Cooper-Thomas et al., 2004; Kristof, 1996; Werbel & Gilliland, 1999). The measurement approach is used by

researchers to determine the degree of fit between the individual and environmental characteristics under review. Unfortunately, no conclusive empirical support has been conducted to determine the appropriate use of direct and indirect measures of specific fit levels and conceptualizations. Researchers have voiced concerns over the use of each approach. However, suggestions have been made to control for common method variance in direct measurement, as well as comparing the meaning and outcomes of direct measurement to indirect when feasible. The following section will present a detailed review of each level of fit (PV, PO, and PJ) under review in the current study. Table 2 presents the measurement approaches applied to various conceptualizations of fit levels based on previous research. Both direct and indirect measures have been predominantly applied to measure the traditional conceptualizations of PJ fit (demands-abilities fit) and PO fit (value congruence); however, only indirect measures have been used to measure the dominant conceptualization of PV fit (interest congruence). While a variety of direct and indirect measures have been used to assess three of the five conceptualizations for PO fit, only recently have direct measures been applied using a needs-supplies fit conceptualization of PJ fit (Cable & DeRue, 2002). Furthermore, each conceptualization of PV fit (needs-supplies, demands-abilities fit, and interest congruence) has exclusively been assessed by indirect measures.

Table 2

Measurement of PE Fit Levels

	PE Fit Levels			
Conceptualization	PJ Fit	PJ Fit PO Fit		
Needs-				
Supplies Fit	D	D & I	I	
Demands-				
Abilities Fit	D & I	Ι	I	
Value				
Congruence	n/a	D & I	?	
Goal				
Congruence	?	Ι	?	
Personality				
Congruence	D	D & I	?	
Interest				
Congruence	?	?	I	

D = Indicates a direct measurement approach has been used.

I = Indicates an indirect measurement approach has been used.

n/a = Indicates conceptualization is not theoretically plausible.

<sup>? =</sup> Indicates conceptualization is theoretically plausible but no research has been conducted. *Note*. Person-group fit level not included. Please note that the conceptualization of a fit level does not necessarily imply that a scale dedicated solely to a single conceptualization was used in previous research. Several fit studies (e.g., see Bretz and Judge [1994] and Saks and Ashforth [2002]) have included multiple fit items based on multiple conceptualizations in single scale to measure a fit level.

# Detailed Review of Fit Levels

This section will provide a more in-depth review of the PJ, PO, and PV fit levels. The review of each fit level will consist of five areas. First, the general definition of the fit level is provided. Second, historical information is presented, identifying the initial interest in researching the fit level. Third, common conceptualizations are discussed along with measurement methods developed for the fit level. Fourth, outcomes researched in association with the fit level are presented. Finally, considerations for future research are addressed.

# Person-Job Fit

Kristof (1996) identifies a job as "the tasks a person is expected to accomplish in exchange for employment, as well as characteristics of those tasks" (p. 8). Researchers broadly define PJ fit as individuals' compatibility with a specific job (Kristof, 1996). There has been some ambiguity in regard to the interpretation of the term "job;" for example, previous research (e.g., Blau, 1987) has ambiguously referred to the work environment as the job. PJ fit is commonly considered relative to the tasks of the job and not the values, goals, and mission of the organization that houses the job. For example, employees may possess the KSAs demanded of the job; however, these individuals may not share the same values or goals with the organization (Lauver & Kristof-Brown, 2001). Therefore, an individual may experience high PJ fit and low PO fit. While job attributes are influenced by the greater organizational culture, these attributes are conceptually unique elements of the job itself (Kristof, 1996).

PJ fit has been studied within the areas of OB and I/O psychology (Edwards, 1991). The concept implies that the interaction between the individual and the job influences outcomes for both the individual and the organization (Lewin, 1951; Murray, 1938). PJ fit has been one of the most commonly studied levels of PE fit (Kristof, 1996) due to the tremendous amount of attention directed toward the selection of applicants based on his or her skills to fill available positions (Cascio, 1991; Guion, 1987). During World War I, this attention to PJ fit began as the Army used cognitive ability tests to select soldiers into positions. This focus established a pattern for selection research during the remainder of the 20<sup>th</sup> century (Snow & Snell, 1993).

As PJ fit was traditionally a vocational counseling construct, the conceptual boundaries of PJ fit research extend into various areas of motivation (Hackman & Oldham, 1980), job satisfaction (Locke, 1976), job stress (French, et al., 1982), and vocational choice (Holland, 1985a). Upon conducting a review of these areas, Edwards (1991) identified two conceptualizations predominantly applied to PJ fit throughout the literature, needs-supplies and demands-abilities fit. Therefore, "good" PJ fit exists when an individual's needs are met by a job and/or the individual possesses the abilities needed to perform the job tasks effectively (Edwards, 1991; O'Reilly, 1977). Potentially, both needs-supplies and demands-abilities fit must be satisfied for "true" or a high level of PJ fit to exist.

Assessment of person-job fit. PJ fit, conceptualized as demands-abilities fit, has remained a central tenet of I/O psychology and human resource management research investigating the recruitment and selection of job applicants (Caldwell & O'Reilly, 1990;

O'Reilly et al., 1991; Saks & Ashforth, 1997). The earliest application of PJ fit for employment selection occurred during Frederick Taylor's (1911) efforts to improve efficiency with workers operating machinery. Within the selection context, interviewers and recruiters traditionally have freely used the basic premise of PJ fit to determine the degree of fit between the applicants' KSAs and the requirements or demands of the position. Conversely, applicants choose positions that meet their needs (i.e., needssupplies conceptualization of PJ fit), while recruiters consider the applicants' KSAs as the most relevant fit for a particular position (i.e., demands-abilities conceptualization) (Anderson & Ostroff, 1997; Werbel & Gilliland, 1999). Prior to selection efforts, job analysis is used to determine the job demands (i.e., required KSAs), followed by the construction of strategies to measure the degree to which job candidates fulfill these job demands (Werbel & Gilliland, 1999).

Outcomes of person-job fit. The predominant outcome of PJ fit studied within the OB and I/O psychology literature is job satisfaction (Edwards, 1991). Strongly influenced by the TWA (Dawis & Lofquist, 1984), researchers have focused on job satisfaction as the most proximal outcome of PJ fit. Within the field of organizational psychology (Dipboye, Smith, & Howell, 1994; Spector, 1997), job satisfaction is generally referred to as a job attitude; however, definitions tend to be ambiguous, describing the construct as a general job attitude or feelings regarding the job. For example, Spector (1997) defines job satisfaction simply as an attitudinal variable that assesses "how people feel about their jobs and different aspects of their jobs" (p. 2). Other job satisfaction definitions are more specific. Locke (1976) claims that satisfaction is "... a pleasurable or positive emotional"

state resulting from the appraisal of one's job or job experiences." Cranny, Smith, and Stone (1992) view satisfaction as an affective reaction to a job resulting from a comparison process between personal needs and perceived job outcomes. These definitions suggest that there seems to be a clear emotional or affective undertone to job satisfaction.

Fit researchers have adhered to Edwards' (1991) recommendation stating that researchers should select outcomes that correspond closely to job content dimensions to determine the degree of variance accounted for by fit levels. Essentially, perceptions of different fit levels should differentially relate to outcomes if these perceptions are truly distinct (Cable & DeRue, 2002). For example, the congruence between an individual and his or her job should be related to the individual's feelings of satisfaction toward the job, as opposed to feelings toward the individual's career. Findings regarding the relationship between PJ fit and job satisfaction have showed relatively strong, positive correlations. Using direct measurement of PJ fit, Brkich et al. (2002) and Saks and Ashforth (2002) reported significant correlations of .80 and .78, respectively. Also utilizing direct measures, Lauver and Kristof-Brown (2001) indicated a positive, albeit weaker relationship (r = .46).

Within the field of employee selection, on-the-job performance is the outcome studied most frequently in the use of PJ fit. Based on the fundamental premise of selecting for the demands of the job, recruiters and interviewers attempt to select those candidates that will perform well in the job due to the congruence (mainly a demands-abilities perspective) between their KSAs and job demands. Findings in the field of

employee selection support a positive correlation between PJ fit and performance (Schmidt & Hunter, 2003); however, studies within the fit literature have been unable to provide strong empirical evidence for a similar positive relationship between these two variables. For example, both Cable and DeRue (2002) and Lauver and Kristof-Brown (2001) reported correlations less than .11 for PJ fit (conceptualized as demands-abilities fit) and a variety of performance indicators. Clearly, further research is needed to investigate performance outcomes within the PJ fit literature.

Researchers have also examined other individual outcomes of PJ fit such as psychological and physical health, motivation, organizational commitment, absenteeism, turnover, and vocational choice (Edwards, 1991). Recently, Borman and Motiwidlo (1993) called for the expansion of the PJ fit criterion domain to include constructs representing organizational effectiveness, such as prosocial behavior, organizational citizenship behavior, and organizational commitment. Cable and DeRue (2002) have followed this recommendation by including occupational commitment and career satisfaction in recent research to explore the impact of PJ fit on additional outcomes. Findings indicated significant, positive relationships for PJ fit (conceptualized as needssupplies fit) and career satisfaction (r = .38) and occupational commitment (r = .43), as well as relationships for PJ fit (conceptualized as demands-abilities fit) with career satisfaction (r = .27) and occupational commitment (r = .24).

Summary of person-job fit. PJ fit has developed within the vocational and selection research. Due to the increasing efforts to match applicants' KSAs with job demands, PJ fit has been one of the most commonly studied levels of PE fit (Cascio,

1991; Guion, 1987; Kristof, 1996). During World War I, this attention to PJ fit began as the U.S. Army used cognitive ability tests to select soldiers into positions. This focus established a pattern for selection research extending from World War I through the remainder of the 20<sup>th</sup> century (Snow & Snell, 1993). PJ fit has traditionally been conceptualized as demands-abilities fit within I/O psychology and human resource management research (Caldwell & O'Reilly, 1990; O'Reilly et al., 1991; Saks & Ashforth, 1997). Researchers have focused on job satisfaction as the most proximal outcome of PJ fit, indicating strong relationships between PJ fit and job satisfaction (Brkich et al., 2002; Saks & Ashforth, 2002). However, research with the fit literature investigating the relationship between PJ fit and on-the-job performance have not been as strong. Borman and Motiwidlo (1993) suggest the use of additional conceptualizations of PJ fit to be investigated along with a wide spectrum of outcomes. Cable and DeRue (2002) have recently begun this expanded investigation of the impact of PJ fit on outcomes previously excluded from PJ fit research.

# Person-Organization Fit

In general, PO fit examines the congruence between individuals and organizations; however, PO fit has been conceptualized in many ways depending on the approach and perspective of the researcher. Unfortunately, this fit construct does not have a consistent, precise definition adopted by researchers in the field as do PJ and PV fit. The majority of studies settle on a broad, general definition of PO fit exemplified as the compatibility between individuals and organizations. Following this definition, researchers have postulated various conceptualizations of fit, including value congruence,

personality congruence, goal congruence, and needs-supplies fit. Thus, PO fit can be measured in numerous ways making it difficult for researchers to find agreement on a single conceptualization or definition. There is a lack of clarity determining the content that falls under the heading of PO fit, as well as interpreting the definition and degree of "compatibility" between individuals and organizations (Kristof, 1996; Rynes & Gerhart, 1990).

Researchers have investigated various conceptualizations of PO fit (Kristof, 1996); however, these conceptualizations (e.g., value congruence and personality congruence) of PO fit have yet to be combined in a single study of PO fit. There is growing interest for developing a comprehensive definition to facilitate more integrative research. In order to include various studies conceptualizing PO fit in different ways, the term PO fit is broadly defined as "the compatibility between the people and organizations that occurs when at least one entity provides what the other needs or they share similar fundamental characteristics or both" (Kristof, 1996, p. 4). Using this broad definition, PO fit research has focused on three areas: organizational entry, socialization processes, and outcomes of existing employees.

PO fit research is more recent than PJ fit. While the early attention of PJ fit began during World War I, selecting individuals with particular skill sets suitable for vacant positions (Cascio, 1991; Guion, 1987), the increasing complexity of the business world led organizations to broaden the focus to include PO fit in the 1990s (Kristof-Brown, 2000). Due to organizational restructuring and downsizing, organizational leaders became interested in a workforce that can be adaptive inside the organization. For

example, an employee that can perform well in more than one business unit is more desirable than an employee that can only function in one single position. Thus, a more "mobile" workforce within the organization has become advantageous in the marketplace (Bowen et al., 1991). Additionally, growing interest in organizational culture and climate over the past decade has led fit researchers to consider congruence between individuals and elements of organizational culture, suggesting PO fit may be equally or more important than PJ fit.

Furthermore, fit researchers posit that both PJ and PO fit are critical to recruiting and selection efforts (Bowen et al., 1991; Judge & Ferris, 1992; Rynes & Gerhart, 1990; Werbel & Gilliland, 1999). The conceptual boundaries of PO fit are more expansive than other forms of fit between an individual and his or her particular job. Moreover, organizational values and characteristics are likely to be more stable than the specific KSAs required of a particular position (Bowen et al., 1991). Job tasks are more likely to change over time compared to the values of an organization due to the need for organizations to create and terminate positions in order to address rapidly changing business demands. Werbel and Gilliland (1999) posit that organizations selecting candidates based on shared values of the organization may be able to successfully undergo major organizational changes (i.e., restructurings) due to this congruence. Therefore, selecting for PO fit is the critical factor when improving long-term employee commitment as opposed to only assessing PJ fit (Bowen et al., 1991; Werbel & Gilliland, 1999).

Assessment of person-organization fit. There are a variety of ways researchers have actually assessed PO fit depending on the conceptualization adopted by the researcher. Schneider's (1987) ASA framework has heavily influenced the assessment of PO fit, emphasizing the use of value congruence, goal congruence, and personality congruence metrics. Schneider, Smith, & Goldstein (2000, p. 67) posit the following:

The organizational goals, and the culture that emerges to attain these goals are thus believed to be a reflection of the personal attributes (e.g., personality) of the founder. It is the outcome of three interrelated dynamic processes, *attraction*, *selection*, and *attrition* (ASA), that determines the kinds of people in an organization. That is, certain levels of people are attracted to, and prefer, particular levels of organizations; organizations formally and informally select certain levels of people to join the organization; and attrition occurs when people who do not fit a particular organization leave. Those people who become part of the organization and stay based on these processes, in turn, define the nature of the organization and its structure, processes, and culture.

Aligned closely with the ASA framework, the most frequently used method to conceptualize PO fit is value congruence, assessing the similarity between individual and organizational values (O'Reilly, et al., 1991). This is likely due to the relative stability of values held by both the individual and the organization (Van Vianen, 2000). Cable and Judge (1997) define values at the individual level as "enduring beliefs" that guide the attitudes, judgments, and behaviors of an individual. At the organizational level, a value is defined as "an organizational product, determined by a majority of active

organizational members who are aware of the organization's support for the value" (Chatman, 1989, p. 460). Researchers within the fit literature typically agree on the values to assess; however, it should be noted that culture and climate scholars have an ongoing debate regarding the appropriate aspects of culture and climate needed for assessment. Chatman (1991) and Cable and Judge (1996) have applied the use of O'Reilly et al.'s (1991) Organizational Culture Profile (OCP), designed to assess value congruence using an indirect, cross-levels measurement approach. The OCP involves a Q-sort methodology forcing respondents to sort 54 values (e.g., flexibility, adaptability, autonomy, and fairness) into nine categories.

Additional conceptualizations of PO fit based on the ASA framework include assessing individuals' goal congruence with organizational leaders and peers (Schneider, 1987). Also driven by the ASA framework, researchers measure PO fit using a personality congruence conceptualization as the supplementary fit between the characteristics of individual personality and organizational climate. Stemming from Murray's (1938) need-press theory, another conceptualization of PO fit embraces the needs-supplies perspective by defining fit as "the match between individual preferences or needs and organizational systems and structures" (Kristof, 1996, p. 5). While there has been debate over the conceptual boundaries of PO fit, Kristof (1996) recognizes that a definition of PO fit must include multiple conceptualizations.

Outcomes of person-organization fit. Researchers have long proposed that the outcomes of compatibility between an individual and an organization results in greater job satisfaction and organization commitment (Bowen et al., 1991). Similar to PJ fit, PO

fit has been researched extensively with regard to job satisfaction. Using direct measures of PO fit, researchers have provided empirical evidence for significant positive relationships (r's = .53, .47, and .58) between job satisfaction and PO fit (Cable & DeRue, 2002; Lauver & Kristof-Brown, 2001; Saks & Ashforth, 2002, respectively). Additionally, a significant, positive relationship (r = .67) between PO fit and affective organizational commitment was found by Saks and Ashforth (2002). Other commitment-based outcomes, such as intent to quit, turnover, and organizational identification have also been examined by PO fit researchers. For example, both Lauver and Kristof-Brown (2001) and Saks and Ashforth (2002) indicated negative, significant relationships (r's = -.53 and -.57, respectively) between PO fit and intent to quit. In a study of PO fit including both job satisfaction and tenure, Bretz and Judge (1994) found that PO fit (measured at the individual-level) accounted for 23% of the variance in job satisfaction and 24% of the variance in tenure.

PO fit has also been studied in relation to absenteeism, job involvement, grievances, hiring decisions, performance, and pro-social behavior (Blau, 1987; Cable & DeRue, 2002; Cable & Judge, 1997; Kristof, 1996). Cable and Judge (1997) found a correlation of .45 between PO fit perceptions and hiring decisions of interviewers. While performance has been investigated with regard to PO fit, the results do not provide strong support. For example, both Cable and DeRue (2002) and Lauver and Kristof-Brown (2001) found small, positive correlations ranging from .11 to .28. Empirical support exists showing a significant, positive relationship (r = .22) between pro-social behaviors or organizational citizenship behaviors (OCBs) and PO fit (Cable & DeRue, 2002). The

rationale for this relationship contends that individuals with good PO fit make more of an investment into their organizational membership due to the strong mutual relevance of one another's value structure and shared attributes (Bowen et al., 1991).

Summary of person-organization fit. Due to organizational restructurings and downsizing and the advancements of organizational culture and climate research over the past decade, more fit researchers began to investigate PO fit (Bowen et al., 1991; Kristof-Brown, 2000). PO fit has been conceptualized in multiple ways in the fit literature. Due to the influence of Schneider's (1987) ASA framework, researchers have primarily assessed PO fit using value congruence, goal congruence, and personality congruence conceptualizations. Murray's (1938) need-press theory has also influenced the conceptualization of PO fit using a needs-supplies fit conceptualization. The most traditional conceptualization of PO fit, value congruence, has provided empirical evidence supporting a strong, positive relationship between PO fit and both job satisfaction and organizational commitment (Cable & DeRue, 2002; Lauver & Kristof-Brown, 2001; Saks & Ashforth, 2002, respectively). Less strong, positive relationships have been found between PO fit and performance (e.g., r's < .28; Cable & DeRue, 2002; Lauver & Kristof-Brown, 2001). The recognized impact of PO fit on individual outcomes is influencing researchers and practitioners to consider including PO fit in the selection of job applicants, moving beyond a standard selection process exclusively evaluating PJ fit.

### Person-Vocation Fit

While PO fit has been conceptualized in numerous ways, fit researchers have consistently relied on a common conceptualization of PV fit. PV fit is conceptualized as interest congruence or the "degree of match between the individual's vocational interests and aspects of their work environment" (Harris, Moritznes, Robitschek, Imhoff, & Lynch, 2001, p. 314). The basic conceptualization of PV fit states that individuals select occupations populated by others with similar vocational interests (Holland, 1997). PV fit has strong roots in vocational psychology, a discipline focusing on an individual's selection of an occupation and his or her satisfaction and productivity within that occupation (Furnham, 2001). Parsons' (1909) tripartite model of vocational choice provided the foundation of vocational psychology and outlined three fundamental aspects of the discipline: "(a) self-analysis of one's abilities, aptitudes, interests, ambitions, and resources; (b) occupational analysis of work requirements, tasks, and opportunities; and (c) the use of 'true reason' to relate the self and occupational analyses" (Tracey & Rounds, 1993, p. 229). Based on this model, vocational researchers, building on the emerging research of individual differences in the early 20<sup>th</sup> century (Campbell & Borgen, 1999), focused on the relation of vocational interests to the outcomes of occupational satisfaction and longevity or stability to remain in the occupation (Tracey & Rounds, 1993).

John Holland, a counseling psychologist, pioneered the development of PV fit assessment. Holland (1973) posited that an individual's vocational satisfaction, stability, and achievement are determined by the congruence between the individual's interests and

his or her vocational environment. His work has dominated PV fit research, including the introduction of an occupational classification system (1959, 1966a, 1966b) and a theory of careers (1973, 1985a, 1997). The roots of Holland's (1997) work can be traced back to the first systematic assessment of vocational interests, titled the Strong Vocational Interest Bank for Men (Furnham, 2001; Strong, 1927). Eventually, Holland's (1959) theory of vocational choice was applied to Strong's research, forming a bridge between the empirical beginnings of interest measurement and the practical theoretical interpretations of vocational psychology (Campbell & Borgen, 1999). Holland's theory has stimulated research in both vocational psychology and I/O psychology (Gustafson & Mumford, 1995; Savickas & Gottfredson, 1999), leading to the development of career development counseling and multiple interest inventories (Furnham, 2001). In fact, almost every major current vocational interest inventory has been based on Holland's research (Campbell & Borgen, 1999).

Assessment of person-vocation fit. Holland developed an indirect, cross-levels measurement approach in which both the individual and the environment are measured to determine PV fit (Kristof, 1996; Savickas & Gottfredson, 1999). Regarding the individual, Holland proposed that an individual expresses his or her personality through the choice of an occupation; thus, individuals' interests serve as personality indicators (Holland, 1973). Concerning the environment, Holland proposed that occupations could be organized by the same personality dimensions as the individual, thus forming corresponding measures determining congruence.

To model these dimensions, a typology was constructed in which both individuals and occupations were considered to have "personalities." Using Holland's typology, individuals and environments can be grouped into six categories representing six psychological features inherent in both: realistic, investigative, artistic, social, enterprising, and conventional personality levels (abbreviated RIASEC). These six "personality" levels represent characteristic patterns of interests, competencies, and behaviors (Gottfredson & Richards, 1999). For example, those who are self-confident and enterprising seek vocations characteristic of enterprising occupational roles, such as a business executive, salesperson, or sports promoter (Furnham, 2001). Holland's RIASEC typology dominates the PV literature and has spawned numerous studies testing the application of the RIASEC typology in various settings and comparing it to other measures, such as ability (e.g., Randahl, 1991; Rolfhus & Ackerman, 1996).

Researchers (De Fruyt, 2002; De Fruyt & Mervielde, 1999; Hogan & Blake, 1999; Larson, Rottinghaus, & Borgen, 2002; Rolfhus & Ackerman, 1996) have recently investigated the relationship between Holland's interest measures and those of personality assessments to determine the degree to which vocational interests reflect underlying personality characteristics. Hogan and Blake (1999) posited that vocational interest measures indicate how an individual will prefer an occupation whereas personality measures identify the motivation and interpersonal skills necessary to perform successfully in an occupation. However, general findings conclude that only a weak correlation exists between personality and interest inventories (Schneider, 2001).

Therefore, interest and personality measures did not seem to capture the variance of the same latent constructs.

Outcomes of person-vocation fit. The premise that individuals will be satisfied working in occupational environments congruent with their interests stems from Holland's (1997) theoretical development and the principle of the TWA (Dawis & Lofquist, 1984). Researchers (e.g., Chartrand & Walsh, 1999; Harris et al., 2001; Meir, Melamed, & Dinur, 1995; Young, Tokar, & Subich, 1998) have focused exclusively on the central tenet of Holland's theory of vocational choice, the relationship between interest congruence and job satisfaction. However, the relationship between PV fit and job satisfaction has received mixed results (Chartrand, 1999). For example, based on the PV fit literature of the mid-1980s, Spokane (1985) used the term "magic .30" to describe the typical correlation between PV fit and job satisfaction. Due to the large number of integrative studies in this area, two meta-analyses have been conducted. Assouline and Meir (1987) and Tranberg, Slane, and Ekeberg (1993) found mean correlations (r's = .21 and .20) between PV fit and job satisfaction based on 77 and 17 correlations respectively. Chartrand (1999), Holland (1987), and Hough, Barge, & Kamp (2001) have postulated that this weak correlation may be attributed to restriction of range for job satisfaction. The limited degree of variance for highly satisfied samples may lead to falsely low correlation estimates. Additionally, Holland (1997) criticized the results of these metaanalyses, claiming that weak research designs included in the meta-analyses received as much weight as strong research designs.

In addition to job satisfaction, researchers have studied the relationship between PV fit and improved career satisfaction, career achievement, skill development, vocational stability, job tenure, organizational commitment, performance, and decreased perceived stress (Chartrand & Walsh, 1999; De Fruyt, 2002; Hough et al., 2001; Schneider, 2001; Tracey & Rounds, 1993). Hough et al. (2001) reported an average significant, positive correlation (.29) between PV fit and actual turnover based on the review of 21 studies. Furthermore, fourteen studies investigating the relationship between PV fit and job performance suggest a range of correlations between .20 and .30 (Hough et al., 2001).

Overall, Holland and researchers oriented to the RIASEC typology have focused predominantly on individual outcomes, such as job satisfaction and other work attitudes. Conversely, performance and effectiveness outcomes have been related more to studies of PJ fit in the traditional selection context (Schneider, 2001). By including a variety of outcome variables, the current study hopes to provide further empirical evidence for the relationship of PV fit to a number of outcomes.

Criticisms of Holland's typology. Holland's theory of vocational choice has received a tremendous amount of respect from other researchers in the field, however some research continues to challenge the RIASEC typology (Furnham, 2001). For example, Schwartz (1992) postulates that the support for Holland's relationship between PV fit and job satisfaction is found only for those more common occupations (e.g., doctors, lawyers, mechanics) due to individuals' understanding of these occupations. Additional criticisms point out that Holland's typology is inadequate when used to

differentiate specialties of an occupation, suggesting that the typology is only suitable for distinguishing between occupations as opposed to within occupations (Upperman & Church, 1995). Chartrand (1999) also claims that Holland's (1997) congruence indices contain considerable error, plagued by calculations using inadequate units of analysis (i.e., occupational codes identifying interest profiles). Furthermore, Holland's theory of vocational choice has dominated the PV fit literature to the extent that his work has restricted the development of alternative theories and measures (Schwartz, 1992).

As mentioned previously, Holland's six "personality" levels are represented by items consisting of interests, competencies, and behavior (Gottfredson & Richards, 1999; Reardon & Lenz, 1999). The current study focuses on the criticisms regarding the inability to partial out the relationship between individual conceptualizations of PV fit and outcomes (e.g., job satisfaction) due to the fact that Holland has included multiple conceptualizations of PV fit (preferences, competencies, and interests) in Holland's RIASEC scales (Edwards, 1991). For example, researchers using Holland's RIASEC scales are not able to interpret PV fit scores as representing unique conceptualizations of PV fit such as needs-supplies or demands-abilities fit. Findings indicating the strength of relationships between multiple conceptualizations of PV fit and specific outcome variables (e.g., career satisfaction and occupational commitment) would be beneficial in detecting the unique nature of fit relationships (Reeve & Heggestad, 2004). While Holland's influential work has contributed to PV fit research early in the development of vocational psychology, modern day PV fit research should step outside of his body of work to expand the research in different directions, contributing to a better understanding of PE fit (Kristof, 1996). For example, researchers should rely on multiple conceptualizations (e.g., demands-abilities fit, needs-supplies fit, personality congruence, and interest congruence) to assess PV fit instead of relying on Holland's (1997) approach.

Alternative person-vocation fit efforts. Unfortunately, there have been few alternative approaches to assessing PV fit in light of Holland's dominance of the field (Furnham, 2001). Only recently have researchers (Feij et al., 1999; Shivy, Rounds, & Jones, 1999) expanded the conceptual measurement of PV fit, proposing alternative measures of fit. Feij et al. (1999) conducted a longitudinal study of PV fit, conceptualizing PV fit as the congruence between vocational interests and perceived skill requirements. Applying this indirect, individual-level measurement strategy, findings supported a positive relationship between PV fit and job satisfaction as well as a longitudinal increase in PV fit over time. The measurement of PV fit directly or subjectively remains a relatively untouched area of PV fit research as stated by Shivy et al. (1999, p. 207):

Given that vocational theorists continue to speculate on the importance of acquiring a cognitive structure for organizing information about the self, the world of work, and one's relation to that work world, it is surprising that all but a few vocational researchers have neglected the study of occupational perceptions. In contrast, researchers from outside mainstream vocational psychology have shown considerable interest in individuals' occupational cognitions. These investigators have not only hinted at the role that organized occupational

information might play in various aspects of the career development process, but they have also conducted substantial empirical research.

Thus, Feij et al.'s (1999) venture into a subjective fit scale was a novel approach to assessing PV fit. Recent research (e.g., Magaña, Burton, & Ferreira-Pinto, 1995) purports that the conceptual structure of individuals' occupational perceptions does not resemble Holland's RIASEC model. Further research is needed to expand this recent interest in studying PV fit perceptions into the realm of industrial/organizational psychology related PE fit research in this time of increasing attention to professions. Clearly, a void exists to study the role of fit perceptions regarding occupations, restricted by the dominance of Holland's RIASEC typology.

Changing nature of professions. In recent decades, the role of the individuals' profession has gained increasing attention due to the changing nature of the work environment (Blau, 2001; Cavanaugh & Noe, 1999; Gottfredson, 1999; Parasuraman, Greenhaus, & Linnehan, 2000). Currently, Parasuraman et al. (2000) posit that individuals no longer are bound to work for one organization due to the changes (i.e., downsizing, restructuring) of organizations and the economic opportunities fueled by global competitive pressures. With increasing frequency, individuals are moving from job to job and employer to employer. Cavanaugh and Noe (1999) proposed a change in the relationship between employees and employer, labeled a psychological contract.

According to the old psychological contract, "employees who were good performers were virtually guaranteed a job by their employer until retirement, the employer helped employees plan their careers and provided promotions to ensure career development, and

employees were loyal and committed to the job and the organization" (p. 324).

Conversely, the *new* psychological contract indicates that, "both employees and employers have lower expectations for long-term employment, employees are responsible for their own career development, and commitment to the work performed has replaced commitment to the job and organization" (p. 324). Therefore, PV fit may become an increasingly important fit level as individuals are more focused on professional development than focusing on their upward mobility in the organization (Meyer, Allen, & Smith, 1993). This premise holds many opportunities for researchers in selection contexts as well as research investigating perceptions of fit for incumbent employees.

Summary of person-vocation fit. PV fit developed out of vocational psychology during the growth of individual differences research during the early 20<sup>th</sup> century (Strong, 1927). The pioneering work of Holland (1959) has driven theoretical developments in both vocational psychology and I/O psychology. Holland's (1973) typology, conceptualizing PV fit as interest congruence, has been most commonly used to assess PV fit. Studies of job satisfaction, the predominant outcome of PV fit, have produced mixed results, suggesting a low to moderate, positive relationship with PV fit. However, restriction of range in job satisfaction is posited to have produced falsely low correlation estimates. While Holland's (1997) research has received tremendous support, critics (e.g., Schwartz, 1992) contend that this body of research has limited the attempts to conceptualize PV fit in alternative ways among criticisms for conceptualization specificity (Edwards, 1991; Gati, 1989) and measurement approaches (Feij et al., 1999; Shivy et al., 1999). PV fit is becoming more important today as the old psychological

contract has been replaced by a new contract, in which loyalty to the organization has dissipated in lieu of a focus on career development (Blau, 2001; Cavanaugh & Noe, 1999; Gottfredson, 1999; Parasuraman et al., 2000).

### Fit Summary

PV, PO, and PJ fit have gained the attention of researchers within the areas of I/O psychology, OB, and vocational psychology (Edwards, 1991; Feij et al., 1999; Kristof-Brown et al., 2002). World War I stimulated researchers to focus on PJ fit, selecting individuals with particular skill sets for vacant positions (Cascio, 1991; Guion, 1987). Early 20<sup>th</sup> century vocational researchers capitalized on the emerging research of individual differences to conduct initial PV fit research efforts (Campbell & Borgen, 1999). During the 1990s, organizational restructurings, downsizing, and growing interest in organizational culture and climate facilitated the development of PO fit research, studying the positive outcomes of fit in organizational entry and socialization. In recent decades, PV fit has gained increasing attention due to the changing nature of the work environment as employees begin to value professional development over long-term employment (Blau, 2001; Cavanaugh & Noe, 1999; Gottfredson, 1999; Parasuraman et al., 2000).

While researchers have applied various conceptualizations and measurement approaches to each of these fit levels, a trend exists in the research regarding typical conceptualizations applied to PV, PO, and PJ fit. For example, researchers have most often conceptualized PJ fit as demands-abilities fit within the areas of recruitment and selection of job applicants (Caldwell & O'Reilly, 1990; O'Reilly et al., 1991; Saks &

Ashforth, 1997). The most frequently used conceptualization of PO fit has been value congruence (O'Reilly et al., 1991). Concerning PV fit, researchers have consistently relied on Holland's (1997) common conceptualization of interest congruence. Thus, while various conceptualizations of fit levels exist, researchers have favored particular conceptualizations over others in regard to specific fit levels.

Although researchers have studied a variety of outcomes of fit, the main outcome predominantly studied is job satisfaction (Edwards, 1991). Researchers have focused on job satisfaction as the most proximal outcome of fit due to the TWA (Dawis & Lofquist, 1984), positing that the correspondence (or "fit") between individual and environmental characteristics yields increased job satisfaction. This dominant focus on job satisfaction has also been attributed to researchers' (e.g., Chartrand, 1999; Edwards, 1991; Holland, 1987) recommendations to select outcomes that correspond closely to job content dimensions to determine the degree of variance accounted for by fit levels. Findings regarding the relationship between PV, PO, and PJ fit and job satisfaction have indicated mixed results depending on the fit level.

In addition to job satisfaction, organizational commitment, turnover, and intent to quit have received a significant amount of attention in the fit literature. Researchers have proposed that the outcomes of compatibility between an individual and the job, organization, and/or vocation results not only in greater job satisfaction, but also to organization commitment (Bowen et al., 1991; Holland, 1987). Performance has also received attention in the fit literature (Cook, 1997); however, this research concentrates on PJ fit within the field of employee selection (Schneider, 2001). Researchers have been

unable to provide strong empirical evidence for the positive relationship between fit and performance using traditional direct or indirect fit measures. While performance has been investigated with regard to PO fit, the results do not provide support for a significant relationship. Vocational research suggests of moderate correlation between PV fit and performance (Hough et al., 2001; Schneider, 2001).

## Integrative Fit Perceptions Research

A trend in the PE fit literature has been the inclusion of only one level of fit using a single conceptualization (e.g., value congruence or demands-abilities fit) (e.g., Bretz & Judge, 1994; Cable & Judge, 1997). However, researchers have begun to make clearer distinctions in recent years between levels of fit under the rubric of PE fit and the conceptualizations used to investigate these constructs (Lauver & Kristof-Brown, 2001). While PV fit has yet to be investigated thoroughly using direct measurement techniques or multiple conceptualizations, general findings regarding the direct measurement of PO and PJ fit perceptions in a single study have received a modest amount of attention (Lauver & Kristof-Brown, 2001). Typically, researchers (e.g., Bretz et al., 1993; Cable & Judge, 1996; Kristof-Brown, 2000; Saks & Ashforth, 2002) investigating multiple levels of fit have limited investigations to determining whether recruiters' perceptions support a distinction between levels of fit (namely PO and PJ fit perceptions) in hiring applicants.

Researchers (Cable & Judge, 1996; Kristof-Brown; 2000; Lauver & Kristof-Brown, 2001; Saks & Ashforth, 1997, 2002) have examined the relationships between multiple fit measures to determine the distinctiveness of PO and PJ fit perceptions. In each of these studies, researchers have applied traditional conceptualizations to PO fit

(value congruence) and PJ fit (demands-abilities fit). Lauver and Kristof-Brown (2001) demonstrated that PO and PJ fit perceptions of incumbent employees were only weakly correlated (r = .18). Moreover, Cable and Judge (1996), using one-item scales of fit perceptions, revealed relatively low correlations between PO fit and PJ fit for job applicants (r = .35) and for newly employed organizational members (r = .16). Saks and Ashforth (1997) applied different one-item measures of PO and PJ fit perceptions of applicants; however, results revealed a strong, positive correlation (r = .56, p < .01) between the two constructs. Subsequently, Saks and Ashforth (2002) applied scales of PJ and PO fit perceptions using items from a variety of conceptualizations. For example, PJ fit was assessed with demands-abilities and needs-supplies fit items while the PO fit scale was a blend of value congruence, personality congruence, and needs-supplies fit items. Assessing incumbent employees' fit perceptions, Saks and Ashforth (2002) found results similar to Saks and Ashforth (1997) indicating a strong correlation (r = .49, p < .01) between PJ and PO fit perceptions.

Similarly, Kristof-Brown (2000) found a strong, positive correlation (r = .72, p < .01) between recruiters' PO fit perceptions, conceptualized as value congruence, and PJ fit perceptions, conceptualized as demands-abilities fit. However, confirmatory factor analysis (CFA) provided more support for a two-factor solution (i.e., PO fit factor and PJ fit factor) than a single-factor fit solution. Therefore, while the correlation was strong, the constructs were still unique and independent supplying construct validity evidence for two distinct factors. Potential cause for studies (Kristof-Brown, 2000; Saks & Ashforth, 1997, 2002) demonstrating a strong correlation between PO and PJ fit perceptions may

have been common method variance, as the two constructs were measured using the same methods (Podsakoff et al., 2003). Thus, a two-factor conceptualization of subjective fit perceptions implies the importance of fit for an employee with both his or her job and his or her organization.

The investigation of the relationships of fit constructs to outcomes has provided further construct validity evidence for a PO and PJ fit distinction. Lauver and Kristof-Brown (2001) demonstrated that both PO and PJ fit perceptions accounted for unique variance in job satisfaction. Cable and Judge (1996) indicated that PO fit perceptions were stronger predictors of job choice intentions, organizational commitment, and job satisfaction than were PJ fit perceptions. Saks and Ashforth (2002) found that PJ fit perceptions is strongly related to job satisfaction than is PO fit, which is more strongly related to organizational commitment. Kristof-Brown (2000) also found support for the unique relation of fit perceptions to work outcomes. Hence, PJ fit perceptions predicted hiring recommendations better than PO fit perceptions.

Kristof-Brown et al. (2002) expanded the previous investigation (Kristof-Brown, 2000) by including PG fit in the examination of the simultaneous relationship of PJ, PG, and PO fit with work environment satisfaction. Results supported researchers' hypothesis that all three levels of fit would have independent effects on work satisfaction, with PJ fit ( $\beta$  = .58, p < .05) having the strongest relationship with work environment satisfaction, followed by PO fit ( $\beta$  = .47, p < .05) and PG fit ( $\beta$  = .36, p < .05). Together, these three fit levels accounted for 71% of work environment satisfaction. Based on Kristof-Brown et al.'s (2002) study and previous fit research (e.g., Cable & Judge, 1996; Kristof-Brown,

2000; Lauver & Kristof-Brown, 2001; Saks & Ashforth, 1997, 2002), empirical support for the differentiation between PO and PJ fit perceptions and the unique relationships of each fit level to work outcomes has been provided.

A three-factor model of subjective fit perceptions. Although the two-factor model of fit is superior to a unidimensional approach, not all fit researchers argue that this model is a comprehensive representation of individuals' fit perceptions. Cable and DeRue (2002) identified the inadequacy of the two-factor (PO fit factor and PJ fit factor) conceptualization of fit perceptions (e.g., Lauver & Kristof-Brown, 2001) because needs-supplies fit perceptions of PJ fit were not included in the investigation. Previous fit studies (e.g., Cable & Judge, 1996; Kristof-Brown, 2000; Lauver & Kristof-Brown, 2001; Saks & Ashforth, 1997) had overlooked the examination of needs-supplies fit perceptions when investigating PO and PJ fit. Cable and DeRue (2002) conceptualized PJ fit as judgments of demands-abilities fit *and* needs-supplies fit, while PO fit was conceptualized as judgments of value congruence, similar to previous research (e.g., Cable & Judge, 1996, 1997; Chatman, 1989; Lauver & Kristof-Brown, 2001).

Findings (Cable & DeRue, 2002) provided empirical support for the hypothesized, three-factor model (i.e., PO value congruence, PJ needs-supplies fit, and PJ demands-abilities fit) of subjective fit perceptions, as the data fit this three-factor model better than a two-factor (PO and PJ fit) model. As hypothesized, PO value congruence fit perceptions had a significant, positive relationship with organizational identification, perceived organizational support, and organizational citizenship behaviors (e.g., volunteering to help others). Additionally, decisions to stay with the organization, as

measured by actual turnover figures, were negatively related to PO value congruence perceptions. This finding has been empirically supported by the previous researchers (e.g., Cable & Judge, 1996; Lauver & Kristof-Brown, 2001).

As posited by Cable and DeRue (2002), PJ needs-supplies fit perceptions were shown to increase as occupational commitment increased, supporting the proposition that these fit perceptions represent a total set of returns from the job. Thus, PJ needs-supplies fit perceptions are conceptually closer to an individual's attachment to his or her profession or occupation than to another organization offering the same occupation or profession (Meyer et al., 1993). Furthermore, empirical support was found for a positive relationship between PJ needs-supplies fit perceptions and both job satisfaction and career satisfaction. Turnover was not found to significantly relate negatively to PJ needs-supplies fit perceptions as hypothesized. Cable and DeRue (2002) postulated that this result was due to the fact that PO value congruence is an organizationally-focused fit construct; thus, the relationship is stronger between organizationally-relevant decisions (i.e., turnover decisions) and PO value congruence perceptions compared to a job-focused fit construct (i.e., PJ needs-supplies fit perceptions).

Cable and DeRue's (2002) findings did not support any of the researchers' hypotheses regarding PJ demands-abilities fit perceptions. Lauver and Kristof-Brown (2001) found similar null findings with regard to the relationship between PJ demands-abilities fit perceptions and job performance. Cable and DeRue (2002) proposed PJ demands-abilities fit perceptions to have a positive relationship with occupational commitment, job performance, and pay raises based on merit/performance. Potential

reasons for these null effects included range restriction or ceiling effects for fit perceptions as these ratings were susceptible to participants favorably skewing their perceptions due to the influence of self-esteem.

Overall, Cable and DeRue (2002) found empirical support for a three-factor model of fit perceptions, consisting of PO value congruence, PJ needs-supplies fit, and PJ demands-abilities fit. Posited relationships were found for PO value congruence and PJ needs-supplies in regard to organization-relevant work outcomes and job/career satisfaction, respectively. PJ demands-abilities fit perceptions produced null findings; however, additional research may uncover underlying relationships between this fit construct and work outcomes. Further investigation is needed to replicate these findings and expand the conceptual boundaries of the model to include multiple fit levels and conceptualizations.

## Overall Summary

The discipline of PE fit has been strongly influenced by interaction theory (Lewin, 1951), need-press theory (Murray, 1938), the TWA (Dawis & Lofquist, 1984), ASA model (Schneider, 1987), and Holland's (1973, 1997) theory of vocational behavior. Guided by these theories, researchers within I/O psychology, OB, and vocational psychology have investigated four levels of fit: PV, PO, PG, and PJ fit. Each fit level has a unique history, application of conceptualizations and measurement techniques, and set of outcomes commonly reviewed. Researchers have conceptualized levels of fit (PV, PO, and PJ) in multiple ways over the years (Edwards; 1991; Kristof, 1996; Muchinsky & Monahan, 1987; Schneider, 2001; Werbel & Gilliland, 1999);

however, the trend in PE fit literature has focused on including only one level of fit using a single conceptualization (e.g., value congruence for PO fit or demands-abilities fit for PJ fit or interest congruence for PV fit) (Kristof-Brown et al., 2002). This trend has indirectly restricted and constrained fit researchers in advancing the understanding of various fit perceptions (Kristof-Brown et al., 2002).

The concept of fit has many manifestations and takes many forms depending on the level of fit and the underlying conceptualization as illustrated in Figure 1 (Schneider, 2001). Unfortunately, only limited empirical evidence is available to guide researchers in selecting among various conceptualizations for fit levels and identifying how these relate to unique outcomes (Bretz & Judge, 1994). Furthermore, as presented in Table 1 and Table 2, no conclusive empirical support has been conducted to determine the appropriate measurement approach for specific fit levels and conceptualizations; although, suggestions have been made to control for common method variance in direct measurement (Edwards, 1991). Previously, the boundaries between levels of PE fit and the conceptualizations of these fit levels have remained vague as researchers have failed to explicitly identify fit levels and conceptualizations under review to establish construct validity (Kristof, 1996; Kristof-Brown et al., 2002). However, researchers have begun to make clearer distinctions in recent years between levels of fit and the conceptualizations used to investigate these constructs (Lauver & Kristof-Brown, 2001).

Recent research (e.g., Cable & Judge, 1996; Kristof-Brown, 2000; Kristof-Brown et al., 2002; Lauver & Kristof-Brown, 2001; Saks & Ashforth, 1997, 2002) has shown support for the differentiation between levels of fit. Cable and DeRue (2002) found

empirical support for a three-factor model of fit perceptions, consisting of PO value congruence, PJ needs-supplies fit, and PJ demands-abilities fit. Further investigation is needed to replicate these findings and expand the conceptual boundaries of the model to include multiple fit levels and conceptualizations.

As presented in Table 1 and Table 2, a number of fit levels have theoretical support for using additional, previously unused, conceptualizations and measurement techniques. While PV fit has yet to be investigated thoroughly using direct measurement techniques, general findings regarding the direct measurement of PO and PJ fit perceptions in a single study have received a modest amount of attention (Lauver & Kristof-Brown, 2001). Building on Cable and DeRue's (2002) research, additional fit levels, such as PV fit, could be investigated in relation to conceptualizations typically used for PO and PJ fit, such as value congruence and demands-abilities. Additionally, Cable and DeRue (2002) posited that PO fit may also be perceived by employees using a needs-supplies fit conceptualization. An exploratory investigation of these conceptualizations applied to fit levels serves to advance the fit literature following recommendations for future research suggested by leading fit researchers (e.g., Cable & DeRue, 2002; Kristof-Brown et al., 2002, Saks & Ashforth, 2002). Future research is needed to expand the fit perceptions research by clarifying multiple conceptualizations of various fit levels within a single study.

Conceptually, distinctions between fit levels (PV, PO, and PJ) have been presented (e.g., Kristof, 1996; Schneider, 2001; Werbel & Gilliland, 1999); yet, only a limited amount of empirical research supports these distinctions for incumbent employees

(Kristof-Brown et al., 2002; Lauver & Kristof-Brown, 2001). Typically, researchers (e.g., Bretz et al., 1993; Cable & Judge, 1996; Kristof-Brown, 2000; Saks & Ashforth, 2002) investigating multiple levels of fit (PO and PJ fit perceptions) have limited investigations to determining whether recruiters' perceptions support a distinction between levels of fit in hiring applicants. Therefore, future research involving fit perceptions should focus on the perceptions of incumbent employees.

Practitioners and researchers are interested in PE fit most notably for the relationship between fit and positive employee outcomes (Lauver & Kristof-Brown, 2001). Researchers have adhered to Edwards' (1991) recommendation stating that researchers should select outcomes that correspond closely to job content dimensions to determine the degree of variance accounted for by fit levels. Essentially, perceptions of different fit levels should differentially relate to outcomes if these perceptions are truly distinct (Cable & DeRue, 2002). Empirical support for these pursuits was provided by results indicating the unique variance accounted for in attitudes by PO value congruence and PJ demands-abilities fit perceptions (Cable & Judge, 1996; Kristof-Brown, 2000; Lauver & Kristof-Brown, 2001; Saks & Ashforth, 1997). An integrative analysis of multiple levels of fit in a single study serves to provide an improved understanding of what elements constitute overall PE fit (Kristof-Brown et al., 2002). Thus, to enhance construct validity, more research is needed to understand if and how employees conceptualize various perceptions of fit, how these perceptions are related to each other, and whether these perceptions have unique relationships with individual attitudes (Cable & DeRue, 2002; Lauver & Kristof-Brown, 2001).

# Current Study and Research Questions

Further research is needed to improve the understanding of how employees distinguish between various aspects of the work environment and how these fit relationships affect employees' attitudes and behavior (Cable & DeRue, 2002; Kristof, 1996; Kristof-Brown, 2000; Lauver & Kristof-Brown, 2001; Saks & Ashforth, 2002). Previous studies of perceived fit have been plagued with measurement issues, such as one-item scales, scales confounding levels and conceptualizations of fit, items developed ad hoc between fit studies, failure to control for common method variance (Podsakoff et al., 2003), the unidentified contribution of needs-supplies fit and PV fit perceptions, and the exclusion of incumbent employees' perceptions (Cable & DeRue, 2002; Shivy et al., 1999). Only recently have researchers (e.g., Cable & DeRue, 2002) attempted to investigate the conceptual framework of employees' fit perceptions by constructing well-developed measurement scales and analyzing the relationship of multiple fit perceptions to a variety of individual employee outcomes (e.g., job satisfaction and occupational commitment).

The first objective of the current study is to replicate the three-factor model of subjective fit perceptions supported by Cable and DeRue (2002). The second objective of the current study is to further test the structure of Cable and DeRue's (2002) three-factor model by applying additional conceptualizations of previously included fit levels (PO and PJ fit), as well as including multiple conceptualizations of PV fit.

Therefore, three levels of fit (PJ, PO, and PV fit) will be empirically investigated to provide an integrative interpretation of incumbent employees' subjective fit

perceptions. Included in this integrative study are multiple conceptualizations of PJ fit (needs-supplies and demands-abilities fit), PO fit (value congruence and needs-supplies fit), and PV fit (value congruence, needs-supplies fit, demands-abilities fit, personality congruence, and interest congruence). Following Cable and DeRue's (2002) recommendation, PO fit is conceptualized in the current study as value congruence in addition to a novel conceptualization, needs-supplies fit conceptualization. While PO fit has been measured using a needs-supplies fit conceptualization in previous research (e.g., Moos, 1987), the current study examines direct measures of fit perceptions using a PO fit scale dedicated *exclusively* to the needs-supplies conceptualization. Although not examined by Cable and DeRue (2002), multiple direct PV fit measures are included to address the lack of alternative PV fit measurement (Schwartz, 1992; Shivy et al., 1999; Tracey & Rounds, 1995).

The author conducted a pilot study to develop scales of subjective fit perceptions using multiple conceptualizations of PV, PO, and PJ fit. The results of these scale development efforts are presented in Appendix A. Based upon Cable and DeRue's (2002) research, the three-factor model (PO value congruence, PJ needs-supplies fit, and PJ demands-abilities fit) was proposed to best fit the data. However, because items based on previously excluded conceptualizations (personality congruence and interest congruence) of previously excluded fit levels (PV fit) were included in the pilot study, four and five-factor models were also posited to be probable. Pilot study findings supported a four-factor model (PO value congruence, PJ/PO needs-supplies fit, PJ/PV demands-abilities fit, and general PV fit [using multiple conceptualizations] perceptions) as the best fitting

model due to the interpretability of solutions. Therefore, this four-factor solution formed the basis for hypotheses generation for the current study; however, potential theoretically based, alternative models, ranging from one to six factors (see Appendix F), will be tested to determine suitable fitting models.

The current study serves to address the shortcomings of previous research by explicitly identifying fit levels and conceptualizations, including multiple conceptualizations of various fit levels, using scales that do not confound levels of fit and conceptualizations of fit, examining the needs-supplies conceptualization, thoroughly investigating the PV fit level using direct measures, controlling for common method variance, sampling *incumbent* employees, and using a large number of outcome variables to examine construct validity. First, the implications of common method variance using direct measurement of fit perceptions will be controlled by modeling employees' dispositional affect, as suggested by Podsakoff et al. (2003). Second, incumbent employees' perceptions will be assessed to add to the lack of research regarding this group of organizational members. Third, to investigate empirical evidence of construct validity of fit perceptions, a wide range of corresponding outcome variables are included in the current study. Thus, the prediction of individual outcomes will be improved by considering multiple levels of fit, conceptualized in multiple ways, within a single study and identifying which factors of fit (e.g., PO value congruence, PJ/PO needs-supplies fit, PJ/PV demands-abilities fit, and general PV fit) are most strongly related to a series of corresponding individual consequences (e.g., job performance, career satisfaction, and intent to quit) (Cable & DeRue, 2002; Lauver & Kristof-Brown, 2001).

# Study Hypotheses

Hypothesis 1. Using a subset of the fit items (nine), individuals will make distinctions between PO value congruence, PJ needs-supplies fit, and PJ demands-abilities fit perceptions. Therefore, a three-factor model of subjective fit perceptions (e.g., PO value congruence, PJ needs-supplies, and PJ demands-abilities fit) will fit better than the one-, two-, and three-factor alternative models tested by Cable and DeRue (2002), replicating their findings.

Hypothesis 2. Based on pilot work including additional levels and conceptualizations of fit, individuals will make distinctions between PO value congruence, PJ/PO needs-supplies, PJ/PV demands-abilities, and general PV fit perceptions. Therefore, a four-factor model of subjective fit perceptions (e.g., PO value congruence, PJ/PO needs-supplies, PJ/PV demands-abilities, and general PV fit) will fit better than the ten alternative models presented in Appendix F.

Hypothesis 3. Controlling for PJ/PO needs-supplies, PJ/PV demands-abilities, and general PV fit perceptions, individuals' PO value congruence perceptions will be most strongly related to (a) organizational commitment, (b) organizational citizenship behaviors, (c) perceived organizational support, (d) organizational identification, and (e) intent to quit.

Hypothesis 4. Controlling for PO value congruence, PJ/PV demands-abilities, and general PV fit perceptions, individuals' PJ/PO needs-supplies fit perceptions will be most strongly related to (a) intent to quit, (b) job satisfaction, (c) career satisfaction, and (d) occupational commitment.

Hypothesis 5. Controlling for PO value congruence, PJ/PO needs-supplies, and general PV fit perceptions, individuals' PJ/PV demands-abilities fit perceptions will be most strongly related to (a) occupational commitment and (b) job performance.

Hypothesis 6. Controlling for PO value congruence, PJ/PO needs-supplies, and PJ/PV demands-abilities fit perceptions, individuals' general PV fit perceptions will be most strongly related to (a) job satisfaction, (b) career satisfaction, (c) occupational commitment, and (d) job performance.

Table 3 summarizes the hypothesized relationships between fit factors and outcomes. Additionally, Figure 2 represents these hypothesized relationships as a structural model.

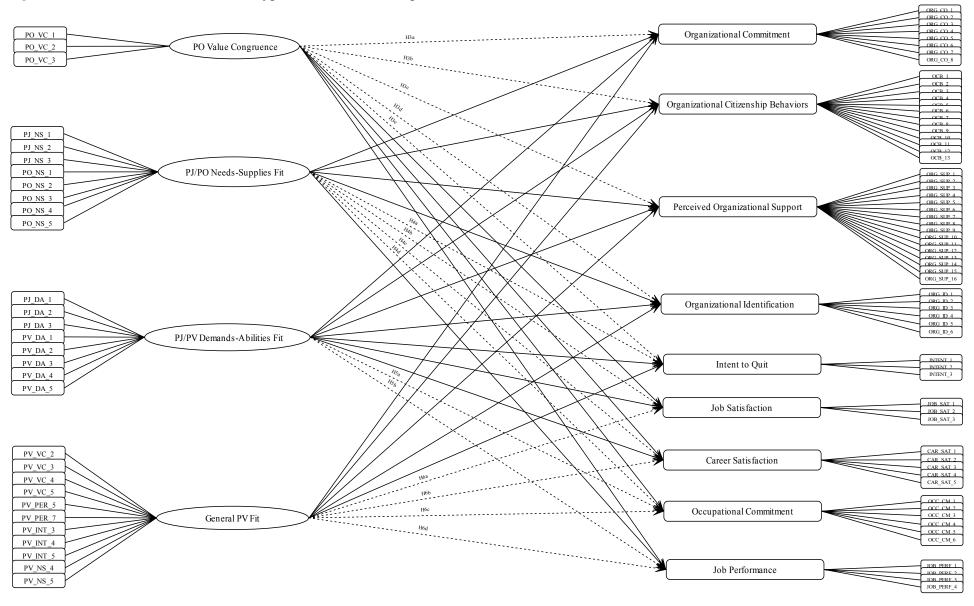
Table 3

Fit Factors and Hypothesized Relationships to Outcomes

	Fit Factors			
Outcomes	PO-VC	PJ/PO-NS	PJ/PV-DA	PV-GEN
Organizational Commitment	НЗа			
Organizational Citizenship Behaviors	НЗЬ			
Perceived Organizational Support	Н3с			
Organizational Identification	H3d			
Intent to Quit	НЗе	H4a		
Job Satisfaction		H4b		Н6а
Career Satisfaction		Н4с		Н6ь
Occupational Commitment		H4d	Н5а	Н6с
Job Performance			H5b	H6d

*Note*. PO-VC = PO fit conceptualized as value congruence; PJ/PO-NS = PJ and PO fit conceptualized as needs-supplies fit; PJ/PV-DA = PJ and PV fit conceptualized as demands-abilities fit; PV-GEN = *general* PV fit conceptualized using multiple conceptualizations: value congruence, needs-supplies fit, personality congruence, and interest congruence. Cells include specific hypothesis.

Figure 2. Full model of fit factors and hypothesized relationships to outcomes.



Note. A full complex structural model (arrows for random measurement error were omitted for clarity; exogenous variables are intercorrelated; endogenous variables are intercorrelated). Dashed lines indicate hypothesized significant paths.

#### **CHAPTER 2**

#### **METHOD**

### **Participants**

Participants were drawn from members of 45 professional, email discussion lists (see Appendix G for a summary of mailing lists used), representing a variety of professions such as human resources, library services, and criminal justice. These discussion lists served as electronic forums for professionals to discuss issues related to their professions and to gather opinions, advice, and instruction from other professionals. Members of professional discussion lists were selected to recruit organizational employees considering themselves to be part of a profession (e.g., accounting, organizational development, human resources). A total of 955 participants responded to the questionnaire; however, only 667 cases remained after applying the following screening criteria: no self-employed professionals, no missing data, no univariate outliers, and no multivariate outliers.

Sixty-eight percent of respondents were women and 88% were Caucasian. The average respondent was 44 years old, had been employed by his or her current employer for 7.6 years, had 12.6 years of full-time and 4.5 years of part-time work experience, and belonged to an organization with an average size of 8,789 members. Ninety-five percent of respondents were full-time employees with the remaining 5% working part-time. Forty-eight percent of respondents held a masters degree while 32% held a doctorate. Respondents indicated their field of work included *one or more* of the following areas:

education (49%), training and development (22%), organizational development and change (17%), evaluation (14%), human resources (11%), organizational behavior (11%), industrial/organizational psychology (8%), medical (5%), library services (5%), general business (5%), engineering (4%), sales/marketing (3%), research (3%), counseling (2%), public relations (2%), legal (2%), and various other professions (11%). Furthermore, respondents indicated their occupational status related to *one or more* of the following positions: university professor (25%), mid-level manager (19%), director (18%), internal consultant (15%), K-12 teacher (11%), librarian (8%), executive (5%), external consultant (5%), frontline supervisor (3%), student (2%), engineer (2%), and other various occupational positions (16%).

A total of 65 completed supervisor/peer rating questionnaires were collected for the 667 participants involved in the study. Fifty-five percent were supervisor relationships while 42% were peer (i.e., colleague or coworker). The average length of employee-supervisor and employee-peer relationships was 4.5 years.

#### Procedure

After procuring approval for my participation for each professional discussion list by each list owner or moderator, participants received an email providing an overview of the study's objectives and asked for participation (see Appendix I for study survey materials). This email included an Internet link to the Web-based questionnaire via email. In addition, a request to forward the email to other professionals eligible for inclusion was included in the email. The first page of the questionnaire requested participants' agreement to participate in the study by providing informed consent

information. This information outlined the purpose of the study, any potential harm that may come from participating in the study, and researchers' contact information should the participants have any questions. By advancing beyond this first page of the questionnaire, participants provided their informed consent to participate in the study. Participants then advanced through a series of Web pages to complete the Web-based questionnaire at their own pace.

At the end of the questionnaire, participants were asked to solicit responses from either their immediate supervisor or peer for productivity-related behavior and performance data. First, the participant was asked to enter the date and time of their completion of the questionnaire to serve as a "key" to link a participant's rating with his or her supervisor or peer's ratings. Second, the participant was asked to email their immediate supervisor or peer including the following information: the date/time entered previously (i.e., the "key"), wording provided on the questionnaire introducing the request of the supervisor or peer's participation and instructions, and an Internet link to a separate Web-based questionnaire (see Appendix J).

The instructions of the supervisor/peer questionnaire asked the supervisor/peer to access the Web-based questionnaire via the emailed link. The first page of this questionnaire asked for the supervisor/peer's informed consent to participate in the study. Next, the supervisor/peer was asked to enter the "key" to link these ratings with the participant's ratings. The supervisor/peer then completed 17 items assessing employees' performance and organizational citizenship behaviors. Please note that the 17 items included on the supervisor or peer questionnaire listed in Appendix E are the same 17

general performance and organizational citizenship behavior items included on the employee questionnaire (see Appendix D).

## Study Variables

## Fit Perceptions

The following fit perception items were developed based upon the results of the pilot study (see Appendix A). Drawing from the relevant PE fit literature, 43 items corresponding to multiple conceptualizations of PV, PO, and PJ fit were included. The resulting pilot study data provided preliminary evidence of the underlying factor structure and discriminant validity between fit items and attitudinal outcomes (e.g., job satisfaction, career satisfaction, and occupational commitment). Using exploratory factor analyses (EFA), three exploratory models, a three-factor, a four-factor, and a five-factor solution were utilized. The three-factor model was proposed to be the most likely candidate as previous EFAs have indicated three factors (PO value congruence, PJ needs-supplies fit, and PJ demands-abilities fit) of items (Cable & DeRue, 2002). However, because items based on previously excluded conceptualizations (e.g., personality congruence and interest congruence) of previously excluded fit levels (e.g., PV fit) were included in the current study, four and five-factor models were also posited to be probable.

Pilot study findings (see Appendix A) supported a four-factor model (PO value congruence, PJ/PO needs-supplies fit, PJ/PV demands-abilities fit, and PV fit [using multiple conceptualizations] perceptions) as the best fitting model due to simple structure analysis (Tabachnick & Fidell, 1996). Therefore, this four-factor solution was used as the

basis of hypothesis development for the current study; however, potential alternative models (see Appendix F) were examined to determine the best fitting model.

For the predictor variables listed below, respondents were asked to rate their agreement with each item on a seven-point scale using the endpoints of *strongly disagree* to *strongly agree*. The items contained on these predictor variables listed below are contained in Appendix C.

Person-organization value congruence. Three items used by Cable and DeRue (2002; e.g., "The things that I value in life are very similar to the things that my organization values") were used to measure PO value congruence perceptions. Based on the pilot data, the coefficient alpha estimate is .93.

Person-job/person-organization needs-supplies fit. A total of eight items were used to assess needs-supplies fit perceptions. Three items used by Cable and DeRue (2002; e.g., "There is a good fit between what my job offers me and what I am looking for in a job") were used to measure PJ needs-supplies fit perceptions. Five items (e.g., "My current organization meets the needs I expect an organization to meet") were applied to measure PO needs-supplies fit perceptions. Based on the pilot data, the coefficient alpha estimate is .94.

Person-job/person-vocation demands-abilities fit. A total of eight items were used to access demands-abilities fit perceptions. Three items used by Cable and DeRue (2002; e.g., "The match is very good between the demands of my job and personal skills") were used to measure PJ demands-abilities fit perceptions. Five items (e.g., "My abilities fit

the demands of my profession") were used to measure PV demands-abilities fit perceptions. Based on the pilot data, the coefficient alpha estimate is .89.

General person-vocation fit. Eleven items (e.g., "My profession represents my interests" and "My profession requires me to be someone I am not") were used to measure PV fit perceptions. These items represented value congruence, needs-supplies fit, personality congruence, and interest congruence conceptualizations. Based on the pilot data, the coefficient alpha estimate is .88.

These 30 fit items were presented along with the following organizational outcome measures listed below (see Appendix C for a full list of fit items). Fit perceptions items were organized in the first section of the questionnaire followed by organizational outcome measures (see Appendix D for a full list of outcome items). *Outcome Variables* 

For the outcome variables listed below (with the exception of dispositional affect), respondents were asked to rate their agreement with each item on a seven-point scale with the endpoints of "strongly disagree" and "strongly agree." The items contained on these outcome variables listed below are contained in the employee questionnaire (see Appendix D) and the supervisor/peer questionnaire (see Appendix E).

Organizational commitment.<sup>2</sup> Allen and Meyer's (1990) eight-item Affective Commitment Scale (e.g., "I would be very happy to spend the rest of my career with this

64

<sup>&</sup>lt;sup>2</sup> Please note that organizational commitment was not included in subsequent confirmatory factor analyses due to the concerns about the ratio of sample size to the number of estimated paths in the proposed model required for appropriate structural equation modeling analyses. Additionally, adequate conceptual overlap existed with organizational identification, such that the conclusions of the current study would not be substantially impacted without the inclusion of organizational commitment.

organization") were used to measure organizational commitment. Saks and Ashforth (2002) reported a coefficient alpha estimate of .78.

Organizational identification. Six items used by Mael and Ashforth (1992; e.g., "When someone criticizes my firm, it feels like a personal insult") were used to measure organization identification. Mael and Ashforth (1992) reported a coefficient alpha estimate of .85.

Intent to quit. Three items used by Lauver and Kristof-Brown (2001; e.g., "I would prefer another job to the one I have now") were used to assess intentions to quit the current employment relationship. Lauver and Kristof-Brown (2001) reported a coefficient alpha estimate of .85.

Job satisfaction. A combination of three items used by Cammann, Fichman, Jenkins, and Klesh (1983) and Hackman and Oldham (1974) were used to measure job satisfaction. One item, developed by Cammann et al. (1983; e.g., "In general, I like working in my current job"), was used to assess job satisfaction. Cammann et al. (1983) reported coefficient alpha estimates ranging from .67 to .95. In addition, two items from the Job Diagnostic Survey (Hackman & Oldham, 1974; e.g., "Generally speaking, I am very satisfied with my job" and "I am generally satisfied with the kind of work I do in my job") that assessed personal reactions toward the job were used to measure job satisfaction. Hackman and Oldham (1974) reported a coefficient alpha estimate of .77.

Career satisfaction. The five-item scale used by Judge, Cable, Boudreau, and Bretz (1995; e.g., "I am satisfied with the success I have achieved in my career") were

used to measure career satisfaction. Judge et al. (1995) reported a coefficient alpha estimate of .87.

Occupational commitment. Meyer et al.'s (1993) six-item Affective Occupational Commitment Scale (e.g., "I regret having entered the profession that I did;" reverse scored) was used to assess occupational commitment. Meyer et al. (1993) reported coefficient alpha estimates averaging .86.

Perceived organizational support.<sup>3</sup> The 16-item scale used by Eisenberger, Huntington, Hutchinson, and Sowa (1986; e.g., "The organization fails to appreciate any extra effort from me;" reverse scored) was used to measure perceived organizational support. Cable and DeRue (2002) reported a coefficient alpha estimate of .94.

Organizational citizenship behaviors. Employees' perceptions of their citizenship behaviors and their supervisor/peer perceptions of these behaviors were measured using Van Dyne and LePine's (1998) 12-item scale (e.g., "I volunteer to do things for this organization"). Cable and DeRue (2002) reported a coefficient alpha estimate of .88.

*Job performance*. Employees' perceptions of their in-role job performance and their supervisor/peer perceptions of employee job performance were measured using Van Dyne and LePine's (1998) four-item scale (e.g., "I perform the tasks that are expected as part of the job"). Cable and DeRue (2002) reported a coefficient alpha estimate of .92.

Dispositional affect. Watson, Clark, and Tellegen's (1988) two ten-item scales (positive affect scale and negative affect scale) were used to assess affect. Watson et al.

66

<sup>&</sup>lt;sup>3</sup> Please note that perceived organizational support was also not included in subsequent confirmatory factor analyses due to the concerns about the ratio of sample size to the number of estimated paths in the proposed model required for structural equation modeling analyses. Additionally, assessment of this variable would greatly inflate the number of estimated paths with the inclusion of 16 indicators, the highest number of indicators for any study variable.

(1988) reported an alpha coefficient estimate of .88 for positive affect and .87 for negative affect. For these two scales, respondents were asked to rate their agreement with each item on a five-point scale using the endpoints of *very slightly or not at all* to *extremely*.

#### CHAPTER 3

#### RESULTS

## Data Analytic Strategy

The analyses of study data were conducted in four distinct phases. First, the data were screened for self-employment, missing data, and outliers. Second, measurement models were tested for the best fitting factor models using confirmatory factor analyses (CFAs). Based on the factor structure of the best fitting model identified, descriptive statistics and correlations for all included study variables were examined. Third, a series of CFA structural equation models (SEMs) were used to investigate the potential influence of common method variance and to formally test study hypotheses. Fourth, two multiple regression analyses were conducted to determine the predictability of fit factors for other-rated behaviors.

## Data Screening

A total of 955 participants responded to the questionnaire; however, only 667 cases were included in the current study based on the following screening criteria: no self-employed professionals, no missing data, no univariate outliers, and no multivariate outliers. The following data were deleted: 23 respondents for self-employment, 111 respondents for missing data<sup>4</sup>, 117 respondents for univariate outliers, and 37 respondents for multivariate outliers. To determine univariate outliers, scores for

<sup>&</sup>lt;sup>4</sup> The large amount of missing data was attributed to participants failing to complete the questionnaire, perhaps due to a loss of interest to continue of started questionnaire.

each variable were standardized into z-scores. Cases falling above 3.29 or below -3.29 standard deviations from the mean for any variable were removed as univariate outliers from the dataset. Mahalanobis distance was used to determine the removal of multivariate outliers greater than the critical value  $\chi^2(39) = 73.40$  (Tabachnick & Fidell, 1996).

#### Fit Models

Before starting descriptive analyses of study data, the properties of the fit predictors were examined using confirmatory factor analyses. The following criteria for determining model fit were applied to all SEM analyses: examination of fit indices, acceptable item loadings, squared multiple correlations of the items, and the suggested modification indices. The following fit indices were used based on the recommendations of Hu and Bentler (1999): root mean square error of approximation (RMSEA), standardized root mean square residual (SRMR), comparative fit index (CFI), and nonnormed fit index (NNFI). The lower bound of good fit for the CFI and NNFI is considered to be .90, while the upper bounds for good fit are considered to be .08 and .10 for the RMSEA and the SRMR, respectively (Vandenberg & Lance, 2000). SEM was selected to account for measurement error, estimate all path coefficients simultaneously, and determine the fit of the overall model to the data.

All proposed models were tested with LISREL 8.52 (Jöreskog & Sörbom, 1996) using maximum likelihood estimation. Maximum likelihood estimation assumes multivariate normality and an adequate sample size (several hundred; Boomsma, 2000) due to the asymptotic properties of the indicators, (meaning the indicators are proven true only for large samples; Anderson & Gerbing, 1988). When determining an appropriate

sample size for SEM, recommendations vary for a suitable minimum number of cases from 150 (Anderson & Gerbing, 1988; Holbert & Stephenson, 2002) to 200 (Chou & Bentler, 1995; Hoyle & Kenny, 1999). Regarding complex structural models, the "rule of 5" (Bentler & Chou, 1987) recommends that the study includes at least five participants for every estimated parameter. However, if the data are normally distributed, this constraint may be lifted (Bentler & Dudgeon, 1996). Additionally, stable parameter estimates have been found with a 4:1 ratio of sample size to number of estimated parameters (Tanaka, 1987), suggesting that a ratio of less than 5:1 may yield stable estimates. The current study clearly exceeded the recommended minimum sample size (150-200 cases; Anderson & Gerbing, 1988; Chou & Bentler, 1995; Holbert & Stephenson, 2002; Hoyle & Kenny, 1999) using 667 cases, with ratios of sample size to number of estimated parameters ranging from 3:1 to 32:1. Furthermore, three indicators or more were provided to measure each latent variable as recommended by Anderson and Gerbing (1984).

### Model Replication

The first objective of this study was to replicate Cable and DeRue's (2002) findings for the hypothesized, three-factor model of subjective perceptions of fit using the nine-item fit subset of the data. This hypothesis (H1) was tested by conducting a confirmatory factor analysis of the fit scales, fitting the data to a three-factor, nine-item measurement model using 667 cases with complete data for all fit items (Jöreskog & Sörbom, 1996). Since H1 serves to replicate Cable and DeRue's (2002) findings, the same confirmatory factor analyses conducted by Cable and DeRue (2002) were

performed to examine alternative models of individuals' fit perceptions to test for extended empirical support for their findings. In pursuit of this extended support, four theoretical models were evaluated in relation to the hypothesized, three-factor model (Hayduk, 1987; Medsker, Williams, & Holahan, 1994). The first alternative model involved specifying the hypothesized, three-factor model (i.e., PO-VC factor, PJ-NS fit factor, and PJ-DA fit factor) with no relationships between the three fit constructs. A second alternative model tested a one-factor model, such that individuals perceive an overall judgment of fit, integrating values, needs, and abilities fit elements. The third alternative model tested whether or not the data fit a two-factor model, represented by a supplementary fit factor (i.e., PO-VC items) and a complementary fit factor (i.e., PJ-NS and PJ-DA fit items) (Muchinsky & Monahan, 1987). The fourth alternative model tested a two-factor model, such that value congruence (i.e., PO fit) items loaded with needs-supplies fit items, while demands-abilities fit items formed a second factor.

Similar to Cable and DeRue's (2002) findings, the hypothesized, three-factor (oblique) model revealed the best fit ( $\chi^2$  [24] = 42.30, p < .05, RMSEA = .038, SRMR = .033, CFI = .99, NNFI = .99), surpassing the fit of all the four other alternative models. These results provide support for Hypothesis 1, showing that the data fit the hypothesized, three-factor model most acceptably. Thus, as presented in Table 4, results provide extended empirical support for Cable and DeRue's (2002) results, conducting multiple tests of the hypothesized and alternative models.

Table 4

Model Replication: Fit Statistics for Alternative Models

Model	$\chi^2$	df	<b>RMSEA</b>	SRMR	CFI	NNFI
Hypothesized Model 3a	42.30	24	.038	.033	.99	.99
Alternative Model 2a	1055.38	26	.239	.153	.83	.76
Alternative Model 2b	1227.26	26	.160	.271	.80	.73
Alternative Model 3b	392.06	27	.137	.273	.94	.92
Alternative Model 1	2374.20	27	.381	.234	.61	.48

*Note.* N = 667 cases; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual; CFI = comparative fit index; NNFI = non-normed fit index.

Model 3a = Items load onto three separate fit factors (oblique relationship): PO value congruence, PJ needs-supplies fit, and PJ demands-abilities fit. Model 2a = Items load onto two factors: complementary and supplementary fit. Model 2b = Items load onto two factors: needs-supplies fit and demands-abilities fit. Model 3b = No relationships between fit factors (orthogonal relationship). Model 1 = All items load onto one fit factor.

### Model Expansion

The second objective of this study was to further test the generalizability of Cable and DeRue's (2002) three-factor model by developing additional conceptualizations of previously included fit levels (PO and PJ fit), as well as including multiple conceptualizations of PV fit. Hypothesis 2 posited a four-factor model of subjective fit perceptions (e.g., PO value congruence, PJ/PO needs-supplies, PJ/PV demands-abilities, and general PV fit) would fit better than the 10 alternative models (see Appendix F for all 11 models).

Item loadings and modification indices for each model were examined for all thirty fit items. It soon became evident that the first indicator of PV-DA fit (PV-DA-1; see Appendix C for item) warranted removal from each model based on extremely large modification indices for this indicator in all 11 models. While this item loaded significantly in each model, results clearly indicated that this item was not accounting for

minimal variance in each model due to the low mean of squared multiple correlation of .23. Additionally, results indicated that this item could potentially cross-load onto factors other than PV-DA fit due to the large modification indices of the remaining factors.

Therefore, this item was removed from further analyses, resulting in a total of 29 fit items.

Findings indicated that the six-factor alternative model demonstrated better fit ( $\chi^2$  [362] = 1562.68, p < .05, RMSEA = .076, SRMR = .052, CFI = .97, NNFI = .97) to the data than the hypothesized, four-factor model, and the nine remaining alternative models. These results do not provide support for H2, indicating that the data did not fit the hypothesized, four-factor model adequately. However, these results were aligned theoretically with the hypothesized model as professionals not only made distinctions between conceptualizations of fit as expected (PO-VC, PJ/PO-NS, PJ/PV-DA, and general PV fit), they made finer distinctions with regard to the hypothesized homogeneous NS and DA factors. Professionals made distinctions between PO-VC, PJ-NS, PO-NS, PJ-DA, PV-DA, and general PV fit, thus supporting the six-factor model as the best fitting model. The multiple tests of the hypothesized and alternative models are presented in Table 5.

Table 5

Model Expansion: Fit Statistics for Alternative Models

Model	$\chi^2$	df	RMSEA	SRMR	CFI	NNFI
Alternative Model 6	1562.68	362	.076	.052	.97	.97
Alternative Model 5a	2294.57	367	.099	.069	.95	.94
Hypothesized Model 4	3229.41	371	.123	.085	.93	.92
Alternative Model 5b	3370.55	367	.126	.105	.92	.91
Alternative Model 3d	4009.81	374	.138	.088	.91	.90
Alternative Model 3c	4891.45	374	.180	.125	.88	.87
Alternative Model 3b	5054.22	374	.189	.137	.88	.87
Alternative Model 3a	5201.91	374	.168	.125	.87	.86
Alternative Model 2b	7244.87	376	.223	.158	.82	.81
Alternative Model 2a	7513.92	376	.236	.177	.81	.80
Alternative Model 1	8123.60	377	.237	.170	.80	.78

*Note.* N = 667 cases; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual; CFI = comparative fit index; NNFI = non-normed fit index.

Based on the support of the six-factor model, H3-6 (see Table 3) were generated based on the hypothesized, four-factor model; however, they were revised to H3-8 (see Table 6) to reflect professionals' conceptual dichotomization of the NS and DA factors. The expanded hypotheses were based on the theoretical underpinnings of the previous hypotheses. For example, the expanded hypotheses for PJ-NS and PO-NS (H4-H5; Table 6) mirrored those of the original hypotheses (H4; Table 3) posited for the hypothesized NS factor (including both PJ and PO fit). Similarly, the expanded hypotheses for PJ-DA and PV-DA (H6-H7; Table 6) mirrored those of the original hypotheses (H5; Table 3) posited for the hypothesized DA factor (including both PJ and PV fit). Please note that no other hypotheses were expanded. The hypotheses expanded to the six-factor model are presented in Table 6.

Table 6

Expanded Hypothesized Relationships to Reflect Six-Factor Model

	Fit Factors							
Outcomes	PO-VC	PJ-NS	PO-NS	PJ-DA	PV-DA	PV-GEN		
Organizational Citizenship Behaviors	НЗа							
Organizational Identification	НЗЬ							
Intent to Quit	Н3с	Н4а	Н5а					
Job Satisfaction		H4b	H5b			H8a		
Career Satisfaction		Н4с	Н5с			Н8Ь		
Occupational Commitment		H4d	H5d	Н6а	Н7а	Н8с		
Job Performance				H6b	H7b	H8d		

Note. PO-VC = PO fit conceptualized as value congruence; PJ-NS = PJ fit conceptualized as needs-supplies fit; PO-NS = PO fit conceptualized as needs-supplies fit; PJ-DA = PJ fit conceptualized as demands-abilities fit; PV-DA = PV fit conceptualized as demands-abilities fit; PV-GEN = general PV fit conceptualized using multiple conceptualizations: value congruence, needs-supplies fit, personality congruence, and interest congruence. Cells include specific hypothesis.

# **Descriptive Statistics**

Before conducting the CFA structural modeling analyses, the data were examined for their descriptive properties. Table 7 presents the means, standard deviations, internal-consistency reliability coefficients, and correlations for each of the study variables. Overall, all scale reliability estimates ranged from .82 to .95, exceeding the criterion of .70 judged as acceptable for newly created scales (Nunnally, 1983). Considerable attenuation existed for both self and other-rated organizational citizenship behaviors (OCBs) and self- and other-rated job performance. These scales were negatively skewed with high means and low standard deviations. For example, means (with standard deviations in parentheses) were 5.82 (.72), 6.32 (.66), 6.59 (.50), and 6.55 (.74), respectively (values rated as 1 = low to 7 = high). Additionally, attenuation was evident for both demands-abilities fit variables, PJ-DA and PV-DA, with means of 6.15 (.72) and 6.29 (.55), respectively. Not surprising, occupational commitment was restricted in range (M = 6.08, SD = .79) due to the professional nature of the sample represented by the large percentage (> 80%) of participants holding advanced degrees.

To initially investigate H3-H8, the patterns of correlations between the fit and outcome variables were examined. As shown in Table 7, all six fit variables were significantly related with a majority of outcome variables. The relative sizes of the correlations between fit variables and outcome variables were consistent with hypotheses (H3-H8). The two organizational fit level variables, PO-VC and PO-NS, were strongly

\_

<sup>&</sup>lt;sup>5</sup> Please note that organizational commitment and perceived organizational support were not included in subsequent analyses due to the concerns about the ratio of sample size to the number of estimated paths in the proposed model required for structural equation modeling analyses.

correlated to one another (.78) as well as to organizational identification (.49 and .46, respectively). While the hypothesized, positive relationship between PO-VC and organizational identification (H3) was supported, surprisingly, PO-NS was also found to relate significantly with this variable (.46). Surprisingly, PJ-DA, PV-DA, and general PV fit had stronger significant, positive relationships with self-rated OCBs (.28, .26, and .27, respectively) compared to the hypothesized relationship with PO-VC (.20). Supportive of hypotheses (H4 and H5), PJ-NS and PO-NS were negatively related to intent to quit (-.64 and -.67, respectively). Occupational commitment related strongest to general PV fit (.66), while self-rated job performance was strongly related to PJ-DA, PV-DA, and general PV fit (.29, .36, and .14, respectively), consistent with hypotheses (H6, H7, and H8). Although the other-rated criteria did not correlate strongly with self-rated criteria, a significant positive correlation was found between the two other-rated variables, OCBs and job performance (.57). Positive affect was found to have a stronger mean correlation (.26) with study variables compared to negative affect (.15); therefore, only positive affect will be included in subsequent analyses of common method variance.

Table 7

Descriptive Statistics, Intercorrelations, and Internal Reliability Estimates

	Variable	M	SD	1	2	3	4	5	6	7	8
1.	PO Value Congruence	5.13	1.39	(.95)							
2.	PJ Needs-Supplies Fit	5.34	1.27	.55**	(.91)						
3.	PO Needs-Supplies Fit	4.78	1.44	78**	.69**	(.93)					
4.	PJ Demands-Abilities Fit	6.15	0.72	.18**	39**	.20**	(.89)				
5.	PV Demands-Abilities Fit	6.29	0.55	08*	.16**	$09^{*}$	.63**	(.89)			
6.	General PV Fit	5.57	0.82	.45**	.58**	.45**	.39**	.27**	(.88)		
7	Positive Affect	3.84	0.58	.19**	23**	16**	27**	23**	.33**	(88.)	
8.	Negative Affect	1.57	0.43	20**	17 <sup>**</sup>	- 19 <sup>**</sup>	18 <sup>**</sup>	12 <sup>**</sup>	- 15 <sup>**</sup>	25**	(.82)
9.	OCBs (Self)	5.82	0.72	.20**	.21**	.18**	.28**	.26**	.27**	.37**	15**
10	OCBs (Other)	6.32	0.66	05	.10	01	.21	02	$27^{*}$	10	.11
11.	Organizational Identification	4.86	1.18	.49**	.30**	.46**	.15**	.07	.24**	.18**	02
12.	Intent to Quit	3.48	1.72	- 57**	64**	- 67**	- 27**	10*	- 48**	14 <sup>**</sup>	.15**
13.	Job Satisfaction	5.78	0.99	.54**	76**	64**	.44**	.23**	59 <sup>**</sup>	.23**	- 18 <sup>**</sup>
14.	Career Satisfaction	5.27	1.09	.25**	.47**	.35**	.34**	.26**	46**	.35**	21**
15.	Occupational Commitment	6.08	0.79	.27**	.40**	.25**	.36**	.29**	66**	.40**	05
16.	Job Performance (Self)	6.59	0.50	.02	.07	.02	.29**	.36**	.14**	.25**	08
17.	Job Performance (Other)	6.55	0.74	.04	.06	.09	.22	13	.07	.08	.25*

(table continues)

Table 7 (continued)

	Variable	9	10	11	12	13	14	15	16	17
1.	PO Value Congruence	<u>-</u>								
2.	PJ Needs-Supplies Fit									
3.	PO Needs-Supplies Fit									
4.	PJ Demands-Abilities Fit									
5.	PV Demands-Abilities Fit									
6.	General PV Fit									
7	Positive Affect									
8.	Negative Affect									
9.	OCBs (Self)	(.90)								
10	OCBs (Other)	.10	(.92)							
11.	Organizational Identification	.32**	21	(.88)						
12.	Intent to Quit	14**	08	32**	(.85)					
13.	Job Satisfaction	.29**	.16	.35**	67**	(.83)				
14.	Career Satisfaction	.27**	.12	.13**	34**	.45**	(.83)			
15.	Occupational Commitment	.33**	.17	.26**	39**	49**	.40**	(.84)		
16.	Job Performance (Self)	.26**	.25*	03	01	.15**	.16**	.19**	(.91)	
17.	Job Performance (Other)	.09	.57**	10	01	.04	.02	.09	.35**	(.93)

Note. N is: 667 for PO value congruence, PJ need-supplies fit, PO needs-supplies fit, PJ demands-abilities fit, PV demands-abilities fit, general PV fit, positive affect, negative affect, self-rated OCBs, organizational identification, intent to quit, job satisfaction, career satisfaction, occupational commitment, and self-rated job performance; 65 for other-rated OCBs and other-rated job performance. Alphas are presented on the main diagonal and enclosed in parentheses. The minimum and maximum values for all variables except positive and negative affect is 1=low to 7=high. The minimum and maximum values for positive and negative affect are 1=low to 5=high. p < .05. \*\* p < .01.

# Common Method Variance Analyses

Before further SEM analyses were conducted to examine the relationships of fit variables to outcome variables, analyses of common method variance (CMV) were conducted to determine if method biases caused measurement error, creating either the interpretation of a stronger or weaker relationship between fit and outcome variables. The use of direct measures to assess fit and the self-report format of outcome variables in the same study may lead to common method variance, inflating the strength of relationships between variables (Kristof, 1996; Podsakoff et al., 2003). Therefore, following Podsakoff et al.'s (2003) recommendations, Watson et al.'s (1988) dispositional affectivity scales (positive affect scale and negative affect scale) were proposed to account for common method variance using statistical modeling procedures. Positive affect is defined as "an individual's disposition to experience positive mood states and have an overall sense of well-being" (Munz et al., 1996, p. 796). Negative affect is defined as "a mooddispositional dimension that reflect pervasive and individual differences in negative emotionality and self concept" (Podsakoff et al., 2003, p. 883). Watson and Clark (1984) posit the following:

Self-reports of negative features of the work situation and negative affective reactions may both be influenced by negative affectivity, whereas self-reports of positive affects of the work situation and positive affective reactions may both be influenced by positive affectivity. (Burke, Brief, & George, 1993, p. 410).

Positive affect was selected as the indicator for common method scale for the following analyses based on three reasons. First, due to the higher mean correlation of positive

affect with study variables as compared to negative affect (mean correlations of .26 and .15, respectively, see Table 7). Second, positive affect has been shown to relate stronger as a common method factor to self-report organizational measures compared to negative affect (Chen & Spector, 1991; Jex & Spector, 1996; Williams, Gavin, & Williams, 1996). Third, negative affect was excluded from the analyses in order to limit the degrees of freedom by decreasing the number of estimated paths for each model tested.

To examine positive affect as a common method factor, two general SEM approaches based upon the work of Munz et al., (1996) and Williams et al. (1996) were used. A *confounded* CFA measurement modeling analysis served to determine whether "self-reports of environmental conditions and psychological states should reflect the methodological presence" of positive affect in the survey findings (Munz et al., 1996, p. 795). Thus, the analysis investigated whether a participant's positive affect contaminated responses to other variables at the *item level*. A *congeneric* CFA structural modeling analysis served to determine whether positive affect was "related substantively to other variables through perceptions, affective reactions, and behaviors of individuals" with high positive affect (Munz et al., 1996, p. 795). Whereas the confounded model analysis examined for measurement contamination at the *item level*, a congeneric analysis explored whether a participant's level of positive affect contaminated responses to other variables at the *construct level*.

## Confounded Model Analysis

This first set of CMV analyses includes two confounded models (Model 1a and Model 1b). In both models, the data were fit to a 14-factor, 79-item measurement model.

In Model 1a, paths between the 10 items measuring positive affect and the remaining 69 items used to measure fit perceptions and outcome variables were restricted to zero. Additionally, positive affect was uncorrelated with the 13 substantive variables; however, substantive variables were allowed to intercorrelate. In Model 1b, the 68 paths between positive affect and the remaining items were estimated, while positive affect remained uncorrelated with the remaining variables and the substantive variables were allowed to intercorrelate. By comparing the results of Model 1a and Model 1b, the indication of the extent to which positive affect influenced individuals' responses at the item level was provided.

The confounded modeling results were interpreted in four steps. First, all item factor loadings were investigated to determine whether each indicator significantly loaded on the respective factor (e.g., job satisfaction indicators load significantly on the job satisfaction factor). Second, all factor loadings were analyzed for significance. Third, all correlations among the 13 substantive variables were examined to determine if the magnitude of these correlations decrease when items were freely estimated to load on the positive affect factor (i.e., examining Model 1a compared to Model 1b). Fourth, the overall fit of each model was compared to determine the extent to which positive affect may or may not have improved the fit of the model. Both Model 1a and Model 1b are represented in the model provided in Figure 3.

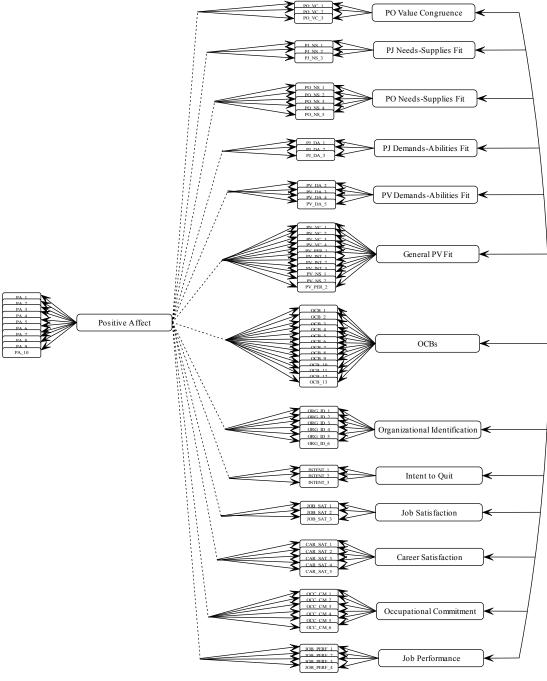


Figure 3. Confounded confirmatory factor model.

*Note.* A confirmatory factor model representing positive affect through factor loadings (arrows for random measurement error were omitted for clarity; the sets of arrows depicting relationships among substantive factors represent 78 factor correlations; positive affect was uncorrelated with substantive factors). Dashed lines indicate fixed paths in Model 1a and estimated paths in Model 1b.

Results showed that each indicator loaded significantly on its respective factor as well as the positive affect factor (ts > 1.96, ps < .05) with the exception of the second indicator of intent to quit which almost reached conventional levels of significance for positive affect, t(1) = -1.70, p > .05 (see Table 8 for Model 1b factor loadings). Noticeably, several indicators of OCBs (7), career satisfaction (4), occupational commitment (4), and general PV fit (5) loaded quite highly on the positive affect factor, suggesting that responses to these items were strongly influenced by positive affect. The completely standardized parameter estimates for Model 1b are presented in Table 8.

Table 8

Completely Standardized Parameter Estimates for Confounded Model 1b

* 4	Respective	Positive Affect
Indicator	Factor Loading	Factor Loading
PO-VC	(Factor 1)	(Factor 14)
1	.90	.18
2	.90	.21
3	.94	.19
PJ-NS Fit	(Factor 2)	
1	.86	.23
2	.91	.24
3	.82	.21
PO-NS Fit	(Factor 3)	
1	.89	.13
2	.93	.15
2 3 4	.83	.15
	.70	.12
5	.89	.18
PJ-DA Fit	(Factor 4)	
1	.82	.27
2	.87	.26
3	.75	.29
PV-DA Fit	(Factor 5)	
1	.86	.20
2	.87	.24
2 3	.83	.23
4	.62	.22
General PV Fit	(Factor 6)	
1	.53	.32
2	.49	.19
3	.55	.22
3 4 5	.58	.31
5	.57	.24
6	.60	.33
	.65	.20
7 8	.60	.22
9	.70	.24
10	.71	.27
11	.51	.27
		(table continues)

(table continues)

Table 8 (continued)

	Respective	Positive Affect
Indicator	Factor Loading	Factor Loading
Organizational Citizenship Behaviors (Self)	(Factor 7)	(Factor 14)
1	.51	.27
2	.57	.15
3	.58	.24
4	.61	.24
5	.63	.28
6	.62	.23
7	.50	.14
8	.68	.23
9	.72	.29
10	.57	.32
11	.46	.36
12	.55	.36
13	.56	.34
Organizational Identification	(Factor 8)	
1	.75	.13
2	.57	.15
3	.71	.21
4 5	.88	.14
	.84	.18
6	.59	.12
Intent to Quit	(Factor 9)	
1	.80	23
2	.83	$07^{\dagger}$
3	.77	10
Job Satisfaction	(Factor 10)	
1	.89	.17
2	.55	.31
3	.86	.19
Career Satisfaction	(Factor 11)	
1	.77	.38
2	.85	.37
3	.50	.14
3 4 5	.67	.29
5	.48	.31

(table continues)

Table 8 (continued)

	Respective	Positive Affect
Indicator	Factor Loading	Factor Loading
Occupational Commitment	(Factor 12)	(Factor 14)
1	.35	.17
2	.70	.29
3	.69	.43
4	.71	.35
5	.65	.33
6	.62	.47
Job Performance (Self)	(Factor 13)	
1	.83	.27
2	.88	.22
3	.77	.24
4	.74	.23
Positive Affect		
1		.65
2		.71
3		.65
4		.76
5		.63
6		.56
7		.66
8		.69
9		.63
10		.61

*Note.* N = 667; All parameters loaded significantly (p's < .05-.01) on their respective factor and the positive affect factor unless noted with a  $^{\dagger}$ .

As shown in Table 9, the magnitude of the factor correlations linking substantive variables was slightly lower in Model 1b than in Model 1a, with an average difference of .05 between the 78 sets of correlations. The largest average difference (.09) was found for OCB correlations. As presented in Table 10, findings indicated that Model 1b fit the data slightly better ( $\chi^2$  [2855] = 6916.24, p < .05, RMSEA = .050, SRMR = .050, CFI = .97, NNFI = .97) than Model 1a ( $\chi^2$  [2924] = 7348.77, p < .05, RMSEA = .052, SRMR = .092, CFI = .97, NNFI = .97); however, the difference between the fit indices for each model was extremely limited, considering the 69 degrees of freedom difference between models. For example, the difference between RMSEA indices for each model was only .002, while the difference between SRMR indices was only .042. Thus, the more parsimonious model, Model 1a, fits as well as Model 1b. Overall, the confounded measurement model results provide support for the measurement contamination of positive affect based on the predominant significant factor loadings and the slight difference in mean correlations; however, the contamination appears to only minimally influence the responses to other variables. The factor correlations among substantive variables are presented in Table 9. Finally, the fit statistics for each confounded and congeneric model are presented in Table 10.

Table 9

Interfactor Correlations Between Substantive Variables

	Model					
Substantive relationship	$1a^{\phi}$	$1b^{\phi}$	$2a^{\psi}$	$2b^{\Psi}$		
OCBs (Self) – Career Satisfaction	.30	.16	.11	.06		
OCBs (Self) – Intent to Quit	17	11	.04	.02		
OCBs (Self) – Job Performance (Self)	.27	.18	.16	.11		
OCBs (Self) – Job Satisfaction	.28	.22	.05	.06		
OCBs (Self) – Occupational Commitment	.37	.21	.12	.07		
OCBs (Self) – Organizational Identification	.33	.27	.20	.17		
Occupational Commitment – Career Satisfaction	.48	.35	.06	.03		
Occupational Commitment – Intent to Quit	47	45	09	10		
Occupational Commitment – Job Satisfaction	.53	.49	.08	.09		
Organizational Identification – Career Satisfaction	.16	.09	.00	02		
Organizational Identification – Intent to Quit	39	37	01	02		
Organizational Identification – Job Performance (Self)	05	11	07	09		
Organizational Identification – Job Satisfaction	.43	.40	.05	.05		
Organizational Identification – Occupational Commitment	.27	.20	.09	.08		
Job Performance (Self) – Career Satisfaction	.19	.09	.06	.02		
Job Performance (Self) – Intent to Quit	02	.03	.03	.02		
Job Performance (Self) – Job Satisfaction	.14	.09	.05	.06		
Job Performance (Self) – Occupational Commitment	.24	.12	.08	.04		
Career Satisfaction – Intent to Quit	36	32	.01	.00		
Career Satisfaction – Job Satisfaction	.46	.41	.02	.03		
Intent to Quit – Job Satisfaction	79	78	11	11		

(table continues)

Table 9 (continued)

	Model					
Substantive relationship	$1a^{\phi}$	$1b^{\phi}$	$2a^{\Psi}$	$2\mathrm{b}^{\psi}$		
PO-VC – OCBs (Self)	.22	.15				
PO-VC – Organizational Identification	.54	.52				
PO-VC – Intent to Quit	64	62				
PO-VC – Job Satisfaction	.62	.60				
PO-VC – Career Satisfaction	.25	.19				
PO-VC – Occupational Commitment	.30	.23				
PO-VC – Job Performance (Self)	.01	05				
PJ-NS Fit – OCBs (Self)	.22	.13				
PJ-NS Fit – Organizational Identification	.35	.31				
PJ-NS Fit – Intent to Quit	72	71				
PJ-NS Fit – Job Satisfaction	.83	.81				
PJ-NS Fit – Career Satisfaction	.48	.43				
PJ-NS Fit – Occupational Commitment	.46	.39				
PJ-NS Fit – Job Performance (Self)	.09	.02				
PO-NS Fit – OCBs (Self)	.19	.14				
PO-NS Fit – Organizational Identification	.51	.50				
PO-NS Fit – Intent to Quit	74	73				
PO-NS Fit – Job Satisfaction	.74	.73				
PO-NS Fit – Career Satisfaction	.33	.29				
PO-NS Fit – Occupational Commitment	.29	.25				
PO-NS Fit – Job Performance (Self)	.01	04				
PJ-DA Fit – OCBs (Self)	.30	.20				
PJ-DA Fit – Organizational Identification	.16	.10		(, 11		

(table continues)

Table 9 (continued)

	Model							
Substantive relationship	$1a^{\phi}$	$1b^{\phi}$	$2a^{\psi}$	$2b^{\psi}$				
PJ-DA Fit – Intent to Quit	30	26						
PJ-DA Fit – Job Satisfaction	.42	.38						
PJ-DA Fit – Career Satisfaction	.38	.29						
PJ-DA Fit – Occupational Commitment	.40	.30						
PJ-DA Fit – Job Performance (Self)	.32	.25						
PV-DA Fit – OCBs (Self)	.28	.20						
PV-DA Fit – Organizational Identification	.10	.05						
PV-DA Fit – Intent to Quit	12	08						
PV-DA Fit – Job Satisfaction	.21	.16						
PV-DA Fit – Career Satisfaction	.30	.22						
PV-DA Fit – Occupational Commitment	.37	.29						
PV-DA Fit – Job Performance (Self)	.39	.34						
General PV Fit – OCBs (Self)	.30	.16						
General PV Fit – Organizational Identification	.28	.22						
General PV Fit – Intent to Quit	57	55						
General PV Fit – Job Satisfaction	.63	.60						
General PV Fit – Career Satisfaction	.52	.44						
General PV Fit – Occupational Commitment	.75	.69						
General PV Fit – Job Performance (Self)	.14	.04						

Note. N = 667; These estimates obtained from PHI matrix; These estimates obtained from PSI matrix.

Model 1a = all items allowed to load on respective factors (only positive affect items allowed to load on positive affect factor). Model 1b = all items allowed to load on respective factors and positive affect factor. Model 2a = all relationships between positive affect and other variables fixed to zero. Model 2b = all relationships between positive affect and other variables estimated.

Table 10

Fit Statistics for Confounded and Congeneric Models

Model	$\chi^2$	df	RMSEA	SRMR	CFI	NNFI
Confounded Model 1a	7348.77	2924	.052	.092	.97	.97
Confounded Model 1b	6916.24	2855	.050	.050	.97	.97
Congeneric Model 2a	7348.77	2924	.052	.092	.97	.97
Congeneric Model 2b	7122.13	2911	.051	.055	.97	.97

*Note.* N = 667 cases; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual; CFI = comparative fit index; NNFI = non-normed fit index.

Model 1a = all items allowed to load on respective factors (only positive affect items allowed to load on positive affect factor). Model 1b = all items allowed to load on respective factors and positive affect factor. Model 2a = all relationships between positive affect and other variables fixed to zero. Model 2b = all relationships between positive affect and other variables estimated.

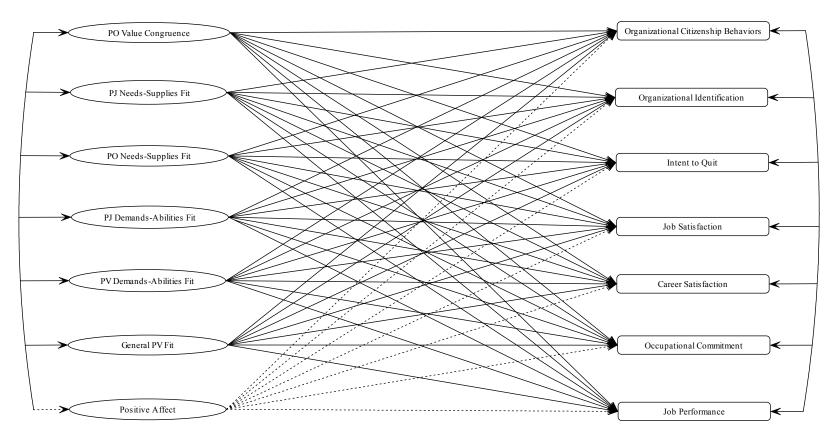
# Congeneric Model Analysis

This second set of CMV analyses included two congeneric models (Models 2a and Model 2b), treating positive affect as a covariate. In Model 2a, the paths from positive affect to the endogenous variables (self-rated OCBs, organizational identification, intent to quit, job satisfaction, career satisfaction, occupational commitment, and self-rated job performance) were restricted to zero. Additionally, the correlations between positive affect and the remaining exogenous fit variables (PO-VC, PJ-NS, PO-NS, PJ-DA, PV-DA, and general PV fit) were constrained to zero; however, the correlations between exogenous fit variables were estimated along with the correlations between endogenous variables. Model 2b was similar to Model 2a except that the seven paths from positive affect to the seven endogenous variables were estimated, as well as the six correlations of positive affect with the exogenous fit variables. Thus, the correlations among the disturbances for the endogenous variables represented shared variance that remained, after positive affect was controlled. By

comparing the results of Model 2a and Model 2b, the indication of the extent to which positive affect related to the process of measuring fit and outcome variables was provided.

The congeneric modeling results were interpreted in three steps. First, correlations among endogenous variables were examined to determine how much residual shared variance was accounted for by positive affect, after the exogenous fit variables were controlled. Second, unique relationships between positive affect and the seven endogenous variables were examined. Third, the overall fit of each model was compared to determine if and to what extent positive affect improved the fit of model. Both Model 2a and Model 2b are represented in the model provided in Figure 4.

Figure 4. Congeneric complex structural model.



*Note.* A complex structural model representing positive affect through structural parameters (the measurement model was omitted for clarity; the sets of arrows depicting relationships among exogenous variables represent 21 factor correlations; the sets of arrows depicting relationships among substantive residuals represent 21 correlations residuals for the substantive variables). Dashed lines indicate fixed paths in Model 2a and estimated paths in Model 2b.

As shown in Table 9, the magnitude of the correlations between the endogenous variables was slightly lower in Model 2b than in Model 2a, with an average difference of .02 between the 21 sets of correlations. The results of Model 2b clearly indicated that positive affect slightly influenced perceptions of five out of seven endogenous variables (self-rated OCBs, organizational identification, intent to quit, job satisfaction, career satisfaction, occupational commitment, and self-rated job performance; all ts > 1.96, ps < .05). Surprisingly, positive affect was the only exogenous variable that significantly predicted self-rated OCBs, suggesting that positive affect strongly influenced the ratings for this variable. Finally, findings indicated that Model 2b fit the data slightly better ( $\chi^2$ [2911] = 7122.13, p < .05, RMSEA = .051, SRMR = .055, CFI = .97, NNFI = .97) than Model 2a ( $\chi^2$  [2924] = 7348.77, p < .05, RMSEA = .052, SRMR = .092, CFI = .97, NNFI = .97); however, the difference between the fit indices for each model was extremely limited, considering the 13 degrees of freedom difference between models. For example, the difference between RMSEA indices for each model was only .001, while the difference between SRMR indices was only .037. Thus, the more parsimonious model, Model 2a, fits as well as Model 2b. Overall, the congeneric structural model results provide support for the influence of positive affect. Positive affect held significant relationships with over half of the endogenous variables in Model 2b. Additionally, the slight difference in mean correlations between Model 2a and 2b provided evidence of the influence of positive affect; however, this influence appeared to be only minimal.

# Summary

The results of confounded and congeneric modeling analyses indicated that positive affect inflated responses to study variables. However, both analyses showed this influence to be minimal based on the slight difference in mean factor correlations between Models 1a /1b and Models 2a/2b. Comparing the two common method approaches of confounded (item level) versus congeneric (variable level) analysis results, the effects of positive affect as a common method factor appeared to be *minimally* stronger at the item level, based on the size of the disparities between the correlations and fit indices of Models 1a/1b. Although the influence of responses was marginal, positive affect was included as a covariate variable in further CFA structural modeling analyses to provide more accurate interpretations of the relationships between fit predictors and outcomes as a result of these findings.

## Full Structural Model Analyses

Based on the results of the CMV analyses, it was evident that positive affect did not have a significantly, substantial impact on all self-rated variables. However, positive affect was shown to have a slight influence on participant's responses to several variables (e.g., OCBs, career satisfaction, and occupational commitment) warranting the inclusion of positive affect in subsequent SEM analyses, examining the influence of positive affect as a common method factor at the variable level. Therefore, positive affect was included in the following analysis to more accurately interpret the estimated relationships between variables. As hypotheses were not generated for positive affect, positive affect clearly accounted for variance for some of the outcome variables, as discovered originally in the

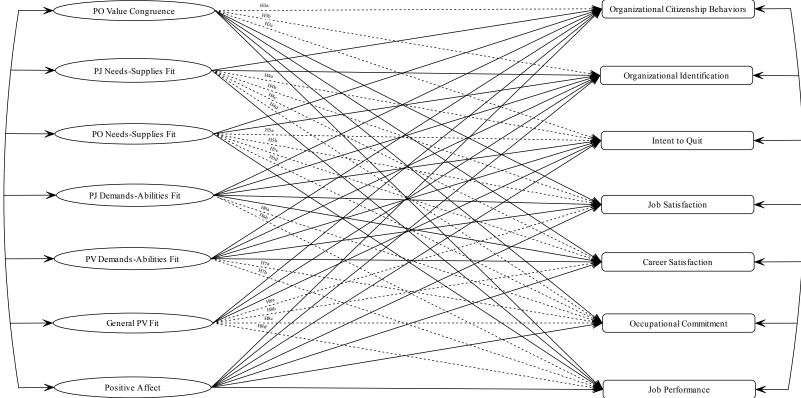
discussion of the congeneric modeling analyses. Positive affect was related to OCB ( $\beta$  = .30, p < .01), organizational identification ( $\beta$  = .09, p < .05), career satisfaction ( $\beta$  = .22, p < .01), occupational commitment ( $\beta$  = .21, p < .01), and job performance ( $\beta$  = .20, p < .01).

To formally test hypotheses (H3-H8), a SEM analysis was used to identify factors and measure the influences of exogenous variables (six fit scales and positive affect scale) on the endogenous variables (attitudinal and self-rated behavior scales). As presented in Figure 5, the proposed model included seven exogenous variables (all six fit scales in addition to the one scale used for positive affect) and seven endogenous variables (all outcome scales with the *exception* of negative affect, other-rated OCBs, and other-rated job performance)<sup>6</sup>. Figure 5 presents the proposed model including the hypothesized paths.

 $<sup>^6</sup>$  Negative affect was not included due to the lack of strong correlations with study variables in comparison to positive affect. Additionally, this variable was not included in the analysis do to the concern for adding unnecessary paths to the model, decreasing the ratio of sample size to estimated paths. Furthermore, other-rated OCBs and other-rated job performance were not included in the analyses, as an adequate number of cases did not exist for inclusion in the SEM analysis (n = 65).

Figure 5. Proposed structural model with hypothesized relationships.

PO Value Congruence
PO Value Congruence
PO Value Congruence



*Note.* A complex structural model (the measurement model was omitted for clarity; the sets of arrows depicting relationships among exogenous variables represent 21 factor correlations; the sets of arrows depicting relationships among endogenous variables represent 21 correlations residuals). Dashed lines indicate hypothesized significant paths.

The sequence of these analyses of the proposed model was based on the two-step strategy suggested by Anderson and Gerbing (1988). First, the measurement part of the model was estimated. Second, given adequate fit of the measurement model, the measurement and structural parts of the model were estimated simultaneously to examine support for hypotheses (H3-H8). This two-step strategy allowed for the detection of any changes in the pattern of standardized coefficients (relationships between variables) between the measurement component of the model and the structural component of the model, even though any changes between the measurement and structural model were anticipated to be minimal. The use of a one-step approach does not detect whether the source of poor model fit is due to the measurement or the structural properties of the model. Therefore, the two-step strategy ensures that poor fit for the structural model would not be attributed to a poorly fitting measurement model.

#### Measurement Model

The data were modeled by a 14-factor, 79-item measurement model. As shown in Table 11, all indicators loaded significantly on their corresponding latent construct. Each explained substantial amounts of item variance ( $R^2$  ranged from .15 to .91). However, indicators for several variables (e.g., OCB, general PV fit, and positive affect) did not load as strongly compared to other variables. Global fit indices indicated that the measurement model fit the data reasonably well ( $\chi^2$ [2911] = 7122.13, p < .05, RMSEA = .051, SRMR = .055, CFI = .97, NNFI = .97). Table 11 reports the factor loadings for each indicator included in the measurement model. Table 12a presents all interfactor correlations.

Table 11

Indicator Loadings for the Hypothesized Measurement Model

	D	
Indicator	Respective Factor Loading	$R^2$
PO-VC	(Factor 1)	K
1	.92	.84
2	.93	.86
3	.96	.91
PJ-NS Fit	(Factor 2)	.71
1	.89	.80
2	.94	.89
3	.84	.71
PO-NS Fit	(Factor 3)	. / 1
1	.90	.80
	.94	.88
2 3 4	.85	.72
4	.70	.50
5	.91	.82
PJ-DA Fit	(Factor 4)	
1	.86	.75
2	.91	.82
3	.81	.65
PV-DA Fit	(Factor 5)	
1	.88	.78
	.91	.82
2 3	.86	.74
4	.66	.43
General PV Fit	(Factor 6)	
1	.62	.39
2	.54	.29
3 4 5	.59	.35
4	.66	.44
5	.62	.39
6	.69	.47
7 8	.67	.45
	.64	.40
9	.73	.53
10	.76	.57
_ 11	.58	.33
<u> </u>	·	(table continues)

(table continues)

Table 11 (continued)

* · ·	Respective	-2
Indicator	Factor Loading	$R^2$
Organizational Citizenship Behaviors (Self)	(Factor 7)	
1	.58	.33
2 3 4	.57	.32
3	.63	.39
4	.65	.42
5	.69	.47
6	.65	.42
7	.50	.25
8	.71	.50
9	.78	.61
10	.65	.43
11	.58	.33
12	.66	.43
13	.66	.44
Organizational Identification	(Factor 8)	
1	.76	.57
2	.58	.34
3	.74	.54
4	.89	.79
5	.86	.73
6	.60	.36
Intent to Quit	(Factor 9)	
1	.83	.69
2	.82	.67
3	.77	.59
Job Satisfaction	(Factor 10)	
1	.91	.82
2	.61	.37
3	.88	.77
Career Satisfaction	(Factor 11)	
1	.86	.74
	.93	.86
3	.51	.26
2 3 4 5	.73	.53
5	.56	.32

(table continues)

Table 11 (continued)

	Respective	
Indicator	Factor Loading	$R^2$
Occupational Commitment	(Factor 12)	
1	.39	.15
2	.74	.55
3	.82	.67
4 5	.78	.61
5	.72	.52
6	.78	.61
Job Performance (Self)	(Factor 13)	
1	.88	.77
2	.90	.82
3	.81	.66
4	.78	.61
Positive Affect	(Factor 14)	
1	.65	.42
2	.73	.53
3	.65	.43
4	.78	.61
5	.63	.39
6	.56	.32
7	.66	.44
8	.68	.46
9	.62	.39
10	.61	.37

*Note.* N = 667. All loadings are completely standardized and significant (p < .01).  $R^2 =$  squared multiple correlations indicating the amount of unique variance accounted for in the model by each item.

Table 12a

Interfactor Correlations for the Hypothesized Measurement Model

	Variable	1	2	3	4	5	6	7	8	9
1.	PO Value Congruence	1.00		<u> </u>			0		0	
2.	PJ Needs-Supplies Fit	.56	1.00							
3.	PO Needs-Supplies Fit	.85	.72	1.00						
4.	PJ Demands-Abilities Fit	.18	.41	.19	1.00					
5.	PV Demands-Abilities Fit	.10	.19	.10	.67	1.00				
6.	General PV Fit	.49	.63	.49	.43	.32	1.00			
7	Positive Affect	.21	.25	.18	.29	.24	.38	1.00		
8.	OCBs (Self)	.22	.22	.19	.30	.28	.30	.39	1.00	
9.	Organizational Identification	.54	.35	.51	.16	.10	.28	.19	.33	1.00
10.	Intent to Quit	64	72	74	30	12	56	18	17	39
11.	Job Satisfaction	.62	.83	.74	.42	.21	.63	.22	.28	.43
12.	Career Satisfaction	.25	.48	.33	.38	.30	.52	.41	.30	.16
13.	Occupational Commitment	.30	.46	.29	.40	.37	.75	.48	.37	.27
14.	Job Performance (Self)	.01†	.09	.01†	.32	.39	.14	.27	.27	05 <sup>†</sup>

(table continues)

Table 12a (continued)

	Variable	10	11	12	13	14
1.	PO Value Congruence					
2.	PJ Needs-Supplies Fit					
3.	PO Needs-Supplies Fit					
4.	PJ Demands-Abilities Fit					
5.	PV Demands-Abilities Fit					
6.	General PV Fit					
7	Positive Affect					
8.	OCBs (Self)					
9.	Organizational Identification					
10.	Intent to Quit	1.00				
11.	Job Satisfaction	79	1.00			
12.	Career Satisfaction	36	.46	1.00		
13.	Occupational Commitment	47	.53	.48	1.00	
14.	Job Performance (Self)	$02^{\dagger}$	.14	.19	.24	1.00

*Note.* N = 667; All estimates were significant (p's < .05-.01) unless noted with a  $^{\dagger}$ .

#### Structural Model

Once the measurement model was estimated, the structural model was examined to investigate hypotheses (H3-H8). The data were again modeled by a 14-factor, 79-item structural model. Global fit indices indicated that the structural model fit the data reasonably well ( $\chi^2$ [2911] = 7122.13, p < .05, RMSEA = .051, SRMR = .055, CFI = .97, NNFI = .97). It should be noted that these fit indices were the same for the measurement model; thus, there was no difference in fit between the measurement and structural models<sup>7</sup>.

As presented in Figure 6, SEM results provided substantial evidence for the convergent and discriminant validity of these six fit perception factors (PO-VC, PJ-NS, PO-NS, PJ-DA, PV-DA, and general PV fit). Overall, the hypotheses for PO-VC provided only minimal support for hypothesis set 3, as the data supported one out of three hypotheses. The relationship between PO-VC and organizational identification ( $\beta$  = .34, p < .01) was significant and supportive of H3a. However, the hypothesized relationships with OCB (H3b) and intent to quit (H3c) were not significant. Surprisingly, a nonhypothesized, negative relationship with career satisfaction ( $\beta$  = -.20, p < .01) was significant. In addition, PO-VC was unrelated to most of the other nonhypothesized outcomes, revealing evidence of discriminant validity (Schwab, 1999).

<sup>&</sup>lt;sup>7</sup> Unlike most uses of SEM, a series of nested CFAs are not being tested in these analyses. Rather, the analyses are testing the relationships of all study variables to one another while controlling for measurement error and common method variance. Furthermore, all paths between exogenous and endogenous variables were estimated which duplicates the measurement model specifications; however, the structural model of path relationships includes unidirectional rather than by directional relationships.

The hypotheses for PJ-NS provided moderate support for hypothesis set 4, as the data supported three out of four hypotheses. The relationships between PJ-NS fit and intent to quit ( $\beta$  = -.28, p < .01), job satisfaction ( $\beta$  = .46, p < .01), and career satisfaction ( $\beta$  = .25, p < .01) were supportive of H4a-c. However, the hypothesized relationship with occupational commitment (H4d) was not significant. PJ-NS fit was unrelated to most of the other nonhypothesized outcomes, offering evidence of discriminant validity (Schwab, 1999).

The hypotheses for PO-NS provided partial support for hypothesis set 5, as the data supported two out of four hypotheses. The hypothesized relationships between PO-NS fit and intent to quit ( $\beta$  = -.42, p < .01) and job satisfaction ( $\beta$  = .34, p < .01) were supportive of H5a-b. However, the hypothesized relationships with career satisfaction (H5c) and occupational commitment (H5d) were not significant. Unexpectedly, the relationship of PO-NS with organizational identification ( $\beta$  = .26, p < .01) was significant. PO-NS fit was not related to OCB and job performance, providing evidence of discriminant validity.

The hypotheses for PJ-DA provided no support for hypothesis set 6, as the data failed to support neither of the two hypotheses. PJ-DA fit was unrelated to the hypothesized outcomes of occupational commitment and job performance; thus, H6a-b was not supported. Two significant, unanticipated relationships were found for intent to quit ( $\beta = -.10$ , p < .05) and job satisfaction ( $\beta = .15$ , p < .01).

The hypotheses for PV-DA provided strong support for hypothesis set 7, as the data supported both hypotheses. The relationships between PV-DA fit and occupational

commitment ( $\beta$  = .12, p < .01) and job performance ( $\beta$  = .30, p < .01) were supportive of H7a-b. The nonhypothesized, significant relationships with intent to quit ( $\beta$  = .09, p < .05) were surprising. PV-DA fit was unrelated to most of the other nonhypothesized outcomes, offering evidence of discriminant validity (Schwab, 1999).

The set of hypotheses for general PV fit provided moderately strong support for H8 as the data supported three out of four hypotheses. General PV fit was related to job satisfaction ( $\beta$  = .15, p < .01), career satisfaction ( $\beta$  = .27, p < .01), and occupational commitment ( $\beta$  = .67, p < .01), supportive of H8a-c. Unexpectedly, the hypothesized relationship with job performance (H8d) was not supported, while a significant relationship was found with intent to quit ( $\beta$  = -.17, p < .01).

Overall, these findings provided moderate support for 11 of the 19 hypotheses, in addition to identifying six unexpected, significant relationships. These results contributed insight into the relations of the six fit predictors and attitudinal and behavior outcomes. For example, organizational identification was only significantly related to the two organizational-level fit constructs, PO-VC and PO-NS fit. Additionally, PJ-NS fit was the strongest predictor of job satisfaction ( $\beta$ = .46, p < .01), while PO-NS fit was the strongest predictor of intent to quit ( $\beta$ = -.42, p < .01). General PV fit was significantly correlated with occupational commitment, representing the strongest relationship between fit constructs and outcomes ( $\beta$ = .67, p < .01). While PJ-DA, PV-DA, and general PV fit were hypothesized to significantly relate to job performance, only PV-DA fit had a significant, positive correlation. Another surprising finding was the significant, negative

relationship between PO-VC and career satisfaction. Figure 6 and Table 12b present the standardized parameter estimates for the structural model.

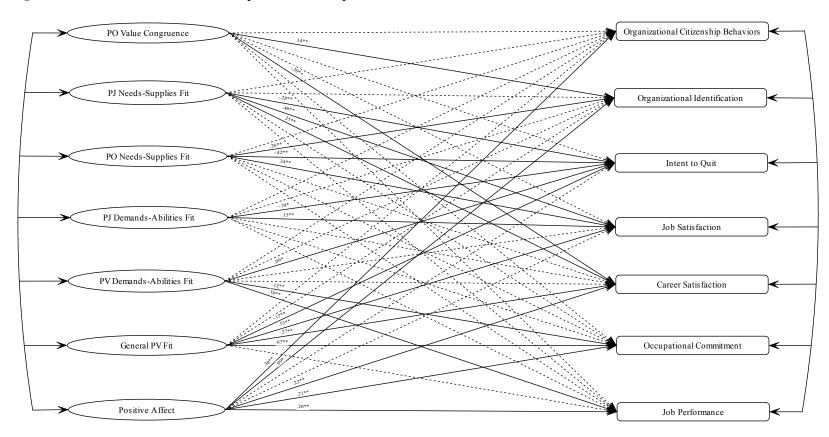


Figure 6. Structural model of fit and positive affect predictors and outcomes.

*Note.* A complex structural model (the measurement model was omitted for clarity; the sets of arrows depicting relationships among exogenous variables represent 21 factor correlations; the sets of arrows depicting relationships among endogenous variables represent 21 correlations residuals). Dashed lines indicate nonsignificant standardized path coefficients.

<sup>\*</sup> p < .05, two-tailed; \*\* p < .01, two-tailed

Table 12b

Structural Parameter Estimates of Fit and Positive Affect Predictors and Outcomes

	Fit Factors						
Outcomes	PO- VC	PJ- NS	PO- NS	PJ- DA	PV- DA	PV- GEN	PA
Organizational Citizenship Behaviors	ns						.30**
Organizational Identification	. <u>34</u> **		.26**				.09*
Intent to Quit	ns	<u>28</u> **	<u>42</u> **	10 <sup>*</sup>	.09*	17**	
Job Satisfaction		. <u>46</u> **	.34**	.15**		. <u>15</u> **	
Career Satisfaction	20**	. <u>25</u> **	ns			. <u>27</u> **	.22**
Occupational Commitment		ns	ns	ns	. <u>12</u> **	. <u>67</u> **	.21**
Job Performance				ns	.30**	ns	.20**

Note. PO-VC = PO fit conceptualized as value congruence; PJ-NS = PJ fit conceptualized as needs-supplies fit; PO-NS = PO fit conceptualized as needs-supplies fit; PJ-DA = PJ fit conceptualized as demands-abilities fit; PV-DA = PV fit conceptualized as demands-abilities fit; PV-GEN = general PV fit conceptualized using multiple conceptualizations: value congruence, needs-supplies fit, personality congruence, and interest congruence; PA = positive affect. Only significant completely standardized parameter estimates are presented. Underlined cells represent hypothesized relationships. ns = nonsignificant hypothesized relationship; p < .05. \*\* p < .01.

## Multiple Regression Analyses for Other-Rated Behavior

While the limited number of other-rated data for OCB and job performance precluded the analysis of these variables in SEM analyses, these data (n = 65) were included in two multiple regression models, one for each outcome variable. Positive affect was not included in the models as data were not collected for supervisor/peer's positive affect. The models served to further examine the prediction of PO-VC for OCB (H3a) and the prediction of other-rated job performance by PJ-DA (H6b), PV-DA (H7b), and general PV fit (H8d). As presented in Table 13, PO-VC was unrelated to OCB and did not support H3a. Surprisingly, a nonhypothesized relationship between general PV fit and OCB ( $\beta$  = .34, p < .05) was found. As shown in Table 13, PJ-DA and PV-DA fit were related to other-rated job performance ( $\beta$  = .46 and -.41, p < .01, respectively), supportive of H6b and H7b. While these results were supportive of a significant relationship between PV-DA fit and other-rated job performance, the negative direction of the relationship was unexpected. Hypothesis 8d was not supported as general PV fit was not related. The results of these analyses appear in Table 13.

Table 13 Subjective Fit Perceptions Prediction of Other-Rated OCBs and Job Performance

	Predictors												
	PO-	-VC	PJ-	NS	PO	-NS	PJ-	DA	PV-	-DA	PV-0	GEN	_
Outcome variable	β	SE	β	SE	β	SE	β	SE	β	SE	β	SE	Model $R^2$
Organizational Citizenship Behaviors (Other)	<u>24</u>	.11	.01	.11	.01	.11	.30	.15	28	.21	.34	.12*	.17
Job Performance (Other)	17	.13	06	.12	.20	.12	. <u>46</u>	.17**	<u>41</u>	.24**	. <u>04</u>	.14	.17

*Note.* N = 65. Underlined cells represent hypothesized relationships. p < .05 \*\* p < .01

#### **CHAPTER 4**

#### **DISCUSSION**

The study accomplished the two main objectives presented at the outset of this investigation. First, empirical support for Cable and DeRue's (2002) three-factor model of subjective fit perceptions was replicated. Second, this three-factor model was expanded by determining the best fitting measurement model from a series of 11 alternative models, followed by investigating the structural relationships between fit perceptions and outcomes. The current study advanced recent fit research by Cable and DeRue (2002) to improve the understanding of how individuals' conceptualize fit perceptions by testing previous hypotheses and by testing the development of additional fit perceptions measures. Furthermore, the current study was unrestricted by limitations found in previous studies of perceived fit, such as the use of one-item scales, scales confounding levels and conceptualizations of fit, items developed ad hoc between fit studies, the failure to control for common method variance (Podsakoff et al., 2003), the unidentified contribution of needs-supplies fit and PV fit perceptions, and the exclusion of incumbent employees' perceptions (Cable & DeRue, 2002; Shivy et al., 1999). As a result, the current study investigated the conceptual framework of employees' fit perceptions by constructing well-developed measurement scales and analyzing the relationship of multiple fit perceptions to a variety of individual employee attitudes (e.g., job satisfaction and occupational commitment) and behavior (e.g., job performance).

Overall, results strongly supported the distillation of fit levels into specific conceptualizations, suggesting that professionals made distinctions between multiple levels of fit and conceptualizations.

### Model Replication

Due to the novel introduction of Cable and DeRue's (2002) research findings examining incumbents' conceptual framework of fit perceptions, efforts were made to first *replicate* their three-factor (oblique) model of subjective fit perceptions. Using Cable and DeRue's (2002) nine subjective fit items, the results of a CFA successfully replicated their model, confirming that individuals do make distinctions between PO-VC, PJ-NS, and PJ-DA fit perceptions. The alternative three-factor (orthogonal), two-factor (complementary and supplementary fit model; needs-supplies and demands-abilities fit model), and one-factor (general fit) models failed to fit the data as well as the hypothesized, three-factor (oblique) model. Overall, the replication findings provided extremely strong support for a three-factor model of subjective fit perceptions based on the testing of Cable and DeRue's (2002) nine subjective fit items.

### Model Expansion

After successfully replicating Cable and DeRue's (2002) three-factor model of subjective fit perceptions, the current study *expanded* their model. The model was expanded by including five PO-NS, four PV-DA, and eleven general PV fit items, along with Cable and DeRue's (2002) previous nine subjective fit items. Based on CFA *measurement* model results, the best fitting model yielded six factors of fit perceptions and was supportive of the notion that professionals do make distinctions between

conceptualizations of fit (as discovered by Cable & DeRue [2002]), in addition to the various levels of fit within a conceptualization. While the data did not directly support the hypothesized, four-factor model that was based on pilot work (see Appendix A), the data indicated that the current sample of professionals made even finer distinctions than anticipated. Moreover, although not supportive of H2, four of the six factors (PO-VC, PJ/PO-NS, PJ/PV-DA, and general PV fit) represented in the hypothesized, four-factor model were supported by the six-factor model. However, professionals made finer distinctions of the PJ/PO-NS and PJ/PV-DA fit factors by separating the conceptualization by fit level (e.g., PJ-NS and PO-NS fit; PJ-DA and PV-DA fit). Therefore, the six-factor model is partially supportive of the hypothesized, four-factor model, which failed to separate PJ-NS from PO-NS fit and PJ-DA from PV-DA fit onto individual factors. In summary, the model expansion results generated strong evidence for a six-factor model of subjective fit perceptions.

The CFA *structural* models were then examined to investigate the relationships between fit predictors and outcomes while modeling common method variance. Common method variance was modeled by positive affect for three reasons. First, a higher mean correlation of positive affect with study variables as compared to negative affect (mean correlations of .26 and .15, respectively, see Table 7) was found. Second, the affectivity research (Chen & Spector, 1991; Jex & Spector, 1996; Williams et al., 1996) support a stronger relationship between positive affect with self-report organizational measures compared to negative affect. Finally, efforts were made to limit the degrees of freedom by decreasing the number of estimated paths for each model tested. Results showed a

slight difference in mean factor correlations between Models 1a /1b (confounded) and Models 2a/2b (congeneric), suggesting that positive affect marginally inflated responses across study variables. When comparing the confounded and congeneric analyses results, the effects of positive affect as a common method factor appeared to be minimally stronger at the item level, based on the size of the disparities between the correlations and fit indices of Models 1a/1b. Although the influence of responses was marginal, positive affect was included as a covariate variable in further CFA structural modeling analyses to provide more accurate interpretations of the relationships between fit predictors and outcomes as a result of these findings.

### Convergent and Discriminant Validity of Fit Scales

The CFA structural model results provided moderate evidence for convergent and discriminant validity of the six fit scales (PO-VC, PJ-NS, PO-NS, PJ-DA, PV-DA, and general PV fit), supporting 11 of the 19 hypotheses. For example, PO-VC was strongly related to organizational identification ( $\beta$  = .34, p < .01) as expected. Additionally, the two needs-supplies fit factors (PJ-NS and PO-NS fit) were significant predictors of intent to quit ( $\beta$ s = -.28 and -.42, p < .01, respectively) and job satisfaction ( $\beta$ s = .46 and .34, p < .01, respectively). Interestingly, in comparison to PJ-NS fit, a stronger relationship was found for PO-NS fit with the organization-focused outcome of intent to quit, while PJ-NS fit demonstrated a stronger relationship with the job-focused outcome of job satisfaction. Furthermore, PJ-NS fit showed a substantial relationship with career satisfaction ( $\beta$  = .25, p < .01). The two occupational-related PV fit factors (PV-DA and general PV fit) were both related to occupational commitment ( $\beta$ s = .12 and .67, p < .01, respectively). PV-

DA fit was also predictive of self-rated job performance ( $\beta$  = .30, p < .01), while general PV fit was related to job and career satisfaction ( $\beta$ s = .15 and .27, p < .01, respectively). Support of these 11 hypotheses contributed insight into the relations of the six fit predictors and attitudinal and behavior outcomes.

Although hypotheses regarding construct validity of fit perceptions with the inclusion of newly introduced experimental fit items were moderately supported, eight hypotheses were not supported and six unexpected, significant relationships were found. For example, with the exception of organizational identification, PO-VC was not significantly related to the remaining organization-focused outcome variables (OCBs and intent to quit) as hypothesized. Interestingly, PO-VC had an unanticipated, negative relationship with career satisfaction ( $\beta = -.20, p < .01$ ). Regarding PO-NS fit, a nonhypothesized relationship was found with organizational identification; yet, the beta coefficient ( $\beta = .26$ , p < .01) was slightly smaller than the PO-VC ( $\beta = .34$ , p < .01). Career satisfaction was predicted by PJ-NS fit but not by PO-NS fit as hypothesized. PJ-DA fit failed to show substantial relationships with many of outcome variables, showing weak relationships (nonhypothesized) with intent to quit ( $\beta = -.10$ , p < .05) and job satisfaction ( $\beta = .15, p < .01$ ). PV-DA fit also had an unexpected, significant but weak relationship with intent to quit ( $\beta = .09$ , p < .05). Surprisingly, general PV fit was not related to self-rated job performance as hypothesized, but did demonstrate an unexpected moderate relationship with intent to quit ( $\beta = -.17$ , p < .01). Multiple regression results failed to support a significant relationship between PO-VC and other-rated OCBs, as well as a significant relationship between general PV fit and other-rated job performance.

Additionally, an unexpected significant relationship between general PV fit and otherrated OCBs; however, this relationship was only significant at the .05 level.

Several reasons might explain the lack of empirical support for a number of proposed hypotheses and the occurrence of unanticipated significant findings. First, hypothesis 2, which proposed that a four-factor model of fit perceptions would fit the data best, was not supported. The empirical support for the alternative six-factor model over the hypothesized four-factor model might be based on the fact that the pilot study sample only included one profession, while the current study sample included over 16 professions. Thus, across professions, professionals appeared to make finer distinctions between both the level of fit and conceptualizations of fit. However, it should be noted that forty-nine percent of the sample worked in the field of education; thus, the differences between the current study and pilot study findings might be attributed to the differences in SIOP members (pilot study sample, see Appendix A) and the predominant representation of educational professionals in the current study. Further disparity in findings might have been attributed to gender differences. For example, the pilot study sample consisted of forty-three percent women, while sixty-eight percent of the current study sample represented women. Also, a substantial difference in educational background might have affected findings. For example, compared to eighty-seven percent of the pilot study sample, only thirty-two percent of the current study sample held doctorate degrees. Finally, it should be noted that a five-factor model (Model 5a, see Appendix F) also proved to closely fit the data within acceptable fit indices parameters, as presented in Table 5. This model included a homogeneous demands-abilities fit factor

in comparison to two demands-abilities fit factors (PJ-DA and PV-DA fit) in the sixfactor model.

Person-Organization Value Congruence Perceptions

The failure of PO-VC to predict for intent to quit and self-rated OCBs and the unanticipated relationship with career satisfaction could be attributed to several explanations. The lack of support for PO-VC and intent to quit might be due to three issues. First, intent to quit was a surrogate measure for the unattainable figures of actual turnover used by Cable and DeRue (2002), as they found a significant relationship between PO-VC and actual turnover using logistic regression analysis ( $\beta = .48$ , p < .05). Moreover, highly correlated (-.67) with job satisfaction, intent to quit was also strongly predicted by PJ-NS fit ( $\beta = -.28$ , p < .01), suggesting that this variable was closely related to traditional job-focused predictors (e.g., PJ-NS fit) and job-focused outcomes (e.g., job satisfaction), and might not have been interpreted as closely to an organizational representation of employee turnover as intended. In Mobley, Horner, and Hollingsworth's (1978) model of a job satisfaction and turnover process, they posited that an employee will initially think of quitting, resulting in a search for another job. If this search uncovers favorable opportunities, the employee will then develop an intention to quit the organization. This intention to quit predicts leaving the organization which is a type of turnover; however, if the job search failed to uncover favorable opportunities, the employee will then develop an intention to stay in lieu of an intention to quit. Overall, Mobley et al.'s model (1987) associates a close relationship between intention to quit and actual turnover or quitting the organization. Correlations of .24 and .35 between intent to

quit ratings and actual turnover have been reported in previous research (O'Reilly et al., 1991; Saks & Ashforth, 1997; respectively), suggesting that these outcomes may only be moderately related.

Second, although PO-VC was not related to intent to quit in the SEM analyses of the current study, correlational results were similar to previous findings. For example, the current study found a significant, negative correlation between PO-VC and intent to quit (r = -.57), similar to previous findings (r = -.53); Lauver & Kristof-Brown, 2001). Moreover, a mean correlation of -.58 between PO fit perceptions (using multiple conceptualizations) and intentions to quit was reported in a meta-analysis of PO fit and work attitudes (Verquer, Beehr, & Wagner, 2003). With the use of SEM analyses, the current study surpasses previous correlational and regression analyses (Lauver & Kristof-Brown, 2001) by accounting for measurement error, correlations between outcome variables, and common method variance. Finally, in their meta-analysis, Verguer et al. (2003) found that significant relationships between PO-VC and intent to quit were strongly moderated by the use of the OCP (Chatman, 1991), suggesting that the forcedchoice format of the OCP could have inflated variance resulting in a stronger effect size. Therefore, discrepancies in measurement methodologies might also explain the lack of a significant result between PO-VC and intent to quit in the current study.

Third, another issue was Lauver and Kristof-Brown's (2001) failure to include an alternative measure of PO fit in their study, while the current study included PO-NS fit in addition to a PO-VC. The null SEM results for the relationship between PO-VC and intent to quit in the current study could have resulted from the inclusion of additional PO-

NS and PJ-NS fit scales, missing from previous studies (Lauver & Kristof-Brown, 2001). These two additional scales (PJ-NS and PO-NS fit) were both significant predictors of intent to quit ( $\beta$ s = -.28 and -.42, p < .01, respectively). Therefore, variance previously accounted for by PO-VC might be redistributed to these additional fit factors. Also, with the addition of PO-NS fit items to Cable and DeRue's (2002) PJ-NS fit factor, the pilot study (see Appendix A) results also found a null relationship between PO-VC and intent to quit, similar to the current study. In the pilot study, the single PJ/PO-NS fit factor accounted for the majority of the variance for intent to quit with an extremely strong relationship ( $\beta$  = -.75, p < .01). These three points suggest potential reasoning to explain the null finding between PO-VC and intent to quit in the current study.

The lack of support for PO-VC and self-rated OCBs might be attributed to several reasons. While Cable and DeRue (2002) found a significant relationship between PO-VC and other-rated OCBs (r = .22), they did not include self-rated OCBs ratings in the study. Additionally, compared to other-rated data, self-rated data have been shown to be vulnerable to leniency, halo, and social desirability tendencies in self-report ratings of job performance (Cascio, 1991). Mount (1984) indicated that self-ratings of performance averaged .70 SD higher than other-ratings. In the study of OCBs, Vandenberg, Lance, and Taylor (1997) found that self-raters seemed to use a different conceptual rating framework than did managers. Typically, other-ratings and self-ratings do not often agree, with average correlations estimated to be between .22 (Conway & Huffcutt, 1997) and .35 (Harris & Schaubroeck, 1988). This was supported in the current study as the correlation between self-rated and other-rated OCBs was only .10. These explanations

offer support for the lack of evidence for a substantial relationship between PO-VC and self-rated OCBs. Consequently, the common method factor of positive affect had a strong relationship with self-rated OCBs ( $\beta$  = .30, p < .01), and was the only significant predictor of this variable.

The unexpected relationship between PO-VC and career satisfaction might be explained by the following points. The moderate, negative relationship of PO-VC with career satisfaction ( $\beta = -.20$ , p < .01) suggests that as a professional's perceived PO-VC increased, his or her career satisfaction decreased. This finding may indicate that professionals compromise their career satisfaction in order to commit to one organization whose values are congruent with their own. However, previous results are not supportive of this finding. For example, Cable and DeRue (2002) found a negative, nonsignificant relationship between PO-VC and career satisfaction ( $\beta = -.04$ ). Similarly, the pilot study findings also found a negative, nonsignificant relationship between these two variables (β = -.08). Unfortunately, prior to Cable and DeRue's (2002) study, career satisfaction had not been included in fit research; thus, a limited amount of research exists for comparison. Interestingly, recent fit research (Erdogan, Kraimer, & Liden, 2004) involving career satisfaction and PO-VC (indirectly measured) has reported a correlation of .21, similar to the correlations found in the current study (r = .25) and by Cable and DeRue (r = .17; 2002); yet, additional analyses were restricted to multiple regression. Overall, the use of SEM analyses in the current study surpasses previous correlational and regression analyses of the pilot study and Cable and DeRue's (2002) research by accounting for measurement error, correlations between outcome variables, and common

method variance. Further replication of this finding is needed to determine whether a stable negative relationship between PO-VC and career satisfaction exists. As a result, the cautious interpretation of this finding is encouraged until further replication of these results.

### *Needs-Supplies Fit Perceptions*

There were three unsupported hypotheses and an unexpected result found for both of the needs-supplies fit factors (PJ-NS and PO-NS fit). It should be noted that the hypotheses generated in the current study for these two needs-supplies fit scales were based solely on postulations made by Cable and DeRue (2002) and their introduction of a novel PJ-NS fit scale. Thus, PO-NS fit hypotheses as well as PJ-NS fit hypotheses were generated by Cable and DeRue's (2002) hypotheses for their needs-supplies fit factor. First, although the significant relationship between PO-NS fit and organizational identification ( $\beta = .26$ , p < .01) was not hypothesized, this finding was logical as PO-NS fit is an organizational-level fit variable (similar to PO-VC) that should most strongly relate to organization-focused outcomes. Furthermore, the pilot study results also found a significant relationship between the single PJ/PO-NS fit factor and organizational identification ( $\beta = .17$ ); however, the relationship was only significant at the .05 level. Unfortunately, previous findings regarding PO-NS fit are not directly comparable to the current study due to the inconsistent use of indirect and direct measures of PO fit consisting of items based on multiple conceptualizations within one scale (e.g., see Bretz & Judge, 1994 and Saks & Ashforth, 2002). Thus, because previous researchers failed to

use homogeneous fit scales dedicated to a single conceptualization of one fit level, the current study results regarding PO-NS fit are not comparable.

Second, the failure to find a relationship between PJ-NS and PO-NS fit and occupational commitment could be due to several reasons. One possibility is the inclusion of PV fit variables in the model that might have accounted for increased variance in this profession-focused outcome. For example, PV-DA and general PV fit were the only significant fit predictors for occupational commitment ( $\beta$ s = .12 and .67, p < .01, respectively). Previous research (Cable & DeRue, 2002) indicated a significant relationship between PJ-NS fit and occupational commitment ( $\beta$  = .35, p < .01) using multiple regression analyses, yet researchers did not include any PV fit variables. Additionally, pilot study results (see Appendix A) also found a null relationship between the single PJ/PO-NS fit factor and occupational commitment. In the current study, the correlation between PJ-NS fit and occupational commitment (r = .40) was quite similar to Cable and DeRue's (2002) result (r = .43). However, when this relationship was investigated using SEM analyses, a nonsignificant relationship was indicated.

To test the explanation that the differences in findings between the current study and Cable and DeRue's (2002) research regarding PJ-NS fit and occupational commitment were due to the inclusion of PV fit variables, an additional CFA structural model was conducted. This model included only Cable and DeRue's (2002) nine fit items and positive affect (modeled for common method variance). The results of this analysis supported the hypothesized relationship between PJ-NS fit and occupational commitment ( $\beta = .28$ , p < .01), a finding similar to Cable and DeRue's (2002) result ( $\beta = .35$ , p < .01).

Therefore, apparently the inclusion of PV fit variables into the SEM model, as demonstrated in the current study, accounted for the variance of occupational commitment previously related to PJ-NS fit. Finally, as Cable and DeRue (2002) were the first researchers to include occupational commitment in fit research, only a small amount of fit research exists for comparative purposes. Future replication of current results should be conducted to extend support for this finding between fit factors and occupational commitment.

Third, the lack of support for a substantial relationship between PO-NS fit and career satisfaction could be due to several reasons. For example, career satisfaction was predicted by PJ-NS fit but not by PO-NS fit as hypothesized. Clearly, the job-level fit variable (PJ-NS fit) was a better predictor of the occupational-focused variable of career satisfaction in comparison to organization-level fit variable (PO-NS fit). Also, as PJ-NS fit was a newly introduced scale (e.g., Cable & DeRue, 2002) and has not been extensively researched, few studies existed to provide guidance in forming hypotheses. Consequently, as the PO-NS fit scale was developed in the pilot study, this scale is newer than PJ-NS fit, with less research available for comparison. Thus, current study hypotheses for both needs-supplies fit scales (PJ-NS and PO-NS fit) were based heavily on Cable and DeRue's (2002) postulations for their PJ-NS fit scale. For example, Cable and DeRue (2002) stated "... individuals judge the success of their career primarily on whether their job has enabled them to fulfill their needs" (p. 877). Thus, the source of supplies in the PJ-NS fit relationship was thought to be primarily the job or occupation, not the organization. Additionally, supplies provided by the job were considered distinct

from those provided by the organization in the professional's mind as stated by Cable and DeRue (2002, p. 877), "... a lawyer, a professor, or a car salesperson who perceives a good fit between the job and her own needs could expect to receive many of the same types of rewards in the same profession at another firm." Therefore, the career needs of professionals could be met by a similar job within their profession, regardless of the supplies provided by the organization. These explanations provide some reasoning for the lack of a substantial relationship between PO-NS fit and career satisfaction.

# Demands-Abilities Fit Perceptions

There were two unsupported hypotheses and three unexpected results found for both of the demands-abilities fit factors (PJ-DA and PV-DA fit). The failure of the findings to support a relationship between PJ-DA fit and occupational commitment and self-rated performance might be due to several reasons. First, these null results were similar to previous null findings (Cable & DeRue, 2002). Second, the addition of PV-DA fit strongly predicted for the hypothesized outcomes of occupational commitment and self-rated job performance ( $\beta s = .12$  and .30, p < .01, respectively). This finding suggests that the core relationship to occupational-focused outcomes was at the professional fit level. Similar results were found in the pilot study (see Appendix A) where the single PJ/PV-DA fit factor was a significant predictor of occupational commitment ( $\beta = .17$ , p < .01). Apparently, when PJ-DA and PV-DA fit were separated and included in SEM analyses in the current study, PV-DA fit was the only significant predictor of the two demands-abilities fit scales for occupational commitment ( $\beta = .12$ , p < .01). This provides additional convergent validity for PV-DA fit as the profession-level fit variable was

significantly related to the profession-focused outcome of occupational commitment; however, further research is needed to replicate these findings as the strength of the relationship was weak.

The unexpected, significant relationships between PJ-DA and PV-DA fit with intent to quit might be attributed to the following explanation. These two unexpected, significant relationships were fairly weak for PJ-DA and PV-DA fit ( $\beta$ s = -.10 and .09, p < .05, respectively). Contrary to the significant results found in the current study, pilot study results (see Appendix A) failed to find a substantial relationship between the single PJ/PV-DA fit factor and intent to quit.

The unexpected relationship between PJ-DA fit and job satisfaction might be attributed to several points. Pilot study results (see Appendix A) found similar evidence for a significant relationship between the single PJ/PV-DA fit factor and job satisfaction ( $\beta$  = .14, p < .01). Additionally, the correlations in the current study showed significant relationships between PJ-DA and PV-DA fit with job satisfaction (r's = .44 and .23, respectively). Thus, separating PJ-DA and PV-DA fit in the SEM analyses yielded results indicating a significant relationship between PJ-DA fit and job satisfaction ( $\beta$  = .15, p < .01). This provides additional convergent validity for PJ-DA fit, as the job-level fit variable was significantly related to the job-focused outcome of job satisfaction, while the profession-level fit variable (PV-DA fit) was not. However, further research is needed to replicate these findings as the strength of the relationship was weak.

## General Person-Vocation Fit Perceptions

There was only one unsupported and one unexpected result found for the general PV fit factor. First, the lack of significance for the hypothesized relationship between general PV fit and self-rated job performance might be due to the control for common method variance. For example, positive affect (used as a common method factor) accounted significantly for variance of self-rated job performance variance ( $\beta = .20, p < .00$ .01). Second, PV-DA fit had a relatively strong relationship with self-rated job performance ( $\beta = .30, p < .01$ ). Considering the squared multiple correlation for self-rated job performance was only .19, positive affect and PV-DA fit seem to account for a majority of the variance in this criterion. This finding suggests that needs-supplies fit, value, interest, and personality congruence with the profession do not relate to self-rated performance as strongly as demands-abilities fit. However, professionals' positive affect and demands-abilities fit with the profession strongly related to this outcome. Third, the unexpected, significant relationship with intent to quit ( $\beta = -.17$ , p < .01) might be attributed to the psychometric properties of the PV fit items. Contrary to the significant result found in the current study, pilot study results (see Appendix A) found a null relationship between intent to quit and general PV fit (using the same 11 general PV fit items included in current study). Thus, this finding was inconclusive as these PV fit scales were newly developed and require further psychometric examinations. Further psychometric refinement of PV fit items is needed and the replication of all PV fit results would help explain unanticipated findings.

#### Other-Rated Behavior

Multiple regression analyses of other-rated job performance and OCBs found minimal evidence for the construct validity of the fit scales. There were considerable limitations to these analyses and the results should be interpreted cautiously until further replication. First, the stability of these findings is questionable due to the small sample size (n = 65, only 10% of sample data). For example, Green (1991) recommends a minimum number of 110 cases using six predictors to test individual predictors. Second, as participation in the current study was voluntary, all participants were prompted to request behavioral ratings from a colleague or peer; however, research regarding selfselection bias suggests that only good performers might have been willing to follow this request (Arthur, Woehr, & Graziano, 2001; Bifulco, 2002; Lin, 1968; Williams, Labig, & Stone, 1993). Consequently, self-selection bias might have restricted the range in both other-rated variables. Finally, while two of the three significant results are based on PV fit scales, further psychometric examination of the PV fit scales (PV-DA and general PV fit) is needed as these scales are newly developed. Therefore, the following results should be interpreted very cautiously due to the small sample size, possible voluntary selfselection bias, and the need for additional psychometric development of the PV fit items.

Findings indicated that general PV fit unexpectedly predicted other-rated OCBs  $(\beta = .34, p < .05)$ . PJ-DA fit was a strong predictor of other-rated job performance  $(\beta = .46, p < .01)$ , a finding that has been hypothesized but unsupported by previous fit researchers (e.g., Lauver & Kristof-Brown, 2001; Cable & DeRue, 2002). Therefore, as professionals' perceptions of fit with their abilities and the job demands increased, their

performance on the job increased. While PV-DA fit was also a strong predictor of otherrated job performance, the direction of the relationship was unexpectedly negative ( $\beta$  = -.41, p < .01). Thus, as professionals' perceptions of fit with their abilities and the demands of their profession increased, their performance on the job decreased. Overall, these results should be interpreted very cautiously due to the inadequate sample size and possible voluntary self-selection bias. Further replication of these findings is needed to strengthen support for these conclusions.

# Post Hoc Model Expansion Analyses

While the CFA measurement modeling results generally supported the notion that professionals made distinctions by both the fit level and fit conceptualization, the sixth factor of the best fitting model (six-factor) formed a general PV fit scale consisting of 11 items. These items were representative of multiple conceptualizations (needs-supplies fit, value, interest, and personality congruence) of PV fit. Therefore, to further investigate the factor structure of professionals' fit perceptions involving the general PV fit items, five post hoc CFAs were conducted. These a priori models were not planned previously due to the empirical support for a general PV fit factor provided by the pilot study. For each of the five models, PO-VC items were loaded onto factor one, PJ-NS fit items were loaded onto factor two, PO-NS fit items were loaded onto factor three, PJ-DA fit items were loaded onto factor five.

Five models (see Table 14) were tested to evaluate a variety of loadings for the four conceptualizations represented by the 11 general PV fit items (needs-supplies fit, value, interest, and personality congruence). Four of the five models included seven

factors, while one model tested an eight-factor structure. The first alternative model (Model 7a) involved loading PV-VC, PV-PC (personality congruence), and PV-NS fit items onto factor six and PV-IC (interest congruence) fit items onto factor seven. A second alternative model (Model 7b) tested PV-VC items on factor six and PV-IC, PV-PC, and PV-NS fit items load on factor seven. The third alternative model (Model 7c) tested model fit by loading PV-VC and PV-PC fit items onto factor six and PV-IC and PV-NS fit items onto factor seven. The fourth alternative model (Model 7d) specified PV-VC and PV-NS fit items onto factor six and PV-IC and PV-PC fit items onto factor seven. The only eight-factor alternative model (Model 8) involved loading PV-VC items onto factor six, PV-IC fit items onto factor seven, and combining the PV-PC and PV-NS fit items to form factor eight. Please note that due to the minimum number of three indicators per latent variable in SEM analyses as recommended by Anderson and Gerbing (1984), PV-NS fit and PV-IC items could not represent independent factors, as these conceptualizations only included two items each. A possible nine-factor model could have been tested if a sufficient number of PV-NS fit and PV-PC items existed. These five alternative models are presented in Table 14.

Table 14

Post Hoc Model Expansion: Alternative Models

Model	Factor 6 Loading	Factor 7 Loading	Factor 8 Loading
Alternative Model 7a	PV-VC Items PV-PC Items PV-NS Items	PV-IC Items	
Alternative Model 7b	PV-VC Items	PV-IC Items PV-PC Items PV-NS Items	
Alternative Model 7c	PV-VC Items PV-PC Items	PV-IC Items PV-NS Items	
Alternative Model 7d	PV-VC Items PV-NS Items	PV-IC Items PV-PC Items	
Alternative Model 8	PV-VC Items	PV-IC Items	PV-PC Items PV-NS Items

*Note*. For all models: PO-VC items load onto factor one, PJ-NS fit items load onto factor two, PO-NS fit items load onto factor three, PJ-DA fit items load onto factor four, and PV-DA fit items load onto factor five. General PV fit consists of the following 11 items: PV-VC includes four items, PV-NS fit includes two items, PV-IC (interest congruence) includes three items, and PV-PC (personality congruence) includes two items.

Results indicated that Model 7b fit the data slightly better ( $\chi^2[356] = 1234.48$ , p < .05, RMSEA = .063, SRMR = .049, CFI = .98, NNFI = .97) than the four other alternative models and surpassed the fit of the six-factor measurement model ( $\chi^2[362] = 1562.68$ , p < .05, RMSEA = .076, SRMR = .052, CFI = .97, NNFI = .97). These results provide support for the data fitting Model 7b, a model that was more parsimonious than Model 8, yet had comparable fit indices ( $\chi^2[349] = 1217.73$ , p < .05, RMSEA = .064, SRMR = .048, CFI = .98, NNFI = .97). Additionally, Model 7c also demonstrated

excellent fit indices ( $\chi^2[356] = 1263.52$ , p < .05, RMSEA = .064, SRMR = .052, CFI = .98, NNFI = .97); although, the difference compared to Model 7b was extremely marginal. For example, the difference between the RMSEA indices for Models 7b/7c was only .001, while the difference between the SRMR indices was only .003. Therefore, as presented in Table 15, Model 7b and Model 7c fit the data slightly better than the three other alternative measurement models based on model parsimony and fit indices.

Table 15

Post Hoc Model Expansion: Fit Statistics for Alternative Models

Model	$\chi^2$	df	RMSEA	SRMR	CFI	NNFI
Alternative Model 8	1217.73	349	.064	.048	.98	.97
Alternative Model 7b	1234.48	356	.063	.049	.98	.97
Alternative Model 7c	1263.52	356	.064	.052	.98	.97
Alternative Model 7d	1532.21	356	.077	.051	.97	.97
Alternative Model 7a	1549.01	356	.076	.051	.97	.96

*Note. N* = 667 cases; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual; CFI = comparative fit index; NNFI = non-normed fit index. For all models: PO-VC items load onto factor one, PJ-NS items load onto factor two, PO-NS items load onto factor three, PJ-DA items load onto factor four, and PV-DA items load onto factor five.

Researchers (Converse et al., 2004) have suggested assessing PV fit using a value congruence conceptualization; however, there is no indication that a study of this kind has been conducted. Therefore, given that both Model 7b and Model 7c fit the data reasonably better than other models in Table 15, Model 7b<sup>8</sup> was selected for further analysis to investigate the construct validity of the homogeneous PV-VC factor and the *reduced* general PV fit factor (see Table 16a). To investigate the construct validity of the fit scales in Model 7b, a CFA structural model analysis was conducted based on the two-

-

<sup>&</sup>lt;sup>8</sup> Model 7b was chosen over Model 7c for further testing to investigate the homogeneous PV-VC factor, composed purely of value congruence items.

step strategy suggested by Anderson and Gerbing (1988). Global fit indices indicated that the measurement model fit the data reasonably well ( $\chi^2$ [2897] = 6765.41, p < .05, RMSEA = .048, SRMR = .079, CFI = .97, NNFI = .97). The same global fit indices were found for the structural model ( $\chi^2$ [2897] = 6765.41, p < .05, RMSEA = .048, SRMR = .079, CFI = .97, NNFI = .97). These fit indices were proximal to the more parsimonious, six-factor structural model ( $\chi^2$ [2911] = 7122.13, p < .05, RMSEA = .051, SRMR = .055, CFI = .97, NNFI = .97). Although the degrees of freedom difference between Model 6 to Model 7b was 14, the difference between the RMSEA indices for each model was only .003 and the difference between SRMR indices was only .024. Thus, the more parsimonious six-factor model is most likely the better fitting model; however, further investigation of the structural relationships of Model 7b is warranted to investigate the construct validity of the homogeneous PV-VC factor and the *reduced* general PV fit factor. Table 16a presents the two new fit scales of PV-VC and the *reduced* general PV fit scale found in Model 7b.

Table 16a

Post Hoc Model Expansion: PV Value Congruence and Reduced General PV Fit Scales

Scale	Item
PV Value Congruence	
	<ol> <li>My profession represents my personal values. (VC)</li> <li>My values prevent me from fitting in with my profession because they are different from my profession's values. (VC)</li> </ol>
	3. My current profession represents my personal values better than other professions. (VC)
	4. My values match of fit the values of my profession. (VC)
Reduced General PV Fit	
	1. My profession accurately represents the qualities of my personality. (PC) <sup>†</sup>
	2. My profession requires me to be someone I am not. (PC) <sup>†</sup>
	3. My profession represents my interests. (IC)
	4. I could not imagine a profession that would fit my interests better than my current profession. (IC)
	5. If I could start over, I would choose a profession that matches my interests better than my current profession. (IC)
	6. My profession offers me everything I seek from a profession. (NS)
	7. My profession fulfills my professional desires. (NS)

<sup>&</sup>lt;sup>†</sup> The loading of personality congruence items is the only difference between Model 7b and Model 7c. For example, these items load with value congruence items in Model 7c. *Note.* VC = value congruence, PC = personality congruence, IC = interest congruence, and NS = needs-supplies fit.

Compared to the CFA structural model representing the six-factor fit model (see Figure 6), the structural parameters for PO-VC, PJ-NS, PO-NS, PJ-DA, and PV-DA fit factors for Model 7b were extremely similar, approaching the same magnitude and direction of relationships. Thus, as the patterns and strengths of paths are the same as in the previous model, Model 7b does not detract from Model 6, rather Model 7b helps further interpret whether professionals made distinctions by both fit level and conceptualization for those items forming the general PV fit factor. For example, evidence for convergent and discriminant validity was found in Model 7b for the PV-VC and the reduced general PV fit scales (as presented in Table 16a). While general PV fit was strongly related to occupational commitment in the six-factor model ( $\beta = .67, p < .00$ .01), results showed that PV-VC and general PV fit (reduced) were both related to occupational commitment ( $\beta$ s = .23 and .47, p < .01, respectively) in Model 7b. This result indicated that professionals' fit perceptions of value congruence with their profession moderately relate to commitment to the occupation, while professionals' general PV fit (reduced) perceptions (as measured with needs-supplies fit, interest, and personality congruence items) had a stronger relationship to occupational commitment. Just as general PV fit was significant with job and career satisfaction in the six-factor model ( $\beta$ s = .15 and .27, p < .01, respectively), general PV fit (reduced) also had similar relationships with these two outcomes ( $\beta s = .14$  and .37, p < .01, respectively) in Model 7b. However, PV-VC was unrelated to job and career satisfaction, showing evidence for discriminant validity and presenting the unique relation of general PV fit (reduced) to job and career satisfaction. A stronger, negative relationship between general PV fit and

intent to quit was found for Model 7b ( $\beta$  = -.28, p < .01) than was found in Model 6 ( $\beta$  = -.17, p < .01). In addition, an unexpected, but weak, positive relationship was also found between PV-VC and intent to quit ( $\beta$  = .10, p < .05) in Model 7b. However, this relationship was weak and significant at only the .05 level. Figure 7 and Table 16b present the structural parameters of Model 7b.

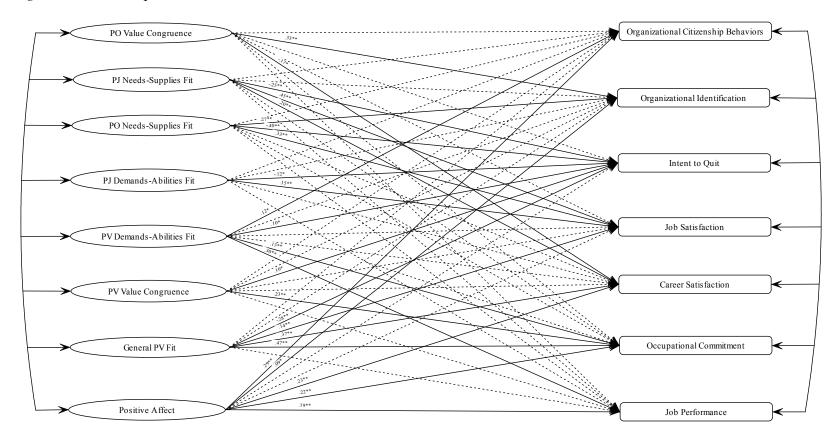


Figure 7. Structural parameters of alternative model 7b.

*Note.* A complex structural model (the measurement model was omitted for clarity; the sets of arrows depicting relationships among exogenous variables represent 28 factor correlations; the sets of arrows depicting relationships among endogenous variables represent 21 correlations residuals). Dashed lines indicate nonsignificant standardized path coefficients.

<sup>\*</sup> p < .05, two-tailed; \*\* p < .01, two-tailed

Table 16b

Structural Parameters of Alternative Model 7b

			I	Fit Factors	S			
Outcomes	PO- VC	PJ- NS	PO- NS	PJ- DA	PV- DA	PV- VC	PV- GEN <sup>†</sup>	PA
Organizational Citizenship Behaviors					.12*			.29**
Organizational Identification	.33**		.27**					.09*
Intent to Quit		25**	40**	12*	.10*	.10*	28**	
Job Satisfaction		.45**	.33**	.15**			.14**	
Career Satisfaction	17*	.20**					.37**	.23**
Occupational Commitment					.13**	.23**	.47**	.22**
Job Performance					.30**			.19**

*Note*. PV-VC = PV fit conceptualized as value congruence. Only significant completely standardized parameter estimates are presented.

<sup>†</sup> Reduced general PV fit conceptualized using multiple conceptualizations: needs-supplies fit, personality congruence, and interest congruence p < .05. \*\* p < .01.

#### Limitations

There were several limitations to this study. First, the number of outcome variable scales was limited for inclusion in the SEM analyses due to the concern for adding unnecessary paths to the model, decreasing the ratio of sample size to estimated paths. A desired ratio of five cases to each estimated parameter would be optimal for complex SEM analyses (Hu & Bentler, 1999). As a result, the study was not able to gain as much insight into the relation of fit perceptions to outcome variables because of the exclusion of perceived organizational support, organizational commitment, and negative affect scales. Although organizational commitment and negative affect were not included in the current study, conceptually related measures were applied. For example, while conceptually distinct, organizational identification was considered a close representation to organizational commitment. While a debate has existed regarding the confusion between the two constructs (Ashforth & Mael, 1989), some researchers view organizational identification as a facet of organizational commitment (Wiener, 1982). Correlations of .69 and .75 between organizational commitment and organization identification have been reported in previous research (Ashforth & Mael, 1989; Saks & Ashforth, 2002, respectively), suggesting a strong relationship between these variables. Since positive affect shared stronger relationships with study variables compared to negative affect (mean correlations of .26 and .15, respectively, see Table 7), positive affect served as a common method factor in SEM analyses. While surrogate measures were used for organizational commitment and negative affect, perceived organizational support was completely excluded from the current study. However, this outcome has only recently been included in fit research by Cable and DeRue (2002), and due to the concerns of additional paths in the SEM analyses, this outcome was most suitable for removal from the study as other outcomes were more established in the fit research and could provide more conclusive construct validity evidence. Finally, while actual turnover figures were not initially proposed for inclusion in the current study, previous fit research (Cable & DeRue, 2002) included this outcome. The cross-sectional design of the study did not allow for the collection of this longitudinal outcome data, a common limitation in fit research (Edwards, 1991). Therefore, intent to quit ratings were used as surrogate measures of objective, actual turnover figures.

Second, an adequate set of objective data, such as performance and OCBs ratings provided by employees' supervisors or peers (n = 65), was not obtained for inclusion in the SEM analyses. Therefore, there was a strong reliance on self-rated data for OCBs and job performance. The study initially intended to use predominantly other-rated ratings for these two outcomes due to the research of OCBs (Vandenberg et al., 1997) suggesting that self-raters use a different conceptual rating framework than did other-raters. The current study attempted to include both self and other ratings of job performance and OCBs to avoid discrepancies. Mount (1984) indicated that self ratings of performance averaged .70 SD higher than manager ratings.

Third, a number of psychometric limitations were found in the current study. For example, the number of experimental items used in the pilot study to conceptualize PV fit was clearly a limitation. The item pool for the pilot study was developed to include items conceptualizing PV fit in addition to PJ and PO fit. However, the majority of multiple

conceptualizations were dedicated to PV fit, as this fit level has not been extensively researched using direct measures. Thus, the number of experimental items used to measure other fit levels (PJ and PO fit) was a limitation. For example, PO fit could have been conceptualized as personality congruence; however, the length of the voluntary survey would have likely diminished participation rates. Therefore, in order to limit the questionnaire to a manageable length, ensuring completion by voluntary participants, fewer experimental items were developed for PO and PJ fit. In addition, the PV fit scales used in the current study were newly developed through pilot work; thus, the results for these scales should be interpreted with caution. Finally, response order effects might have influenced responses as questionnaire items were presented to each participant in the same order (i.e., the presentation of items was not randomly mixed). Research suggests that the sequence of items in a questionnaire might influence ratings made by participants (Couper, Tourangeau, Conrad, & Crawford, 2004).

Fourth, as members of professional, email discussion lists were sampled, the current study did not screen members of these lists for potential residency outside of the United States. Therefore, cross-cultural implications may have influenced participants' responses. For example, Schneider (2001) argues that fit researchers have followed the Western tradition of focusing on personal affective outcomes; however, national culture may impact personal and environmental variables included in person-environment literature. National culture has been shown to serve as a moderator in the prediction of organizational commitment and tenure (Parkes, Bochner, & Schneider, 2001).

Finally, longitudinal data were not used in the current study. These data would have provided a more accurate representation of fit perceptions and attitudinal responses over time (Westerman & Cyr, 2004). Most fit researchers (e.g., Feij et al., 1999; Kristof-Brown et al., 2002; Rynes & Gerhart, 1990) agree that fit perceptions fluctuate over time, recognizing fit as a dynamic rather than a static concept. Fit research has been criticized for failing to assess the "...ongoing, reciprocal influences of work and environmental characteristics on each other" (Kulik, Oldham, & Hackman, 1987, p. 294). Using a longitudinal research design, Cooper-Thomas et al. (2004) recently found that perceived and actual PO fit are more strongly related over time, suggesting that fit is a dynamic construct. Additionally, Caldwell, Herold, and Fedor (2004) found that changes in PO-VC and PJ-DA fit perceptions were impacted by organizational change. Unfortunately, the current study did not collect ratings of fit perception at multiple points in time, nor did the study include any temporal variables (e.g., career stage) that might influence how employees differentially conceptualize fit perceptions over time.

#### Future Research

The current study provides a number of avenues for future research building upon the present investigation. First, a study including multiple measures of PV fit, such as those scales developed in the current study along with more traditional measures (e.g., *Self-Directed Search*; Holland, Fritzsche, & Powell, 1994) could be valuable for examining construct validity of vocational measures. Researchers (e.g., Feij et al., 1999; Shivy, et al., 1999) have called for alternative measurement of PV fit; therefore, a study of this nature falls in line with previous recommendations for future studies. This

integrative study would serve to examine the construct validity of these measures using a series of outcomes related to professional and career-oriented attitudes and behaviors.

Second, future studies replicating the use of the current set of fit items might find empirical support for the six-factor model (PO-VC, PJ-NS, PO-NS, PJ-DA, PV-DA, and general PV fit) or the seven-factor model (PO-VC, PJ-NS, PO-NS, PJ-DA, PV-DA, PV-VC, and general PV fit) of subjective fit perceptions. As three scales (PO-NS, PV-DA, and general PV fit) were newly developed and tested in the current study, future inclusion of these items in fit studies would prove beneficial in establishing the reliabilities and construct validity for these scales.

Third, in pursuit of future research investigating the conceptualizations of fit perceptions, additional fit measures, linked closely to theoretical constructs, should be tested using multiple conceptualizations, similar to the model expansion section of this study. Thus, further investigations of fit should be based on assessing *both* the level and by conceptualization. For example, while PV fit was distilled into PV-DA fit and general PV fit, post hoc analyses found construct validity for the existence of a PV-VC scale within the general PV fit scale based on Model 7b. Additional experimental items could be introduced to further develop potential needs-supplies fit, personality, and/or interest congruence scales for PV fit (Converse et al., 2004). This premise applies to other fit levels as well. For example, just as PJ, PO, and PV fit were distilled into multiple fit conceptualizations within one study (Cable & DeRue, 2002), researchers should investigate whether PG fit may be conceptualized as value congruence, needs-supplies, and demands-abilities fit perceptions (Kristof, 1996; Werbel & Gilliland, 1999). Also,

experimental items representing a goal congruence conceptualization of fit could be introduced for various fit levels as well (Cooper-Thomas et al., 2004; Westerman & Cyr, 2004). This conceptualization was overlooked in the current study due to questionnaire length constraints to ensure questionnaire completion.

Fourth, direct measurement of fit and outcome variables should include multiple measures of common method variance as positive affect was found to slightly influence professionals' responses in the current study. Although positive affect has been shown to have stronger relationships with positive organizational measures (e.g., job satisfaction; Chen & Spector, 1991; Jex & Spector, 1996; Williams et al., 1996) than negative affect, further research should include negative affect in common method analyses to determine the degree of influence of both positive and negative affect on predictors and outcomes. Another potential common method factor for inclusion is social desirability (Podsakoff et al., 2003). For example, Meir and Navon (1992) estimated their results examining PE fit were influenced by social desirability due to the self-report nature of the study. This research suggests that social desirability might also influence self-rated ratings. Finally, further investigations might also yield insight into the occurrence of common method variance at the *item* and/or the *construct* level, using methods employed in the current study.

Fifth, additional research should acquire an adequate sample size for complex SEM analyses that will allow for the inclusion of multiple variables to account for common method variance (e.g., positive affect, negative affect, and/or social desirability) and outcome variables. Since large sample sizes are required due to the complexity of the

SEM models and the large number of criterion variables to be examined (Hu & Bentler, 1999), previous studies of subjective fit (e.g., Cable and DeRue, 2002; Lauver & Kristof-Brown, 2001) have been limited to multiple regression analyses.

Sixth, while the current study sample served to fill in a gap found in fit research for overlooking incumbent professionals, future studies should involve the introduction of the current study's scales to other samples, such as job seekers and recruiters to determine the generalizability of these findings (Cable & DeRue, 2002). Interesting findings might be gained with the study of various occupational groups included in a multiple group CFA measurement and structural model analysis. For example, models for professional versus nonprofessional groups could be examined for differences in model fit, as well as groups segmented by ethnicity, gender, age, educational background, and/or new organizational members versus incumbent employees (Caldwell et al., 2004; Fouad & Mohler, 2004; Westerman & Cyr, 2004). Minimal differences were reported across ethnic groups using indirect PV-IC measures, however, meaningful group differences related to gender were found (Fouad & Mohler, 2004).

Seventh, a valuable study would include the assessment of both direct and indirect measures of multiple fit levels and multiple fit conceptualizations with a variety of outcome measures. A study of this nature would provide additional interpretations of the relationships between *perceived* (direct) and *actual* (indirect) fit with outcomes. Research (Cable & Judge, 1996; Judge & Cable, 1997) suggests that the relationship between actual fit and attitudes are mediated by perceived fit. A study exploring this assumption across the six direct fit scales used in the current study would be beneficial along with

indirect fit scales. Cooper-Thomas et al. (2004) recommend such a study in their recent investigation of actual and perceived PO-VC fit. These researchers acknowledged that a limitation of their study was the exclusive use of a value congruence conceptualization for PO fit. Moreover, a multitrait-multimethod matrix (MTMM; Campbell & Fiske, 1959) approach to this investigation might also yield valuable findings. For example, both direct and indirect measures could be used to assess various conceptualizations of fit levels in which the measures of the same fit constructs would be expected to correlate higher with each other than with measures of different fit constructs involving separate methods. Ideally, these values should also be higher than the correlations among different fit constructs measured by the same method.

Eight, future research into the additive properties of fit perceptions would be beneficial to the fit research. Kristof-Brown et al. (2002) found that fit levels interact to influence work attitudes and behaviors. Future recommendations have been made to examine intensification effects uncovered by Kristof-Brown et al. (2002), as well as spillover effects in which the degree of fit for one fit construct influences the degree of fit for another fit construct. For example, their results found that PJ, PG, and PO fit have independent effects on work satisfaction, with PJ fit having the strongest relationship with work environment satisfaction, followed by PO fit and PG fit. Therefore, research could investigate whether good PO fit compensates for a poor PJ fit and/or PV fit in relation to the attitudes and behaviors of the employee. The scales included in the current study would be appropriate measures of three fit levels (PV, PO, and PJ fit) to include in an additive analysis similar to the method used by Kristof-Brown et al. (2002).

Finally, investigations into *misfit* would be beneficial for continued fit research. Several researchers (Billsberry, Marsh, & Moss-Jones, 2004; Cable & DeRue, 2002; Cable & Edwards, 2004) have discussed misfit as the degree to which employees experience particularly poor or exceptional fit. For example, employees with minimal skills and abilities for his or her job would experience low PJ-DA fit. Conversely, an employee who is overeducated and extremely skilled would experience high PJ-DA fit. However, research has not studied the relation of these examples of misfit to individual outcomes (i.e., attitudes and behaviors). There might be unique relationships between cases of misfit to particular outcomes. Billsberry et al. (2004) have focused on misfit as a predominantly lack of fit or poor fit. Their qualitative results of interviews with incumbents regarding PE fit yielded results suggesting that incumbents' poor fit directly related to negative individual outcomes. Interestingly, Cable and Edwards (2004) propose that oversupply or exceptional fit for PO-NS fit might be optimal as equity theory suggests that "overpayment is not as troubling to employees as underpayment" (p. 831). This postulation could help support Billsberry et al.'s (2004) conjectures about misfit.

# **Practical Implications**

The results of this investigation provide some practical implications for a variety of contexts. As the current study included members from a variety professions, organizations, and jobs, the results may generalize to a multitude of professionals in a number of employment settings. The extended research into PV fit provides useful applications toward professionals' career planning, career development, and career counseling efforts. Traditionally, the objective of person-vocation fit within career

guidance research and practice has been to help individuals select a profession they would find satisfying based on vocational interests (Dawis & Lofquist, 1984; Gottfredson, 2003; Holland, 1985a). For example, optimal PV fit has been shown to contribute significantly to young professionals' well-being and job satisfaction (Feij, Banks, Parkinson, and Whitely, 1992; Feij, Peiró, Whitley, & Taris, 1995). However, this conventional approach to PV fit does not take into account the fit between individuals' abilities and the demands of the profession among other conceptualizations of PV fit that may impact career-focused outcomes (Converse et al., 2004). Therefore, professional employees would benefit from the current results to assist in career development by evaluating those career-focused outcomes (e.g., career satisfaction) most strongly influenced by particular areas of fit. For example, to the extent that professionals evaluate their occupational commitment, they should examine needs-supplies fit, value, interest, and personality congruence perceptions found in the general PV fit scale, while attention to improving job performance should be directed to PV demands-abilities fit perceptions.

The expansion of PV fit research found in the current study not only helps professional employees develop career enhancing strategies, but these findings also aid vocational counselors in clarifying professionals' needs and interests (Feij et al., 1999). The PV fit measures developed in the present investigation also provide vocational counselors with *direct* (subjective) measures to use along with more traditional *indirect* (objective) PV fit measures (e.g., *Self-Directed Search* [Holland et al., 1994], *Vocational Preference Inventory* [Holland, 1985b]). An integrative approach of this type might

provide a more accurate determination of vocational congruence and a more comprehensive assessment of PV fit.

Overall, these findings indicate how professional employees think about their fit with their profession, organization, and job. Therefore, based on the notion that the results supported the prediction of individuals' organizational attitudes and behavior, organizational managers, researchers, practitioners, and professional employees should consider the relationship of each level and conceptualization of fit perception with work outcomes for a more comprehensive assessment of fit (Bretz & Judge, 1994; Westerman & Cyr, 2004). For example, to the extent that organizations are concerned about turnover, organizational leaders should focus on examining the professional employees' PO-NS and PJ-NS fit perceptions as these constructs have been shown to strongly relate to intentions to leave the company. Researchers will find the development of a PO-NS fit scale in use with the more traditional PO-VC measure beneficial in understanding the multi-dimensionality of PO fit (Westerman & Cyr, 2004). Practitioners interested in enhancing career-focused outcomes (e.g., occupational commitment) of a client company's top talent are encouraged to assess profession-level fit variables, such as PV-DA and general PV fit. Each fit perception scale could also contribute valuable information to the organization when used to track professional employees' reactions to organization initiatives (e.g., leadership development programs). With the changing nature of the psychological contract and professionals potentially committing stronger to the profession than the organization (Werbel & Gilliland, 1999), organizations are encouraged to monitor the perceptions of professional incumbents to retain top talent.

Lastly, professional societies and affiliations serve a variety of purposes to their members, such as providing professional connections between members, establishing values upheld by the profession, and servicing the needs of members for professional development. Therefore, officers of these professional groups would most likely be interested in knowing how their group's membership thinks about fit with their profession, organization, and job and how these fit perceptions uniquely affect their attitudes and behaviors.

#### Conclusions

The current study successfully replicated and expanded Cable and DeRue's (2002) three-factor model of subjective fit perceptions, supporting the notion that professionals make distinctions by both the fit level and fit conceptualization.

Furthermore, this investigation improved the understanding of how professionals distinguish between various aspects of the work environment and how these fit relationships affect their attitudes and behavior (Cable & DeRue, 2002; Kristof, 1996; Kristof-Brown, 2000; Lauver & Kristof-Brown, 2001; Saks & Ashforth, 2002). The current study included multiple fit levels (PJ, PO, and PV fit) as suggested by researchers (e.g., Cable & DeRue, 2002; Kristof-Brown, 2001), providing empirical support for the construct validity for the new fit perceptions scales. PV fit was introduced into a single study with PJ and PO fit, approaching the assessment of PV fit from a novel and alternative approach, formerly unseen in previous research. Furthermore, common method variance was controlled in the interpretation of fit and outcome relationships, a necessity when using direct measures. Multiple conceptualizations of multiple fit levels

were examined. Incumbent employees, a previously excluded sample in previous fit research, were sampled across a variety of professions, organizations, and jobs. In summary, the current study effectively investigated the conceptual framework of professionals' fit perceptions by constructing well-developed measurement scales and analyzing the relationship of multiple fit perceptions to a variety of individual employee outcomes.

# APPENDIX A ITEM DEVELOPMENT PROCESS

#### Overview

A pretest was conducted to ensure fit items adequately captured the intended construct domains following the best practices outlined by Hinkin (1995). Based on the relevant PE fit literature, items corresponding to multiple types and conceptualizations of fit were constructed. These fit items were administered to members of a professional society to develop scales for use in the current study. The resulting pretest data were used to provide preliminary evidence of the underlying factor structure and discriminant validity between fit items and attitudinal outcomes (e.g., job satisfaction, career satisfaction, and occupational commitment). The factor structure of pretest data was assessed using exploratory factor analyses, while discriminant validity was examined using correlational analyses and regression analyses.

#### Item Generation Phase

# Item Identification

Items selected to represent each conceptualization of each fit type were drawn explicitly from current PE fit literature or modified/generated by the author to conform to specific conceptualizations of fit types. The following sources were referenced to gather measurement items: Cable and DeRue (2002), Cable and Judge (1996, 1997), Edwards (1991), Feij et al. (1999), Kristof (1996), Kristof-Brown et al. (2002), Lauver and Kristof-Brown (2001), and Saks and Ashforth (1997, 2002). A total of 43 items were used to measure various conceptualizations of PV, PO, and PJ fit (see Table 17 for list of these 43 items). Nine of these items were existing scales (Cable & DeRue, 2002), ten items were modified by the author drawn from previous fit research (e.g., Cable & Judge,

1996; Lauver & Kristof-Brown, 2001), and twenty-four items were drafted by the author based on the following fit research: Cable and Judge (1996, 1997), Cable and DeRue (2002), Edwards (1991), Feij et al. (1999), Kristof (1996), Kristof-Brown et al. (2002), Lauver and Kristof-Brown (2001), and Saks and Ashforth (1997, 2002). These items were developed to be clear and not double-barreled (Babbie, 1974). Additionally, precautions were taken to avoid writing items that confounded values, needs, abilities, personality, and interests within any item (Cable & DeRue, 2002).

The majority of the items developed represented the PV fit level due to a lack existing scales directly measuring PV fit perceptions. Twenty-nine items were modified/written to assess PV fit representing five conceptualizations: value congruence (5 items), needs-supplies fit (5 items), demands-abilities (6 items), personality congruence (8 items), and interest congruence (5 items). PV fit items were worded in such a way as to identify an individual's vocation, occupation, and profession using the universal term of "profession" as suggested by previous vocational researchers (e.g., Meyer et al., 1993). In addition to PV fit, eight items were selected to assess PO fit representing two conceptualizations: value congruence (3 items; Cable & DeRue, 2002) and needs-supplies fit (5 items drafted by author). Six items were selected to assess PJ fit representing two conceptualizations: needs-supplies fit (3 items; Cable & DeRue, 2002) and demands-abilities fit (3 items; Cable & DeRue, 2002). These nine fit items (3 items measuring PO value congruence, 3 items measuring PJ needs-supplies fit, and 3 items measuring PJ demands-abilities fit) developed by Cable and DeRue (2002) were previously validated on existing scales with adequate evidence for construct validity

(Cable & DeRue, 2002). All 43 fit perceptions items were administered to participants during the pretest phase.

#### Pretest Phase

# Participants and Procedure

Participants were randomly drawn from a pool of 2,238 members of an international professional society. Via email, potential participants received an Internet link to the Web-based questionnaire (see Appendix G). Five hundred and seven members (23% of the contacted members) responded to the Web-based questionnaire that assessed their demographics, perceptions of fit, needs-supplies fit, demands-abilities fit, and organizational attitudes. However, data for 167 respondents were removed due to missing data, univariate outliers, and multivariate outliers resulting in the use of data for 340 respondents. The average respondent was 44 years old, had been employed by his or her current employer for 9 years, had 17 years of full-time work experience, had been employed by five employers throughout his or her full-time work history, and belonged to three professional affiliations. Fifty-seven percent of respondents were male and 93% were Caucasian. Eighty-seven percent of respondents held a doctorate degree.

#### Measures

Respondents were asked to rate their agreement with each item on a seven-point scale with the endpoints of *strongly disagree* and *strongly agree* for each scale listed below.

*Fit perceptions*. Forty-three items were included in a pretest questionnaire. The items used to assess fit perceptions are presented in Table 17.

Organizational identification. Six items used by Saks and Ashorth (1997; e.g., "When someone criticizes my firm, it feels like a personal insult") were applied to measure organization identification. Saks and Ashforth (1997) report coefficient alpha estimates averaging .83. The items contained on this scale, and the remaining outcome variables listed below, are contained in Appendix B.

Intent to quit. Three items used by Lauver and Kristof-Brown (2001; e.g., "I would prefer another job to the one I have now") were used to assess intentions to quit the current employment relationship. Lauver and Kristof-Brown (2001) report a coefficient alpha estimate of .85.

Job satisfaction. A combination of three items used by Cammann et al. (1983) and Hackman and Oldham (1974) were used to measure job satisfaction. One item, developed by Cammann et al. (1983; e.g., "In general, I like working in my current job"), was used to assess job satisfaction. Cammann et al. (1983) reported coefficient alpha estimates ranging from .67 to .95. In addition, two items from the Job Diagnostic Survey (Hackman & Oldham, 1974; e.g., "Generally speaking, I am very satisfied with my job" and "I am generally satisfied with the kind of work I do in my job") that assessed personal reactions toward the job were used to measure job satisfaction. Hackman and Oldham (1974) reported a coefficient alpha estimate of .77.

Career satisfaction. The five-item scale used in Judge et al. (1995; e.g., "I am satisfied with the success I have achieved in my career") was used to measure career satisfaction. Judge et al. (1995) report a coefficient alpha estimate of .87.

Occupational commitment. Meyer et al.'s (1993) six-item Affective Commitment Scale (e.g., "I regret having entered the profession that I did;" reverse scored) was used to assess occupational commitment. Meyer et al. (1993) report coefficient alpha estimates averaging .86.

# Data Analyses

Data screening. Five hundred and seven participants responded to the pretest questionnaire; however, only 340 cases were included in the pretest study based on the following screening criteria: no missing data, no univariate outliers, and no multivariate outliers. The following data were deleted: 112 respondents for missing data, 21 respondents for univariate outliers, and 34 respondents for multivariate outliers. To determine univariate outliers, scores for each participant were standardized into z-scores. Cases falling above 3.29 or below –3.29 standard deviations for any variable were removed as univariate outliers from the dataset. Mahalanobis distance was used to determine the removal of multivariate outliers (Tabachnick & Fidell, 1996).

Exploratory factor analyses. An exploratory factor analytic (EFA) strategy was utilized to classify the fit perceptions items. Three exploratory models, a three-factor, a four-factor, and a five-factor solution, were utilized. The three-factor model was proposed to be the most likely candidate as previous EFAs have indicated three factors (PO value congruence, PJ needs-supplies fit, and PJ demands-abilities fit) of items (Cable & DeRue, 2002). However, because items based on previously excluded conceptualizations (e.g., personality congruence and interest congruence) of previously

excluded fit types (e.g., PV fit) were included in the current study, four and five-factor models were also posited to be probable.

First, the author used SPSS v11.0 to conduct a maximum likelihood EFA with oblique rotation of 43 fit perceptions items (using 340 cases with complete data for all fit items) to remove items with low communalities and those not adhering to simple structure (Fabrigar, MacCallum, Wegener, & Strahan, 1999). A total of thirteen items were removed due to low communalities (6 items), a failure to load on a factor above .33 (3 items), cross-loading above .33 on two or more factors (2 items), or loading on a factor with fewer than two items (2 items), a total of 30 of the original 43 fit items were retained (see Table 17 for identification of removed items).

Next, a maximum likelihood EFA with oblique rotation was conducted on the 30 remaining items using the following criteria to determine adequate model fit: examination of scree plots of factor eigenvalues, eigenvalues ≥ 1.0, and interpretability of the solutions related to theoretical models. As shown in Figure 8, the scree plot demonstrates a considerable break in eigenvalue magnitude between four and five factors, suggesting a four-factor model may best fit the data. Based on eigenvalues ≥ 1.0, the analyses resulted in a five-factor solution (see Table 18 for results). The first factor consisted of both PO and PJ needs-supplies fit items in addition to PO value congruence items (Cable & DeRue, 2002). The second factor consisted of negatively worded PV fit items using multiple conceptualizations (see Table 21 for item wording). The third factor consisted of both PJ and PV demands-abilities fit items. This factor was interpreted as a "pure" scale measuring demands-abilities fit. Surprisingly, PO value congruence items

cross-loaded negatively on this fourth factor. The fifth factor consisted of comparatively worded PV fit items (i.e., fit with profession compared to another profession) using multiple conceptualizations (see Table 21 for item wording). The internal consistency reliability estimates were quite high: .96 for factor one, .86 for factor two, .89 for factor three, .93 for factor four, and .78 for factor five.

Thus, to examine the fit of a four-factor model, a maximum likelihood EFA with oblique rotation was conducted in which four factors were extracted. The first factor consisted of both PO and PJ needs-supplies fit items in addition to PO value congruence items (Cable & DeRue, 2002). PV fit items, previously loading on independent factors (as presented in Table 18), loaded together on factor two forming a "pure" PV fit factor with multiple conceptualizations. The third factor consisted of both PJ and PV demands-abilities fit items. PO value congruence items (Cable & DeRue, 2002) cross-loaded negatively on factor four (see Table 19 for results), violating simple structure (Fabrigar et al., 1999). Additionally, this fourth factor accounted for 4.18 percent of the variance. The internal consistency reliability estimates were quite high: .96 for factor one, .88 for factor two, .89 for factor three, and .93 for factor four.

Due to the lack of interpretability of the fourth factor represented in Table 19, a maximum likelihood EFA with oblique rotation was conducted in which three factors were extracted to examine the fit of a three-factor model. Results supported a three-factor solution (see Table 20 for results). These findings support a PO value congruence and a PJ/PO needs-supplies fit perceptions scale (F1), a general PV fit perceptions scale using multiple conceptualizations (F2), and a PJ/PV demands-abilities fit perceptions scale

(F3). The internal consistency reliability estimates were quite high: .96 for factor one, .88 for factor two, and .89 for factor three.

Final considerations. In summary of these findings, a four-factor model (PJ/PO needs-supplies fit, general PV fit using multiple conceptualizations, PJ/PV demands-abilities fit, and PO value congruence perceptions) is posited as the best fitting model due to simple structure analysis (Tabachnick & Fidell, 1996). While current findings indicated that PO value congruence items loaded on the first factor and cross-loaded on the fourth factor (as presented in Table 18 and A3), Cable and DeRue (2002) found empirical support for the conceptual distinction between PO value congruence perceptions and PJ needs-supplies fit perceptions. Therefore, Cable and DeRue's (2002) findings suggest that PO value congruence items are distinct, independent fit perceptions. Based on this information, PO value congruence items included in the current study are interpreted to represent an independent scale.

Throughout the testing of the five, four, and three-factor models, PJ/PO needs-supplies fit items consistently loaded together on a single factor. These findings are supportive of Cable and DeRue's (2002) empirical evidence for a distinct, needs-supplies fit perceptions factor. Additionally, throughout these exploratory models, PJ/PV demands-abilities fit items consistently loaded together on a single factor. These findings are also supportive of Cable and DeRue's (2002) empirical evidence for a distinct, demands-abilities fit perceptions factor.

Current findings regarding PV fit using multiple conceptualizations (value congruence, needs-supplies fit, personality congruence, and interest congruence) were not

supportive of Cable and DeRue's (2002) three-factor model. The inclusion of these additional items to Cable and DeRue's (2002) items formed a distinct, general PV fit perceptions scale using multiple conceptualizations as supported by the test of a four and three-factor solution (as presented in Table 19 and A4, respectively). While the five-factor solution indicated separate PV fit factors using these multiple conceptualizations (as presented in Table 18), the correlation between these two factors (r = -.55) suggested these items may best load on a single factor. The four and three-factor solutions were supportive of this postulation.

However, a distinction between these two independent PV fit factors was identified based on the five-factor solution (as presented in Table 18). As noted previously, five of the six PV fit items loading on factor two were negatively worded (i.e., reverse scored), whereas three of the four PV fit items loading on factor five were comparatively worded (i.e., "better than my current profession" and "matches my interest better than my current profession"). The difference in item valence was suspected of attributing to this distinction between factors, meaning the negative item valence (reverse scored) may have introduced systematic error (Idaszak & Drasgow, 1987). Therefore, the item valence for several of these items will be changed to a positive item valence in the current study to avoid systematic error. Table 20 presents these negatively and comparatively worded items. Table 21 presents item conversions for negatively worded items used in the current study. The results of the EFA are presented in Table 18.

Convergent and discriminant validity. In a preliminary assessment of convergent and discriminant validity of the four-factor solution (PO value congruence, PJ/PO needs-

supplies fit, PJ/PV demands-abilities fit, and general PV fit), the pattern of correlations between fit variables and outcomes (organizational identification, occupational commitment, job satisfaction, career satisfaction, and intent to quit) were examined. As shown in Table 23, all of the fit variables were significantly related with all of the outcome variables. The average correlation between fit variables including PO fit items (PO value congruence and PJ/PO needs-supplies fit) and those organization-relevant outcomes of organizational identification and intent to guit was .53 and .64, respectively. Conversely, the average correlation between fit variables including profession and job specific items (general PV fit and PJ/PV demands-abilities fit) and organizational identification and intent to quit was .21 and .23, respectively. General PV fit, composed of occupational/professional fit items, had a strong relationship with occupational commitment (r = .72), while the average correlation between other fit variables and occupational commitment was .31. PJ/PO needs-supplies fit had a strong relationship with job satisfaction (r = .81); while, the average correlation between the remaining fit variables and job satisfaction was .46. Overall, evidence for construct validity was provided by examining the patterns of correlations between fit variables and outcomes.

To provide a stronger test of convergent and discriminant validity of the four-factors, four scales (PO value congruence, PJ/PO needs-supplies fit, PJ/PV demands-abilities fit, and general PV fit) were entered as simultaneous predictors in a series of five multiple regression models, one for each outcome variable. As presented in the first column of Table 24, the relationship between PO value congruence perceptions and organizational identification ( $\beta = .41$ , p < .01) was significant. In addition, PO value

congruence was unrelated to most of the other outcomes, revealing evidence of discriminant validity (Schwab, 1999). As presented in the second column of Table 24, the relationships between PJ/PO needs-supplies fit and organizational identification ( $\beta = .17$ , p < .05), job satisfaction ( $\beta = .85$ , p < .01), career satisfaction ( $\beta = .28$ , p < .01), and intent to quit ( $\beta = -.75$ , p < .01) were significant. PJ/PO needs-supplies fit was unrelated to occupational commitment, revealing evidence of discriminant validity (Schwab. 1999). As presented in the third column of Table 24, the relationships between PJ/PV demandsabilities fit and occupational commitment ( $\beta = .17, p < .01$ ), job satisfaction ( $\beta = .14, p < .01$ ) .01), and career satisfaction ( $\beta$  = .29, p < .01) was significant. PJ/PV demands-abilities fit was unrelated to organizational identification and intent to quit, revealing evidence of discriminant validity (Schwab, 1999). Finally, as presented in the fourth column of Table 24, the relationships between general PV fit and occupational commitment ( $\beta = .65, p < .05$ .01), job satisfaction ( $\beta = .10$ , p < .01), and career satisfaction ( $\beta = .17$ , p < .01) were significant. General PV fit was no related to organizational identification and intent to quit, providing evidence of discriminant validity (Schwab, 1999).

Overall, these regression results provided supportive evidence of the convergent and discriminant validity of the four fit scales. For example, PO value congruence was the strongest predictor of organizational identification, while PJ/PO needs-supplies fit was the strongest predictor of job satisfaction and intent to quit. Furthermore, general PV fit was the strongest predictor of occupational commitment. With lower beta weights than the other fit predictors, PJ/PV demands-abilities fit was significantly related to occupational commitment, job satisfaction, and career satisfaction.

### Conclusion

The three-factor model was proposed to be the most likely candidate as previous EFAs have indicated three factors (PO value congruence, PJ needs-supplies fit, and PJ demands-abilities fit) of items (Cable & DeRue, 2002). However, because items based on previously excluded conceptualizations (e.g., personality congruence and interest congruence) of previously excluded fit levels (e.g., PV fit) were included in the current study, four and five-factor models were also posited to be probable. Findings supported a four-factor model (PO value congruence, PJ/PO needs-supplies fit, PJ/PV demands-abilities fit, and *general* PV fit [using multiple conceptualizations] perceptions; see Appendix B for scales) as the best fitting model due to the interpretability of solutions. Overall, scale reliability estimates ranged from .88 to .94, exceeding the criterion of .70 judged acceptable (Nunnally, 1983). Therefore, this four-factor solution is proposed for the current study; however, potential theoretically based, alternative models, ranging from one to six factors (see Appendix F), will be tested to determine the best fitting model.

Table 17
Sources of Initial 43 Fit Items

	Item	Item Source
	(Value Congruence)	
1.	I am able to maintain my values working in this profession. +	Modified from Cable and Judge (1996)
2.	My values match or fit the values of my profession.	Modified from Cable and Judge (1996)
3.	My values prevent me from fitting in with my profession	Modified from Cable and
	because they are different from my profession's values. (reverse scored)	Judge (1996)
4.	My profession does not represent my personal values. (reverse scored)	Created by author
5.	My current profession represents my personal values better than other professions.	Created by author
PV Fit	(Needs-Supplies Fit)	
1.	· · · · · · · · · · · · · · · · · · ·	Created by author
2.	My profession fulfills my professional needs. <sup>†</sup>	Created by author
3.	There is a good fit between the benefits I receive from my profession and the benefits I seek from my profession.	Created by author
4.	My profession prevents me from fulfilling my professional	Created by author
	desires. (reverse scored)	
5.	My profession offers me everything I seek from a profession.	Created by author
PV Fit	(Demands-Abilities Fit)	
1.	My abilities fit the demands of my profession.	Modified from Lauver and Kristof-Brown (2001)
2.	I have the right skills and abilities for my profession.	Modified from Lauver and Kristof-Brown (2001)
3.	There is a good match between the requirements of my profession and my skills.	Modified from Lauver and Kristof-Brown (2001)
4.	I need to improve my skills and abilities to meet the demands of my profession. (reverse scored) <sup>+</sup>	Created by author
5.	My training and education allow me to meet the challenges of my profession.	Created by author
6.	I do not need more professional experience to meet the demands of my profession. +	Created by author
PV Fit	(Personality Congruence)	
1.	There is a good fit between my personality and my profession.   √	Created by author
2.	My personality is a good match for my profession.	Modified from Lauver and Kristof-Brown (2001)
3.	I am the right type of person to be working in my profession.	Modified from Lauver and Kristof-Brown (2001)
4.	My personality is similar to others working in my profession. +	Created by author
5.	My profession does not accurately represent the qualities of my personality. (reverse scored)	Created by author
6.	Others would say that my personality is very characteristic of my profession. +	Created by author

7.	My profession requires me to be someone I am not. (reverse scored)	Created by author	
8.	My profession is ultimately the real me. +	Created by author	
PV (Inte	erest Congruence)		
1.	There is a good fit between my interests and my profession.*	Created by author	
2.	My interests are well suited to the attributes of my profession.*	Created by author	
3.	My profession does not represent my interests. (reverse scored)	Created by author	
4.	I could not imagine a profession that would fit my interests better than my current profession.	Created by author	
5.	If I could start over, I would choose a profession that matches my interests better than my current profession. (reverse scored)	Created by author	
PO Fit (	Value Congruence)		
1.	The things that I value in life are very similar to the things that my organization values.	Used by Cable and DeRue (2002)	
2.	My personal values match my organization's value and culture.	Used by Cable and DeRue (2002)	
3.	My organization's values and culture provide a good fit with the things that I value in life.	Used by Cable and DeRue (2002)	
PO Fit (	Needs-Supplies Fit)		
1.	My current organization meets the needs I expect an organization to meet.	Created by author	
2.	The attributes I look for in an organization are fulfilled by my present organization.	Modified from Cable and DeRue (2002)	
3.	My current organization fails to meet my needs. (reverse scored)	Created by author	
4.	Few organizations could meet my needs better than my current organization.	Created by author	
5.	There is a good fit between what my organization offers me and what I am looking for in an organization.	Modified from Cable and DeRue (2002)	
PJ Fit (	Needs-Supplies Fit)		
1.	There is a good fit between what my job offers me and what I am looking for in a job.	Used by Cable and DeRue (2002)	
2.	The attributes that I look for in a job are fulfilled very well by my present job.	Used by Cable and DeRue (2002)	
3.	The job that I currently hold gives me just about everything that I want from a job.	Used by Cable and DeRue (2002)	
PI Fit (1	Demands-Abilities Fit)		
1.	The match is very good between the demands of my job and my personal skills.	Used by Cable and DeRue (2002)	
2.	My abilities and training are a good fit with the requirements of my job.	Used by Cable and DeRue (2002)	
3.	My personal abilities and education provide a good match with the demand that my job places on me.	Used by Cable and DeRue (2002)	

<sup>†</sup>Failed to load

\* Cross-loaded

† Low communality

Value of Loaded on factor with only one other item

Table 18

Factor Loadings for the Remaining 30 Fit Items

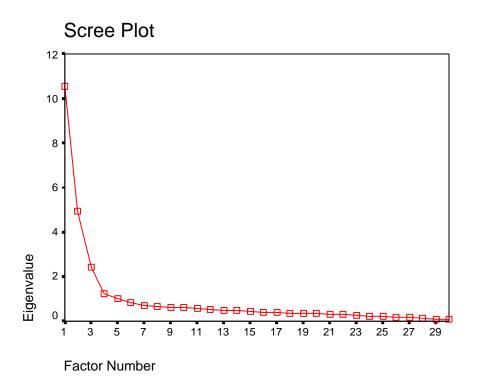
Item			Factor		
	One	Two	Three	Four	Five
PO NS 5	.92				
PO NS 2	.92				
PO NS 1	.89				
PO_NS_3	.87				
PJ_NS_3	.82				
$PO_VC_3$	.77			34	
PO_VC_2	.77			45	
PO_NS_4	.76				
$PJ_NS_2$	.76				
PO_VC_1	.71			36	
PJ_NS_1	.65				
PV_VC_3		.76			
PV_VC_4		.74			
$PV_{IC_{3}}$		.67			
PV_PC_7		.64			
PV_NS_4		.58			
PV_VC_2		.54			
PV_PC_5		.51			
PV_DA_2			.79		
PV_DA_3			.78		
PV_DA_1			.74		
PJ_DA_2			.73		
PJ_DA_3			.64		
PV_DA_5			.63		
PJ_DA_1			.62		
PV_PC_3			.61		
PV_IC_4					85
PV_VC_5					53
PV_IC_5					53
PV_NS_5					45
Percent of Variance Accounted for:	35.13%	16.52%	8.15%	4.18%	3.34%

Extraction Method: Maximum Likelihood; Eigenvalues ≥ 1.0

Rotation Method: Oblimin with Kaiser Normalization

Note. Thirteen of the original 43 fit items failed to load, cross-loaded, and/or had item loadings below .33. PO-VC = PO fit conceptualized as value congruence; PO-NS = PO fit conceptualized as needs-supplies fit; PJ-NS = PJ fit conceptualized as needs-supplies fit; PJ-DA fit = PJ fit conceptualized as demands-abilities fit; PV-DA = PV fit conceptualized as demands-abilities fit; PV-VC = PV fit conceptualized as value congruence; PV-IC = PV fit conceptualized as interest congruence; PV-PC = PV fit conceptualized as personality congruence; PV-NS = PV fit conceptualized as needs-supplies fit.

Figure 8. Scree plot for the remaining 30 fit items.



*Note*. Eigenvalues  $\geq 1.0$ 

Table 19

Factor Loadings for the Remaining 30 Fit Items (Forced Four-Factor Model)

Item		Factor			
	One	Two	Three	Four	
PO NS 2	.93				
PO NS 5	.92				
PO NS 1	.90				
PO NS 3	.88				
PJ_NS_3	.82				
$PO_V\bar{C}_2$	.78			43	
PO_VC_3	.78			33	
$PJ_NS_2$	.76				
PO_NS_4	.75				
PO_VC_1	.72			34	
PJ_NS_1	.65				
PV_VC_4		.75			
PV_PC_5		.72			
PV_IC_3		.71			
PV_IC_4		.66			
PV_VC_3		.64			
PV_NS_5		.64			
PV_IC_5		.60			
PV_PC_7		.60			
PV_VC_5		.58			
PV_NS_4		.53			
PV_VC_2		.49			
PV_DA_2			80		
PV_DA_3			79		
PV_DA_1			75		
PJ_DA_1			72		
PV_DA_5			65		
PJ_DA_3			64		
PJ_DA_1			62		
PV_PC_3			60		
Percent of Variance Accounted for	or: 35.13%	16.52%	8.15%	4.18%	

Extraction Method: Maximum Likelihood; Eigenvalues  $\geq$  1.0; 4 factors were extracted Rotation Method: Oblimin with Kaiser Normalization

Note. Thirteen of the original 43 fit items failed to load, cross-loaded, and/or had item loadings below .33. PO-VC = PO fit conceptualized as value congruence; PO-NS = PO fit conceptualized as needs-supplies fit; PJ-NS = PJ fit conceptualized as needs-supplies fit; PJ-DA fit = PJ fit conceptualized as demands-abilities fit; PV-DA = PV fit conceptualized as demands-abilities fit; PV-VC = PV fit conceptualized as value congruence; PV-IC = PV fit conceptualized as interest congruence; PV-PC = PV fit conceptualized as personality congruence; PV-NS = PV fit conceptualized as needs-supplies fit.

Table 20
Factor Loadings for the Remaining 30 Fit Items (Forced Three-Factor Model)

Item		Factor	
	One	Two	Three
PO NS 2	.96		
PO NS 5	.93		
PO_NS_1	.90		
PO_NS_3	.88		
PO_VC_2	.84		
PO_VC_3	.83		
$PJ_NS_3$	.78		
PO_VC_1	.78		
PO_NS_4	.75		
PJ_NS_2	.73		
PJ_NS_1	.62		
PV_VC_4		.75	
PV_PC_5		.72	
PV_IC_3		.72	
PV_IC_4		.66	
PV_NS_5		.64	
$PV_VC_3$		.64	
PV_PC_7		.60	
PV IC 5		.60	
$PV_V\bar{C}_5$		.59	
PV NS 4		.53	
PV_VC_2		.49	
PV DA 2			80
PV_DA_3			79
PV_DA_1			75
PJ_DA_2			72
PJ_DA_5			64
PJ_DA_3			63
PJ_DA_1			62
PV_PC_3			60
Percent of Variance Accounted for:	35.13%	16.52%	8.15%

Extraction Method: Maximum Likelihood; Eigenvalues  $\geq$  1.0; 3 factors were extracted Rotation Method: Oblimin with Kaiser Normalization

Note. Thirteen of the original 43 fit items failed to load, cross-loaded, and/or had item loadings below .33. PO-VC = PO fit conceptualized as value congruence; PO-NS = PO fit conceptualized as needs-supplies fit; PJ-NS = PJ fit conceptualized as needs-supplies fit; PJ-DA fit = PJ fit conceptualized as demands-abilities fit; PV-DA = PV fit conceptualized as demands-abilities fit; PV-VC = PV fit conceptualized as value congruence; PV-IC = PV fit conceptualized as interest congruence; PV-PC = PV fit conceptualized as personality congruence; PV-NS = PV fit conceptualized as needs-supplies fit.

Table 21

Negatively and Comparatively Worded PV Fit Items

Comparatively Worded PV Fit Items
(Loading on factor five - see Table 18)
My current profession represents my personal values better than other professions.
I could not imagine a profession that would fit my interests better than my current profession.
If I could start over, I would choose a profession that matches my interests better than my current profession. (reverse scored)
_

Table 22

Item Revisions for Negatively Worded PV Fit Items Loading on Factor Two

ent Study
onal values.
onal desires.
ts the qualities
ests.

Table 23

Descriptive Statistics, Intercorrelations, and Internal Reliability Estimates

	Variable	M	SD	1	2	3	4	5	6	7	8	9
1.	PO Value Congruence	5.54	1.13	(.93)								
2.	PJ/PO Needs-Supplies Fit	5.54	1.05	.78	(.94)							
3.	General PV Fit	6.00	0.63	.34	.34	(.88)						
4.	PJ/PV Demands-Abilities Fit	6.35	0.46	.28	.27	.49	(.89)					
5.	Organizational Identification	5.12	1.07	.56	.50	.25	.16	(.86)				
6.	Occupational Commitment	6.36	0.54	.23	.23	.72	.47	.30	(.82)			
7.	Job Satisfaction	6.07	0.75	.59	.81	.41	.38	.40	.36	(.77)		
8.	Career Satisfaction	5.66	0.78	.27	.35	.38	.42	.21	.28	.40	(.78)	
9.	Intent to Quit	2.82	1.52	55	72	26	19	32	21	70	29	(.83)

*Note.* N = 282; all correlations are significant at p < .01. Alphas are enclosed in parentheses.

Table 24

Convergent and Discriminant Validity of Subjective Fit Perceptions

				Pred	ictors				
	РО	)-VC	PJ/P	O-NS	PJ/P	V-DA	PV-	-GEN	
Outcome variable	β	SE	β	SE	β	SE	β	SE	Model $R^2$
Organizational Identification	.41	.08**	.17	.08*	04	.13	.07	.10	.32
Occupational Commitment	03	.03	.00	.03	.17	.06**	.65	.04**	.53
Job Satisfaction	15	.04**	.85	.04**	.14	.06**	.10	.05**	.70
Career Satisfaction	08	.06	.28	.06**	.29	.10**	.17	.08**	.26
Intent to Quit	.04	.09	75	.10**	.02	.16	03	.12	.52

Note. N = 282; PO-VC = PO fit conceptualized as value congruence; PJ/PO-NS = PJ and PO fit conceptualized as needs-supplies fit; PJ/PV-DA = PJ and PV fit conceptualized as demands-abilities fit; PV = general PV fit conceptualized using the following multiple conceptualizations: needs-supplies fit, value congruence, personality congruence, and interest congruence.

\* p < .05 \*\* p < .01

# APPENDIX B PILOT STUDY OUTCOME MEASURES

#### Organizational Identification

- 1. When someone criticizes my organization, it feels like a personal insult.
- 2. I am very interested in what others think about my organization.
- 3. When I talk about my organization, I usually say 'we' rather than 'they'.
- 4. When someone praises my organization, it feels like a personal compliment.
- 5. My organization's successes are my successes.
- 6. If a story in the media criticized my organization, I would feel embarrassed.

#### Intent to Ouit

- 1. I would prefer another job to the one I have now.
- 2. If I have my way, I won't be working for my company a year from now.
- 3. I have seriously thought about leaving my company.

#### Job Satisfaction

- 1. Generally speaking, I am very satisfied with my job.
- 2. I am generally satisfied with the kind of work I do in my job.
- 3. In general, I like working in my current job.

#### Career Satisfaction

- 1. I am satisfied with the success I have achieved in my career.
- 2. I am satisfied with the progress I have made toward meeting my overall career goals.
- 3. I am satisfied with the progress I have made toward meeting my goals for income.
- 4. I am satisfied with the progress I have made toward meeting my goals for advancement.
- 5. I am satisfied with the progress I have made toward meeting my goals for the development of new skills.

#### Occupational Commitment

- 1. My profession is important to my self-image.
- 2. I regret having entered the profession that I did. (reverse scored)
- 3. I am proud to be in my profession.
- 4. I dislike being in my profession. (reverse scored)
- 5. I do not identify with my profession. (reverse scored)
- 6. I am enthusiastic about my profession.

# APPENDIX C CURRENT STUDY FIT MEASURES

#### PO Value Congruence

- 1. The things that I value in life are very similar to the things that my organization values.
- 2. My personal values match my organization's values and culture.
- 3. My organization's values and culture provide a good fit with the things that I value in life.

#### PJ/PO Needs-Supplies Fit

- 1. There is a good fit between what my job offers me and what I am looking for in a job.
- 2. The attributes that I look for in a job are fulfilled very well by my present job.
- 3. The job that I currently hold gives me just about everything that I want from a job.
- 4. My current organization meets the needs I expect an organization to meet.
- 5. The attributes I look for in an organization are fulfilled by my present organization.
- 6. My current organization fails to meet my needs. (reverse scored)
- 7. Few organizations could meet my needs better than my current organization.
- 8. There is a good fit between what my organization offers me and what I am looking for in an organization.

#### PJ/PV Demands-Abilities Fit

- 1. I have the right skills and abilities for my profession.
- 2. There is a good match between the requirements of my profession and my skills.
- 3. My abilities fit the demands of my profession.
- 4. My abilities and training are a good fit with the requirements of my job.
- 5. My personal abilities and education provide a good match with the demand that my job places on me.
- 6. My training and education allow me to meet the challenges of my profession.
- 7. The match is very good between the demands of my job and my personal skills.
- 8. I am the right type of person to be working in my profession.

#### General PV Fit

- 1. My profession represents my personal values.
- 2. My profession accurately represents the qualities of my personality.
- 3. My profession represents my interests.
- 4. I could not imagine a profession that would fit my interests better than my current profession.
- 5. My profession offers me everything I seek from a profession.
- 6. My values prevent me from fitting in with my profession because they are different from my profession's values. (reverse scored)
- 7. My profession requires me to be someone I am not. (reverse scored)
- 8. If I could start over, I would choose a profession that matches my interests better than my current profession. (reverse scored)
- 9. My current profession represents my personal values better than other professions.
- 10. My profession fulfills my professional desires.
- 11. My values match or fit the values of my profession.

# APPENDIX D CURRENT STUDY OUTCOME MEASURES

#### Organizational Identification

- 1. When someone criticizes my organization, it feels like a personal insult.
- 2. I am very interested in what others think about my organization.
- 3. When I talk about my organization, I usually say 'we' rather than 'they'.
- 4. When someone praises my organization, it feels like a personal compliment.
- 5. My organization's successes are my successes.
- 6. If a story in the media criticized my organization, I would feel embarrassed.

#### Organizational Commitment

- 1. I would be very happy to spend the rest of my career with my organization.
- 2. I enjoy discussing my organization with people outside it.
- 3. I really feel as if my organization's problems are my own.
- 4. I think that I could easily become as attached to another organization as I am to my organization. (reverse scored)
- 5. I do not feel like 'part of the family' at my organization. (reverse scored)
- 6. I do not feel 'emotionally attached' to my organization. (reverse scored)
- 7. My organization has a great deal of personal meaning for me.
- 8. I do not feel a strong sense of belonging to my organization. (reverse scored)

#### Intent to Quit

- 1. I would prefer another job to the one I have now.
- 2. If I have my way, I won't be working for my company a year from now.
- 3. I have seriously thought about leaving my company.

#### Job Satisfaction

- 1. Generally speaking, I am very satisfied with my job.
- 2. I am generally satisfied with the kind of work I do in my job.
- 3. In general, I like working in my current job.

#### Career Satisfaction

- 1. I am satisfied with the success I have achieved in my career.
- 2. I am satisfied with the progress I have made toward meeting my overall career goals.
- 3. I am satisfied with the progress I have made toward meeting my goals for income.
- 4. I am satisfied with the progress I have made toward meeting my goals for advancement.
- 5. I am satisfied with the progress I have made toward meeting my goals for the development of new skills.

#### Occupational Commitment

- 1. My profession is important to my self-image.
- 2. I regret having entered the profession that I did. (reverse scored)
- 3. I am proud to be in my profession.
- 4. I dislike being in my profession. (reverse scored)
- 5. I do not identify with my profession. (reverse scored)
- 6. I am enthusiastic about my profession.

#### Perceived Organizational Support

- 1. My organization values my contribution to its well-being.
- 2. If my organization could hire someone to replace me at a lower salary it would do so. (reverse scored)
- 3. My organization fails to appreciate any extra effort from me. (reverse scored)
- 4. My organization strongly considers my goals and values.
- 5. My organization would ignore any complaint from me. (reverse scored)

- 6. My organization disregards my best interests when it makes decisions that affect me. (reverse scored)
- 7. Help is available from my organization when I have a problem.
- 8. My organization really cares about my well-being.
- 9. Even if I did the best job possible, my organization would fail to notice. (reverse scored)
- 10. My organization is willing to help me when I need a special favor.
- 11. My organization cares about my general satisfaction at work.
- 12. If given the opportunity, my organization would take advantage of me. (reverse scored)
- 13. My organization shows very little concern for me. (reverse scored)
- 14. My organization cares about my opinions.
- 15. My organization takes pride in my accomplishments at work.
- 16. My organization tries to make my job as interesting as possible.

#### Organizational Citizenship Behavior

- 1. I volunteer to do things for this organization.
- 2. I help orient new employees in this organization.
- 3. I attend functions that help this organization.
- 4. I assist others in this organization for the benefit of the organization.
- 5. I get involved to benefit this organization.
- 6. I help others in this organization learn about the work.
- 7. I help others in this organization with their work responsibilities.
- 8. I develop and make recommendations concerning issues that affect this organization.
- 9. I speak up and encourage other in this organization to get involved in issues that affect the group.
- 10. I communicate my opinions about work issues to others in this organization even if my opinion is different and others in the organization disagree with me.
- 11. I keep well informed about issues where my opinion might be useful to this organization.
- 12. I get involved in issues that affect the quality of work life here in this organization.
- 13. I speak up in this organization with ideas for new projects or changes in procedures.

#### Job Performance

- 1. I fulfill the responsibilities specified in my job description.
- 2. I perform the tasks that are expected as part of the job.
- 3. I meet performance expectations.
- 4. I adequately complete responsibilities.

#### Positive Affect

- 1. Enthusiastic
- 2. Interested
- 3. Determined
- 4. Excited
- 5. Inspired
- 6. Alert
- 7. Active
- 8. Strong
- 9. Proud
- 10. Attentive

#### Negative Affect

- 1. Distressed
- 2. Upset
- 3. Guilty
- 4. Scared
- 5. Hostile

- 6. Irritable
- 7. Ashamed
- 8. Nervous
- 9. Jittery10. Afraid

# APPENDIX E CURRENT STUDY SUPERVISOR/PEER MEASURES

#### Organizational Citizenship Behavior

- 1. This employee volunteers to do things for this organization.
- 2. This employee helps orient new employees in this organization.
- 3. This employee attends functions that help this organization.
- 4. This employee assists others in this organization for the benefit of the organization.
- 5. This employee gets involved to benefit this organization.
- 6. This employee helps others in this organization learn about the work.
- 7. This employee helps others in this organization with their work responsibilities.
- 8. This employee develops and makes recommendations concerning issues that affect this organization.
- 9. This employee speaks up and encourages others in this organization to get involved in issues that affect the group.
- 10. This employee communicates his/her opinions about work issues to others in this organization even if his/her opinion is different and others in the organization disagree with him/her.
- 11. This employee keeps well informed about issues where his/her opinion might be useful to this organization.
- 12. This employee gets involved in issues that affect the quality of work life here in this organization.
- 13. This employee speaks up in this organization with ideas for new projects or changes in procedures.

#### Job Performance

- 1. This employee fulfills the responsibilities specified in his/her job description.
- 2. This employee performs the tasks that are expected as part of the job.
- 3. This employee meets performance expectations.
- 4. This employee adequately completes responsibilities.

# APPENDIX F ALTERNATIVE MODELS OF FIT

### Alternative Models of Fit

Model	Factor Structure	Item Loadings
	Gestalt fit factor	All fit items
1 Factor		
2a Factor	Complementary fit factor	PO-NS Items PJ-NS Items PV-DA Items PJ-DA Items
i actor	Supplementary fit factor	PO-VC Items PV-GEN Items*
2b Factor	Complementary fit factor	PO-NS Items PJ-NS Items PV-DA Items PJ-DA Items PV-GEN Items
	Supplementary fit factor	PO-VC Items
	PV Factor	PV-DA Items PV-GEN Items
3a Factor	PO Factor	PO-NS Items PO-VC Items
	PJ Factor	PJ-NS Items PJ-DA Items
	NS Factor	PO-NS Items PJ-NS Items
3b Factor	VC Factor	PO-VC Items PV-GEN Items
	DA Factor	PV-DA Items PJ-DA Items

	NS Factor	PO-NS Items PJ-NS Items PV-GEN Items
3c Factor	VC Factor	PO-VC Items
	DA Factor	PV-DA Items PJ-DA Items
	NS/VC Factor	PO-NS Items PJ-NS Items PO-VC Items
3d Factor	DA Factor	PV-DA Items PJ-DA Items
	PV General Factor	PV-GEN Items
	NS Factor	PO-NS Items PJ-NS Items
4 Factor	VC Factor	PO-VC Items
Hypothesized	DA Factor	PV-DA Items PJ-DA Items
Model	PV General Factor	PV-GEN Items
	PO-NS Factor	PO-NS Items
	PJ-NS Factor	PJ-NS Items
5a	PO-VC Factor	PO-VC Items
Factor	DA Factor	PV-DA Items PJ-DA Items
	PV General Factor	PV-GEN Items
	PO-NS Factor	PO-NS Items
	PJ-NS Factor	PJ-NS Items
5b	PO-VC Factor	PO-VC Items
Factor	PJ-DA Factor	PJ-DA Items
	PV Factor	PV-GEN Items PV-DA Items

	PJ-NS Factor	PJ-NS Items
	PO-NS Factor	PO-NS Items
6	PO-VC Factor	PO-VC Items
Facto	or PJ-DA Factor	PJ-DA Items
	PV-DA Factor	PV-DA Items
	PV General Factor	PV-GEN Items

<sup>\*</sup>Includes items from a variety of conceptualizations, including value congruence, needs-supplies fit, personality congruence, and interest congruence.

APPENDIX G

DATA SOURCES

### **Data Sources**

	Email Discussion List	Description
1.	AERA-D	American Education Research Association - Measurement and Research
1.	AEKA-D	
2.	AERA-K	Methodology American Education Research Association - Teaching and Teacher
۷.	ALKA-K	Education Forum
3.	ALF-L	Academic Librarians Forum
<i>3</i> . 4.	ASSESS	Assessment professionals (University of Kentucky operated)
5.	ATTD	Advanced Technology and Training Development
6.	BUSLIB-L	Business Librarians List
7.	CAREERNET	Career professionals network
8.	CJUST-L	Criminal justice professionals (City University of New York operated)
9.	CMMI-PI	Capability Maturing Model Integration
10.		Building and supporting communities of practice
11.		Distance Education Online Symposium (Penn State University operated)
12.		Employee Assistance Program Manager
13.		European Association from Research on Learning and Instruction
14.		European Association of Work and Organizational Psychologists
15.		Educational Technology
16.		Evaluation Talk (American Evaluation Association operated)
17.		ECEF (Enterprise and Career Education Foundation)
18.		ECEF (Enterprise and Career Education Foundation)
10. 19.		Foreign Language Teachers
20.	_	First-Year Assessment
21.		Group Facilitation
22.	HME	Healthcare Management Engineering
23.	HR SOLUTIONS	Human Resource Solutions
24.	HRDIV_NET	Human Resources Division Network (Academy of Management operated)
25.	HRNET	Human Resources Network
26.	IMD-L	International Management Division
27.	Innovative	Teaching professionals
_,.	Teachers Chat	reaching professionals
28.		Learning Organization
29.		Management Education & Development
30.		Organizational Behavior Teaching Society Network
31.	ODCNET	Organizational Development and Change Network (Academy of
J1.	OBCIVET	Management operated)
32.	ODNET	Organizational Development Network
33.	OHPLIST	Occupational Health Psychology
34.	ONLINE	Online learning professionals
	LEARNING	
35.	Online Facilitation	Online facilitators
36.	ORGCULT	Organizational Culture Caucus (Academy of Management operated)
37.	ORGDYNE	Organizational Dynamics
38.	POD	Professional and Organizational Development Network in Higher Education
39.	ROINET	Return on Investment Network
40.	SIM-L	Social Issues in Management Division
41.	STLHE	Forum for Teaching and Learning in Higher Education
	TEAMNET	Teamwork Network (Center for Collaborative Organizations operated)
42.		

### New York operated)

44.	TRDEV	Training and Development
45.	WBTOLL-L	Web-Based Training Online Learning Discussion

# APPENDIX H PILOT STUDY QUESTIONNAIRE

Introductory Email Wording for Pilot Study

Subject: SIOP Members' Work Perceptions - Dissertation Research

Dear SIOP Member,

My name is Michael Kennedy and I am a doctoral candidate in the University of North Texas I/O Psychology Ph.D. program. I am contacting SIOP members to invite your participation in my dissertation research investigating people's perceptions of fit with their profession.

Since my research focuses on perceived fit with one's profession, sampling from a professional society such as SIOP was chosen due to the level of professionalism characteristic of its members. Your participation serves to advance fit research by furthering the understanding of how professionals distinguish between perceptions of fit with their jobs, organizations, and professions.

This dissertation study is for research purposes only. Participation in the study is anonymous and you will not be asked for any personally identifying information. Furthermore, your responses will not be linked to you in any way. The study's survey is online and should take no more than 10 minutes to complete. If you would like to receive a report of my research findings, please reply to this email with "Send me the fit report" in the subject line. Additionally, I will be submitting the results of my research for presentation at the next SIOP conference.

To participate in the study, please click on the link provided below to access the study's online survey. Your participation is greatly appreciated.

http://www.surveymonkey.com/s.asp?u=6328289490

Please feel free to contact me or my dissertation director, Joseph Huff, if you have any questions or concerns regarding the study.

Thanks in advance for your time and participation!

Michael Kennedy

Michael Kennedy I/O Psychology Doctoral Candidate Department of Psychology University of North Texas P.O. Box 311280 Denton, TX 76203-1280 Joseph Huff, Ph.D. Assistant Professor of I/O Psychology Department of Psychology University of North Texas P.O. Box 311280 

#### Informed Consent

Before agreeing to participate in this research study, it is important that you read and understand the following information:

I agree to participate in a study examining the relationships between my feelings, thoughts, and perceptions experienced at work and my levels of job satisfaction and other organizationally relevant variables. I understand that this study is for research purposes only, to further the understanding of how people form subjective perceptions of fit with their jobs, organizations, and professions and the consequences of these fit perceptions.

I understand that I have been presented with a link to a Web-based survey that contains a number of scales that are related to the way I feel about, think about, perceive, and behave on my job. The survey should not take more than 10 minutes to complete.

Any information obtained in this study will be completely anonymous. My responses will not be able to be identified by the investigator or any other person. I understand and agree that the data obtained from this research may be used for scholarly publication and educational purposes.

I understand that the there is no discomfort or possible risk from participating in this study other than those experienced as part of normal daily life.

I understand that I have the right to discontinue participation in this study and can exit the survey at any time without any negative consequences.

If I have any questions or if any problems arise in connection with my participation in this study, I should contact Michael Kennedy in the Psychology Department at the University of North Texas. Additional contact information may be directed to Dr. Joseph Huff in the Psychology Department at the University of North Texas.

This project has been reviewed and approved by the University of North Texas Institutional Review Board for the Protection of Human Subjects.

By clicking the "Next Page" button below, I acknowledge that I have read the information presented above and agree to participate in the following study.

#### Introduction

Thank you for your participation. This survey is part of a larger research project investigating the relationships between people's subjective perceptions of fit with their current job, organization, and profession.

On the following pages, you will find 66 questions that ask you to respond about your work situation, as well as your job in general. The survey should take no more than 10 minutes to complete. Please try to answer all of the questions as honestly and accurately as possible. All responses to this survey will be held in the strictest of confidence. Please do not enter any identifying information as participation in the study is anonymous.

If you have any comments or questions about this survey, feel free to contact Michael Kennedy in the Psychology Department at the University of North Texas. Additional contact information may be directed to Dr. Joseph Huff in the Psychology Department at the University of North Texas. I will gladly discuss this line of research further once you have completed the survey.

Again, thank you for your participation!

## Demographics

Please provide	e the following information:
1. Age	
2. Gender	Male Female
3. Ethnicity  □ □ □ □ □	Caucasian African-American Asian Hispanic Other (please specify)
4. What is the	highest level of education you have completed? High school / GED or less Associate Degree Bachelors Masters Doctorate Post-doctorate
5. How many	years have you been employed by your current employer?
6. How many occupation	years of professional full-time work experience to you have, in any n?

have you worked for in any capacity, including your current employer?
<ul> <li>8. Are you a member of a professional society or association (e.g., American Society for Training and Development, National Academy of Engineering American Academy of Ophthalmologists, Academy of Management Association) affiliated with your current profession?</li> <li>Yes</li> <li>No</li> </ul>
8.1. If yes, how many professional societies or associations are you a member?

## Work Perceptions

Please select a rating below that best reflects your level of agreement with each of the following statements.

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
The attributes of my profession match my expectations.							
My profession fulfills my professional needs.							
There is a good fit between the benefits I receive from my							
profession and the benefits I seek from my profession.							
My profession prevents me from fulfilling my professional desires.							
My profession offers me everything I seek from a profession.							
I feel undersupplied by my profession when considering							
what I want to get out of a profession.							
My abilities fit the demands of my profession.							
I have the right skills and abilities for my profession.							
There is a good match between the requirements of my profession and my skills.							
I need to improve my skills and abilities to meet the demands of my profession.							
My training and education allow me to meet the challenges of my profession.							
I do not need more professional experience to meet the demands of my profession.							
I am able to maintain my values working in this profession.							
My values match or fit the values of my profession.							
My values prevent me from fitting in with my profession			_			_	
because they are different from my profession's values.							
My profession does not represent my personal values.							
My current profession represents my personal values better							

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
than other professions.							
There is a good fit between my personality and my							
profession.							
My personality is a good match for my profession.							
I am the right type of person to be working in my profession.							
My personality is similar to others in my profession.							
My profession does not accurately represent the qualities of my personality.							
Others would say that my personality is very characteristic of my profession.							
There is a good fit between my interests and my profession.							
My interests are well suited to the attributes of my							
profession.							
My profession does not represent my interests.							
I could not imagine a profession that would fit my interests							
better than my current profession.							
My interests do not fit the requirements of my profession							
If I could start over, I would choose a profession that							
matches my interests better than my current profession.							
My current organization meets the needs I expect an organization to meet.							
The attributes I look for in an organization are fulfilled by my present organization.							
My current organization fails to meet my needs.							
Few organizations could meet my needs better than my							
current organization.							
The desires I have for being part of an organization are							
fulfilled by what my present organization offers me.							
The things that I value in life are very similar to the things							
that my organization values.							
My personal values match my organization's value and							
culture.							

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
My organization's values and culture provide a good fit with the things that I value in life.							
There is a good fit between what my job offers me and what I am looking for in a job.							
The attributes that I look for in a job are fulfilled very well by my present job.							
The job that I currently hold gives me just about everything that I want from a job.							
The match is very good between the demands of my job and my personal skills.							
My abilities and training are a good fit with the requirements of my job.							
My personal abilities and education provide a good match with the demand that my job places on me.							

## Organizational Attitudes

Please select a rating below that best reflects your level of agreement with each of the following statements.

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
When someone criticizes my organization, it feels like a				Ŭ			
personal insult.							
I am very interested in what others think about this							
organization.							
When I talk about this organization, I usually say 'we'							
rather than 'they'.							
When someone praises this organization, it feels like a							
personal compliment.							
This organization's successes are my successes.							
If a story in the media criticized the organization, I would							
feel embarrassed.							
My profession is important to my self-image.							
I regret having entered the profession that I did.							
I am proud to be in my profession.							
I dislike being in my profession.							
I do not identify with my profession.							
I am enthusiastic about my profession.							
Generally speaking, I am very satisfied with my job.							
I am generally satisfied with the kind of work I do in my							
job.							
In general, I like working in my current job.							
I am satisfied with the success I have achieved in my		_					
career.							
I am satisfied with the progress I have made toward							
meeting my overall career goals.							
I am satisfied with the progress I have made toward							

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
meeting my goals for income.							
I am satisfied with the progress I have made toward							
meeting my goals for advancement.							
I am satisfied with the progress I have made toward							
meeting my goals for the development of new skills.							
I would prefer another job to the one I have now.							
If I have my way, I won't be working for this company a							
year from now.							
I have seriously thought about leaving this company.							

SIOP Members' Work Perceptions Research
Thanks!
Thank you for your time and participation!
A space is provided below for any comments or suggested improvements concerning this survey. Your feedback will be used to make improvements to the survey for future research endeavors.

To submit your responses and exit the survey, please click on the "Submit this survey" link provided below.

# APPENDIX I CURRENT STUDY PARTICIPANT QUESTIONNAIRE

#### Work Perceptions Research

#### Informed Consent

Before agreeing to participate in this research study, it is important that you read and understand the following information:

I agree to participate in a study examining the relationships between my feelings, thoughts, and perceptions experienced at work and my levels of job satisfaction and other organizationally relevant variables. I understand that this study is for research purposes only, to further the understanding of how people form subjective perceptions of fit with their jobs, organizations, and professions and the consequences of these fit perceptions.

Fit is defined as the degree to which aspects of an individual's work environment are similar and/or complementary to his or her individual characteristics, values, skills, and needs.

I understand that I have been presented with a link to a Web-based survey that contains a number of scales that are related to the way I feel about, think about, perceive, and behave on my job. The survey should not take more than 20 minutes to complete. I understand that I will be given an opportunity to voluntarily request ratings of my on-the-job behavior from my immediate supervisor or peer by emailing this person a provided link to a separate Web-based survey.

Any information obtained in this study will be completely anonymous. My responses will not be able to be identified by the investigator or any other person. I understand and agree that the data obtained from this research may be used for scholarly publication and educational purposes.

I understand that there is no discomfort or possible risk from participating in this study other than those experienced as part of normal daily life.

I understand that I have the right to discontinue participation in this study and can exit the survey at any time without any negative consequences.

If I have any questions or if any problems arise in connection with my participation in this study, I should contact Michael Kennedy in the Psychology Department at the University of North Texas. Additional contact information may be directed to Dr. Joseph Huff in the Psychology Department at the University of North Texas.

This project has been reviewed and approved by the University of North Texas Institutional Review Board for the Protection of Human Subjects.

By clicking on the "Next Page" link below, I acknowledge that I have read the information presented above and agree to participate in the following study.

Introduction

Thank you for your participation.

On the following pages, you will find questions that ask you to respond about your work situation, as well as your job in general. The survey should take no more than 20 minutes to complete.

Please try to answer all of the questions as honestly and accurately as possible. All responses to this survey will be held in the strictest of confidence. Please do not enter any identifying information as participation in the study is anonymous.

If you are disconnected from the survey or exit the survey before submitting your responses, you will be able to reenter the survey at the point from which you exited at a later time.

#### Survey Terminology

Fit – The degree to which aspects of a particular level of your work environment (e.g., job, organization, or profession) are similar and/or complementary to your characteristics, values, skills, and needs;

*Job* – The tasks required of your current position within your organization;

*Organization* – Your current employing organizational entity (e.g., corporation, firm, school, etc.);

*Profession* – Your current occupation or vocation (e.g., accountant, lawyer, engineer, etc.);

# Work Perceptions

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
1. My profession represents my personal values.							
2. My values prevent me from fitting in with my profession because they are different from my profession's values.							
3. My current profession represents my personal values better than other professions.							
4. My values match or fit the values of my profession.							
5. My profession accurately represents the qualities of my personality.							
6. My profession represents my interests.							

	strongly disagree	disagree	slightly disagree	neither agree nor	slightly agree	agree	strongly agree
7. I could not imagine a profession that would fit my interests better than my current profession.				disagree			
8. If I could start over, I would choose a profession that matches my interests better than my current profession.							
9. My profession offers me everything I seek from a profession.							
10. My profession fulfills my professional desires.							
11. My profession requires me to be someone I am not.							
12. I am the right type of person to be working in my profession.							

# $Work\ Perceptions-10\%\ of\ Survey\ Completed$

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
13. I have the right skills and abilities for my profession.							
14. There is a good match between the requirements of							
my profession and my skills.							
15. My abilities fit the demands of my profession.							
16. My training and education allow me to meet the							
challenges of my profession.							

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
17. My personal values match my organization's values and culture.				uisugree			
18. The things that I value in life are very similar to the things that my organization values.							
19. My organization's values and culture provide a good fit with the things that I value in life.							
20. My current organization meets the needs I expect an organization to meet.							

# (previous Web page continued)

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
21. The attributes I look for in an organization are fulfilled by my present organization.							
22. My current organization fails to meet my needs.							
23. Few organizations could meet my needs better than my current organization.							
24. There is a good fit between what my organization offers me and what I am looking for in an organization.							

# $Work\ Perceptions-20\%\ of\ Survey\ Completed$

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
25. There is a good fit between what my job offers me and what I am looking for in a job.							
26. The attributes that I look for in a job are fulfilled very well by my present job.							
27. The job that I currently hold gives me just about everything that I want from a job.							
28. My abilities and training are a good fit with the requirements of my job.							
29. My personal abilities and education provide a good match with the demand that my job places on me.							
30. The match is very good between the demands of my job and my personal skills.							

# Organizational Attitudes – 25% of Survey Completed

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
31. When someone criticizes my organization, it feels like a personal insult.							
32. I am very interested in what others think about my organization.							
33. When I talk about my organization, I usually say 'we' rather than 'they'.							
34. When someone praises my organization, it feels like a personal compliment.							
35. My organization's successes are my successes.							
36. If a story in the media criticized my organization, I would feel embarrassed.							

	strongly	disagree	slightly	neither	slightly	agree	strongly
	disagree		disagree	agree nor	agree		agree
				disagree			
37. I would be very happy to spend the rest of my career with my organization.							
38. I enjoy discussing my organization with people outside it.							
39. I really feel as if my organization's problems are my							
own.							
40. I think that I could easily become as attached to							
another organization as I am to my organization.							

# (previous Web page continued)

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
41. I do not feel like 'part of the family' at my organization.				8			
42. I do not feel 'emotionally attached' to my organization.							
43. My organization has a great deal of personal meaning for me.							
44. I do not feel a strong sense of belonging to my organization.							

# Organizational Attitudes – 40% of Survey Completed

	strongly disagree	disagree	slightly disagree	neither agree nor	slightly agree	agree	strongly agree
			O	disagree	O		
45. I would prefer another job to the one I have now.							
46. If I have my way, I won't be working for my company							
a year from now.							
47. I have seriously thought about leaving my company.							

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
48. Generally speaking, I am very satisfied with my job.							
49. I am generally satisfied with the kind of work I do in							
my job.							
50. In general, I like working in my current job.							

# (previous Web page continued)

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
51. I am satisfied with the success I have achieved in my							
career.							
52. I am satisfied with the progress I have made toward							
meeting my overall career goals.							
53. I am satisfied with the progress I have made toward							
meeting my goals for income.							
54. I am satisfied with the progress I have made toward							
meeting my goals for advancement.							
55. I am satisfied with the progress I have made toward							
meeting my goals for the development of new skills.							

# Organizational Attitudes – 50% of Survey Completed

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
56. My profession is important to my self-image.							
57. I regret having entered the profession that I did.							
58. I am proud to be in my profession.							
59. I dislike being in my profession.							
60. I do not identify with my profession.							
61. I am enthusiastic about my profession.							

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
62. My organization values my contribution to its wellbeing.							
63. If my organization could hire someone to replace me at a lower salary, it would do so.							
64. My organization fails to appreciate any extra effort from me.							
65. My organization strongly considers my goals and values.							
66. My organization would ignore any complaint from me.							
67. My organization disregards my best interests when it makes decisions that affect me.							

possible.

## Organizational Attitudes – 60% of Survey Completed

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
68. Help is available from my organization when I have a problem.							
69. My organization really cares about my well-being.							
70. Even if I did the best job possible, my organization would fail to notice.							
71. My organization is willing to help me when I need a special favor.							
72. My organization cares about my general satisfaction at work.							
73. If given the opportunity, my organization would take advantage of me.							
	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
74. My organization shows very little concern for me.							
75. My organization cares about my opinions.							
76. My organization takes pride in my accomplishments at work.							
77. My organization tries to make my job as interesting as							

## Organizational Attitudes – 70% of Survey Completed

The table below consists of a number of words that describe different feelings and emotions.

Please select a rating below that best reflects the extent to which you feel this way about life in general, that is, <u>how you feel on average</u>.

	very slightly or	a little	moderately	quite a bit	extremely
	not at all				
78. Interested	ai aii				
79. Distressed					
80. Excited					
81. Upset					
82. Strong					

	very	a little	moderately	quite a bit	extremely
	slightly or				
	not				
	at all				
83. Guilty					
84. Scared					
85. Hostile					
86. Enthusiastic					
87. Proud					

## Organizational Attitudes – 75% of Survey Completed

The table below consists of a number of words that describe different feelings and emotions.

Please select a rating below that best reflects the extent to which you feel this way about life in general, that is, <u>how you feel on average</u>.

	very slightly or not	a little	moderately	quite a bit	extremely
	at all				
88. Irritable					
89. Alert					
90. Ashamed					
91. Inspired					
92. Nervous					

	very	a little	moderately	quite a bit	extremely
	slightly or				
	not				
	at all				
93. Determined					
94. Attentive					
95. Jittery					
96. Active					
97. Afraid					

# $Work\ Behavior-85\%\ of\ Survey\ Completed$

		strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
98.	I volunteer to do things for my organization.							
99.	I help orient new employees in my organization.							
100.	I attend functions that help my organization.							
101.	I assist others in my organization for the benefit of							
	the organization.							
102.	I get involved to benefit my organization.							
103.	I help others in my organization learn about the							
	work.							

		strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
	I help others in my organization with their work responsibilities.							
	I develop and make recommendations concerning issues that affect my organization.							
1	I speak up and encourage other in my organization to get involved in issues that affect the group.							
	I communicate my opinions about work issues to others in my organization even if my opinion is different and others in the organization disagree with me.							

# $Work\ Behavior-95\%\ of\ Survey\ Completed$

		strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
108.	I keep well informed about issues where my opinion might be useful to my organization.							
109.	I get involved in issues that affect the quality of work life here in my organization.							
110.	I speak up in my organization with ideas for new projects or changes in procedures.							

	strongly disagree	disagree	slightly disagree	neither agree nor	slightly agree	agree	strongly agree
	uisugree		uisus/cc	disagree	ugree		ugree
111. I fulfill the responsibilities specified in my job							
description.							
112. I perform the tasks that are expected as part of the							
job.							
113. I meet performance expectations.							
114. I adequately complete responsibilities.							

# Demographics - Page 1 of 2

T) 1		.1	C 11	•	•	C	, •
Please	provide	the	tall	$\alpha win \sigma$	111	torn	าลรากท
1 ICasc	provide	uic	1011	OWILL	111	10111	ianon.

1. Age	
2. Gender	Male Female
3. Ethnicity	Caucasian African-American Asian Hispanic Other (please specify)
4. What is th	e highest level of education you have completed?  High school / GED or less  Associate Degree  Bachelors  Masters  Doctorate  Post-doctorate
5. How many	y years have you been employed by your current employer?
6. What is the employed	e size of your employing organization in terms of the number of es?

## Demographics - Page 2 of 2

rupines 1 008	
Please provio	le the following information:
7. Which of t	the following categories best describes your current field of work?
(Plea	se select all that apply.)
7.1 What is	Human Resources Training and Development Organizational Behavior Organizational Change and Development Industrial/Organizational Psychology Performance Improvement Evaluation Education Medical Sales/Marketing Public Relations Engineering Legal Accounting Financial General Business Other (please specify)
	se select all that apply.)
	Front-line Supervisor Mid-level Manager Director

Executive

Teacher

Internal Consultant External Consultant

	University Professor Engineer Lawyer Doctor Nurse Accountant Student Other (please specify)
	ed, please provide an additional description of your current profession space below. (optional)
8. How man profession Full-ti	me
9. Are you s	self-employed? Yes No
10. What is	your current work status? Full-time employee Part-time employee Retired Student Other (please specify)

Work Behavior - Supervisor/Peer Ratings

In order to gain more clear ratings of employee on-the-job behavior, I am asking that you *voluntarily* request your manager or colleague to rate 17 job behavior items.

Please note that these ratings will be completely anonymous and confidential. Directions will be provided to produce a "KEY" that will anonymously link your ratings with your manager's or colleague's ratings. Thus, I will not be able to tell who is being rated, nor will your manager or colleague's identity be known. This means that the identity of both you and your manager or colleague will be completely anonymous.

In addition, you have my personal promise that no individual's information will be divulged, only myself will have access to all study data.

Are you voluntarily willing to ask your manager or colleague to provide behavior ratings?

Yes – Present the needed instructions
No thanks – <i>Advance to the final page of the survey</i>

Work Perceptions Research
Work Behavior - Supervisor/Peer Ratings
In order to request supervisor or peer ratings of your on-the-job behavior, please follow the five steps listed below:
<u>Step 1</u>
Enter today's date and current time in the field below to provide a "KEY" that will be used to <u>anonymously</u> link your ratings with your manager's or colleague's ratings.
For example, if the date is March 1, 2004, and the time is 2:30 PM, you would enter 03 for month (MM), 01 for day (DD), 2004 for year (YYYY), 02 for hour (HH), 30 for minutes (MM), and select PM.
Therefore, the KEY would be <u>03/01/2004-02:30PM</u> .
MM DD YYYY HH MM AM/PM KEY: / :
Step 2

Write this "KEY" down as you will need this information in Step 4.

(previous Web page continued)
Step 3
Copy the text, survey link, and KEY information provided below and paste this information into an email to your manager or colleague:
Hello,
I have volunteered to be part of a research study that examines the link between employee's perceptions of fit and on-the-job employee attitudes and behaviors. Within this study, fit is defined as the degree to which aspects of an individual's work environment (the job, organization, and profession) are similar to the individual's characteristics, values, skills, and needs. The goal of this research is to better determine how important perceived fit is in the prediction of employee attitudes (e.g., job satisfaction) and on-the-job behaviors (e.g., performance).
In order to gain precise ratings of employee on-the-job behaviors, the researcher is asking for each survey respondent to identify a supervisor or peer that is qualified to rate their on-the-job behavior. I am asking for your assistance in this research by providing ratings of my on-the-job behavior. To do so, please follow the Internet link provided below to rate 17 job behavior items contained in a Web-based survey. A "KEY" is provided below to anonymously identify your responses. Please print this email as you will be prompted to input this KEY within the Web-based survey.
Internet Link to Survey: <a href="http://www.surveymonkey.com/s.asp?u=93709489440">http://www.surveymonkey.com/s.asp?u=93709489440</a>
KEY: / / - : AM/PM
Thanks!
<u>Step 4</u>
Insert the "KEY" recorded in Step 1 at the bottom of the email text.
Add the following subject line to the email, "Work Perceptions Research - Your Participation Needed."

# Step 5

Send the email to your manager or colleague.

Work Perceptions Research
Thanks! – Survey Completed
Thank you for your time and participation!
A space is provided below for any comments or suggested improvements concerning this survey. Your feedback will be used to make improvements to the survey for future research endeavors.

To submit your responses and exit the survey, please click on the "Submit This Survey" link provided below.

# APPENDIX J CURRENT STUDY SUPERVISOR/PEER QUESTIONNAIRE

Introductory Email Wording Sent to Supervisor/Peer by Participant

Subject: Your Participation Needed – Research Study

Hello,

I have volunteered to be part of a research study that examines the link between employee's perceptions of fit and on-the-job employee attitudes and behaviors. Within this study, fit is defined as the degree to which aspects of an individual's work environment (the job, organization, and profession) are similar to the individual's characteristics, values, skills, and needs. The goal of this research is to better determine how important perceived fit is in the prediction of employee attitudes (e.g., job satisfaction) and on-the-job behaviors (e.g., performance).

In order to gain precise ratings of employee on-the-job behaviors, the researcher is asking for each survey respondent to identify a supervisor or peer that is qualified to rate their on-the-job behavior. I am asking for your assistance in this research by providing ratings of my on-the-job behavior. To do so, please follow the Internet link provided below to rate 17 job behavior items contained in a Webbased survey. A "KEY" is provided below to anonymously identify your responses. Please print this email as you will be prompted to input this KEY within the Web-based survey.

Internet Link to Survey: http://www.surveymonkey.com/s.asp?u=6328289490

KEY: / / - : AM/PM

Thanks!

Welcome

Dear Employee Supervisor or Peer:

Your employee or colleague, who has contacted you with the Internet link to this survey, has volunteered to be part of a research study that examines the link between employee's perceptions of fit and on-the-job employee behaviors. The goal of this research is to better predict employee on-the-job behavior from employee's subjective perceptions of fit with their current job, organization, and profession.

In order to gain more clear ratings of employee on-the-job behavior, I am asking that the employee have you, their manager or colleague, rate 17 job behavior items. These 17 items have already been rated by the employee, and I will form a composite rating based upon the results of your and your employee's or colleague's ratings. I am asking for two sets of ratings because ratings made by employees tend to not agree with ratings made by managers or colleagues.

I urge you to take the <u>few minutes</u> that this survey will take to complete. Your assistance will help add to the understanding I have in the prediction of employee on-the-job behavior from employee's subjective perceptions of fit with their current job, organization, and profession.

#### Use of KEY

Please note that the ratings you make on this survey will be completely anonymous and confidential. The 14-character "KEY" emailed to you by your employee or colleague will be used to link together your responses with those of your employee or colleague, and is not being used for any other purpose. Using this KEY, I will not be able to tell who the employee is that you are rating, nor will your identity be known.

Therefore, this means that the identity of both you and your employee or colleague will be completely anonymous. In addition, you have my personal promise that no individual's information will be divulged. That is, your employee or colleague will not know what ratings you make nor will you be aware of your employee's or colleague's responses on their survey. Furthermore, only the principal investigator will have access to all study data.

#### **Contact Information**

You may contact me if you have any questions about the survey or the research in which I am conducting. Further, once the current study is completed, I will be writing one or

more papers that summarize the knowledge that I have gained from this research. Thank you for your time and cooperation.

This research project has been reviewed and approved by the UNT Institutional Review Board.

Sincerely,

Michael Kennedy

I/O Psychology Doctoral Candidate University of North Texas

Introduction

Thank you for your participation.

On the following pages, you will find 17 questions that ask you to rate this employee's on-the-job behavior within the past month. The survey should take no more than a few minutes to complete.

Please try to answer all of the questions as honestly and accurately as possible. All responses to this survey will be held in the strictest of confidence. Please do not enter any identifying information as participation in the study is anonymous.

If you are disconnected from the survey or exit the survey before submitting your responses, you will be able to reenter the survey at the point from which you exited at a later time.

Work Perceptions Research
Enter Key
Please enter the 14-character "KEY" sent to you by your employee or colleague.
MM DD YYYY HH MM AM/PM KEY: / / / : :

Work Behavior – Page 1 of 2

The following statements ask you to describe your observations of this employee's general behaviors while at work within the past month.

		strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
1.	This employee volunteers to do things for this organization.							
2.	This employee helps orient new employees in this organization.							
3.	This employee attends functions that help this organization.							
4.	This employee assists others in this organization for the benefit of the organization.							
5.	This employee gets involved to benefit this organization.							
6.	This employee helps others in this organization learn about the work.							

# (previous Web page continued)

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
7. This employee helps others in this organization with their work responsibilities.							
8. This employee develops and makes recommendations concerning issues that affect this organization.							
9. This employee speaks up and encourages other in this organization to get involved in issues that affect the group.							
10. This employee communicates his/her opinions about work issues to others in this organization even if his/her opinion is different and others in the organization disagree with him/her.							

Work Behavior – Page 2 of 2

The following statements ask you to describe your observations of this employee's general behaviors while at work within the past month.

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
11. This employee keeps well informed about issues where his/her opinion might be useful to this organization.							
12. This employee gets involved in issues that affect the quality of work life here in this organization.							
13. This employee speaks up in this organization with ideas for new projects or changes in procedures.							

	strongly disagree	disagree	slightly disagree	neither agree nor	slightly agree	agree	strongly agree
	aisagree		aisagree	disagree	ugree		ugree
14. This employee fulfills the responsibilities specified in his/her job description.							
15. This employee performs the tasks that are expected as part of the job.							
16. This employee meets performance expectations.							
17. This employee adequately completes responsibilities.							

# Demographics

Please provide the following information:

1. What is yo	our professional association with this employee?
	Manager / Supervisor
	Colleague / Peer / Co-worker
	Business partner
	Other (please specify)
2. How long	have you worked with this employee?

Work Perceptions Research
Thanks! – Survey Completed
Thank you for your time and participation!
A space is provided below for any comments or suggested improvements concerning this survey. Your feedback will be used to make improvements to the survey for future research endeavors.

To submit your responses and exit the survey, please click on the "Submit This Survey" link provided below.

#### REFERENCES

- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63, 1-18.
- Anderson, J. C., & Gerbing, D. W. (1984). The effect of sampling error on convergence, improper solutions, and goodness-of-fit indices for maximum likelihood confirmatory factor analysis. *Psychometrika*, 49, 155-173.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, *103*(3), 411-423.
- Anderson, N., & Ostroff, C. (1997). Selection as socialization. In N. Anderson & P.

  Herriot (Eds.), *International handbook of selection and assessment* (pp. 413-440).

  Chichester, U.K.: Wiley.
- Aronoff, J., & Wilson, J. P. (1985). *Personality in the social process*. Hillsdale, NJ: Erlbaum.
- Arthur, W., Jr., Woehr, D. J., & Graziano, W. G. (2001). Personality testing in employment settings: Problems and issues in the application of typical selection practices. *Personnel Review*, 30(6), 657-676.
- Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review*, 14, 20-39.

- Assouline, M., & Meir, E. I. (1987). Meta-analysis of the relationship between congruence and well-being measures. *Journal of Vocational Behavior*, *31*, 319-332.
- Babbie, E. (1974). The practice of social research. New York: McGraw-Hill.
- Bentler, P. M., & Chou, C. (1987). Practical issues in structural modeling. *Sociological Methods and Research*, *16*, 78-117.
- Bentler, P. M., & Dudgeon, P. (1996). Covariance structure analysis: Statistical practice, theory, and directions. *Annual Review of Psychology*, 47, 563-592.
- Bifulco, R. (2002). Addressing self-selection bias in quasi-experimental evaluations of whole-school reform: A comparison of methods. *Evaluation Review*, 26(5), 545-572.
- Billsberry, J., Marsh, P., & Moss-Jones, J. (2004). *Mapping organizational members'*sense of fit. Paper presented at the annual meeting of the Academy of

  Management, New Orleans, LA.
- Blau, G. L. (1987). Using a person-environment fit model to predict job involvement and organizational commitment. *Journal of Vocational Behavior*, *30*, 240-257.
- Blau, G. L. (2001). On assessing the construct validity of two multidimensional constructs: Occupational commitment and occupational entrenchment. *Human Resource Management Review*, 11, 279-298.
- Boomsma, A. (2000). Reporting analyses of covariance structures. *Structural Equation Modeling*, 7, 461-483.

- Borman, W. C., & Motowildo, 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, CA: Jossey-Bass.
- Bowen, D. E., Ledford, G. E., & Nathan, B. R. (1991). Hiring for the organization, not the job. *The Academy of Management Executive*, 5(4), 35-51.
- Bretz, R. D., Jr., & Judge, T. A. (1994). Person-organization fit and the theory of work adjustment: Implications for satisfaction, tenure, career success. *Journal of Vocational Behavior*, 44, 32-54.
- Bretz, R. D., Jr., Ash, R. A., & Dreher, G. F. (1989). Do people make the place? An examination of the attraction-selection-attrition hypothesis. *Personnel Psychology*, 42, 561-581.
- Bretz, R. D., Jr., 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.
- Brkich, M., Jeffs, D. & Carless, S. A. (2002). A global self-report measure of person-job fit. *European Journal of Psychological Assessment*, 18(1), 43-51.
- Burke, B. J., & Deszca, E. (1982). Preferred organizational climate of Type A individuals. *Journal of Vocational Behavior*, 21, 50-59.
- Burke, M. J., Brief, A. P., & George, J. M. (1993). The role of negative affectivity in understanding relations between self-reports of stressors and strains: A comment on the applied psychology literature. *Journal of Applied Psychology*, 78, 402-412.

- 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.
- Cable, D. M., & Judge, T. A. (1994). Pay preference and job search decisions: A personorganization fit perspective. *Personnel Psychology*, *47*(2), 317-348.
- Cable, D. M., & Judge, T. A. (1996). Person-organization fit, job choice decisions, and organizational entry. *Organizational Behavior and Human Decision Processes*, 67, 294-311.
- Cable, D. M., & Judge, T. A. (1997). Interviewers' perceptions of person-organization fit and organizational selection decisions. *Journal of Applied Psychology*, 82(4), 546-561.
- Caldwell, D. F., & O'Reilly, C. A. (1990). Measuring person-job fit with a profile-comparison process. *Journal of Applied Psychology*, 75, 648-657.
- Caldwell, S. D., Herold, D. M., & Fedor, D. B. (2004). Toward an understanding of the relationship among organizational change, individual differences, and changes in person-environment fit: A cross-levels study. *Journal of Applied Psychology*, 89(5), 868-882.

- Cammann, C., Fichman, M., Jenkins, D., & Klesh, J. (1983). Assessing the attitudes and perceptions of organizational members. In S. Seashore, E. Lawler, P. Mirvis, & C. Cammann (Eds.), Assessing organizational change: A guide to methods, measures, and practices. New York: John Wiley.
- Campbell, D. P., & Borgen, F. (1999). Holland's theory and the development of interest inventories. *Journal of Vocational Behavior*, *55*, 86-101.
- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, *56*, 81-105.
- Cascio, W. F. (1991). *Applied psychology in personnel management*. Englewood Cliffs, NJ: Prentice-Hall.
- Cavanaugh, M. A., & Noe, R. A. (1999). Antecedents and consequences of relational components of the new psychological contract. *Journal of Organizational Behavior*, 20, 323-340.
- Chartrand, J., & Walsh, W. B. (1999). What should we expect from congruence? *Journal of Vocational Behavior*, 55, 136-146.
- 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.
- Chen, P. Y., & Spector, P. E. (1991). Negative affectivity as the underlying cause of correlations between stressors and strains. *Journal of Applied Psychology*, 76, 398-407.

- Chou, C. P., & Bentler, P. M. (1995). Estimates and tests in structural equation modeling.

  In R. H. Hoyle (Ed.), *Structural equation modeling* (pp. 37-59). Thousand Oaks,

  CA: Sage.
- Converse, P. D., Oswald, F. L., Gillespie, M. A., Field, K. A., & Bizot, E. B. (2004).

  Matching individuals to occupations using abilities and the O\*NET: Issues and an application in career guidance. *Personnel Psychology*, *57*, 451-487.
- Conway, J. M., & Huffcutt, A. I. (1997). Psychometric properties of multisource performance ratings: A meta-analysis of subordinate, supervisor, peer, and self-ratings. *Human Performance*, *10*, 331-360.
- Cook, K. W. (1997). The relationship of Holland's concept of congruence to work-related outcomes. *Dissertation Abstracts International*, *57*, 7B. (UMI No. 9637024)
- Cooper-Thomas, H. D., Van Vianen, A., & Anderson, N. (2004). Changes in personorganization fit: The impact of socialization tactics on perceived and actual P-O fit. *European Journal of Work & Organizational Psychology*, *13*(1), 52-78.
- Couper, M. P., Tourangeau, R., Conrad, F. G., & Crawford, S. D. (2004). What they see is what we get: Response options for web surveys. *Social Science Computer Review*, 22(1), 111-127.
- Cranny, C. J., Smith, P. C., & Stone, E. F. (1992). *Job satisfaction: How people feel about their jobs and how it affects their performance*. New York: Lexington Books.
- Dawis, R. V., & Lofquist, L. H. (1984). *A psychological theory of work adjustment*.

  Minneapolis, MN: University of Minnesota Press.

- De Fruyt, F. (2002). A person-centered approach to P-E fit questions using a multiple-trait model. *Journal of Vocational Behavior*, 60, 73-90.
- De Fruyt, F., & Mervielde, I. (1999). RIASEC types and big five traits as predictors of employment status and nature or employment. *Personnel Psychology*, *52*, 701-727.
- Dipboye, R. L., Smith, C. S., & Howell, W. C. (1994). *Understanding industrial and organizational psychology: An integrated approach*. New York: Harcourt Brace.
- Edwards, J. R. (1991). Person-job fit: A conceptual integration, literature review, and methodological critique. In C. L. Cooper & I. T. Robertson (Eds.), *International Review of Industrial and Organizational Psychology* (Vol. 6, pp. 283-357), John Wiley and Sons Ltd.
- Edwards, J. R., & Cooper, C. L. (1990). The person-environment fit approach to stress:

  Recurring problems and some suggested solutions. *Journal of Organizational Behavior*, *11*, 293-307.
- Eisenberger, R., Huntington, R., Hutchinson, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71, 500-507.
- Endler, N. S., & Magnusson, D. (1976). *Interactional psychology and personality*. New York: Wiley.
- Erdogan, B., Kraimer, M. L., & Liden, R. C. (2004). Work value congruence and intrinsic career success: The compensatory roles of leader-member exchange and perceived organizational support. *Personnel Psychology*, *57*, 305-332.

- Fabrigar, L. R., MacCallum, R. C., Wegener, D. T., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods*, *4*(3), 272-299.
- Feij, J. A., Banks, M. H., Parkinson, B., & Whitley, W. (1992). Work socialization: In search of the person-environment interaction. *Revue Internationale de Psychologie Sociale*, *5*, 137-150.
- Feij, J. A., Peiró, J. M., Whitley, W. T., & Taris, T. W. (1995). The development of career enhancing strategies and content innovation: A longitudinal study of new workers. *Journal of Vocational Behavior*, 46, 231-256.
- Feij, J. A., Van Der Velde, M. E. G., Taris, R., & Taris, T. W. (1999). The development of person-vocation fit: A longitudinal study among young employees.

  International Journal of Selection and Assessment, 7(1), 12-25.
- Fouad, N. A., & Mohler, C. J. (2004). Cultural validity of Holland's theory and the Strong Interest Inventory for five racial/ethnic groups. *Journal of Career Assessment*, 12(4), 423-439.
- French, J. R. P., Jr., Caplan, R. D., & Harrison, R. V. (1982). *The mechanisms of job stress and strain*. New York: Wiley.
- Furnham, A. (2001). Vocational preference and P-O fit: Reflections on holland's theory of vocational choice. *Applied Psychology: An International Review*, 50(1), 5-29.
- Gati, I. (1989). Person-environment fit research: Problems and prospects. *Journal of Vocational Behavior*, 35, 181-193.

- Gottfredson, G. D. (1999). John L. Holland's contributions to vocational psychology: A review and evaluation. *Journal of Vocational Behavior*, *55*, 15-40.
- Gottfredson, L. S. (2003). The challenge and promise of cognitive career assessment. *Journal of Career Assessment*, 11, 115-135.
- Gottfredson, L. S., & Richards, J. M. (1999). The meaning and measurement of environments in Holland's theory. *Journal of Vocational Behavior*, 55, 57-73.
- Green, S. B. (1991). How many subjects does it take to do a regression analysis? *Multivariate Behavioral Research*, *26*, 499-510.
- Guion, R. M. (1987). Changing view for personnel research. *Personnel Psychology*, 40, 199-213.
- Gustafson, S., & Mumford, M. (1995). Personal style and person-environment fit. *Journal of Vocational Behavior*, 46, 163-188.
- Hackman, J. R., & Oldham, G. R. (1974). The job diagnostic survey: An instrument for the diagnosis of jobs and the evaluation of job redesign projects. New Haven, CT: Yale University.
- Hackman, J. R., & Oldham, G. R. (1980). Work Redesign. Reading, MA: Addison-Wesley.
- Harris, J. I., Moritzen, S. K., Robitschek, C., Imhoff, A., & Lynch, J. L. A. (2001). The comparative contributions of congruence and social support in career outcomes.
  The Career Development Quarterly, 49, 314-323.
- Harris, M. M., & Schaubroeck, J. (1988). A meta-analysis of self-supervisor, self-peer, and peer-supervisor ratings. *Personnel Psychology*, *41*, 43-62.

- Harris, S. G., & Mossholder, K. W. (1996). The affective implications of perceived congruence with culture dimensions during organizational transformation. *Journal of Management*, 22, 527-547.
- Hayduk, L. A. (1987). Structural equation modeling with LISREL: Essentials and advances. Baltimore, MD: Johns Hopkins University Press.
- Hinkin, T. (1995). A review of scale development practices in the study of organizations. *Journal of Management*, 21, 967-988.
- Hogan, R., & Blake, R. (1999). John Holland's vocational typology and personality theory. *Journal of Vocational Behavior*, 55, 41-56.
- Holbert, R. L., & Stephenson, M. T. (2002). Structural equation modeling in the communication sciences, 1995-2000. *Human Communications Research*, 28(4), 531-551.
- Holland, J. L. (1959). A theory of vocational choice. *Journal of Counseling Psychology*, 6, 34-45.
- Holland, J. L. (1966a). A psychological classification scheme for vocations and major fields. *Journal of Counseling Psychology*, *13*, 278-288.
- Holland, J. L. (1966b). A psychology of vocational choice: A theory of personality types and environments. Waltham, MA: Blarsdell.
- Holland, J. L. (1973). *Making vocational choices: A theory of career*. Englewood Cliffs, NJ: Prentice Hall.
- Holland, J. L. (1985a). *Making vocational choices: A theory of careers*. Englewood Cliffs, NJ: Prentice-Hall.

- Holland, J. L. (1985b). *Professional manual for the Vocational Preference Inventory*.

  Odessa, FL: Psychological Assessment Resources.
- Holland, J. L. (1987). Some speculation about the investigation of person-environment transactions. *Journal of Vocational Behavior*, *31*, 337-340.
- Holland, J. L. (1997). *Making vocational choices*. Odessa, FL: Psychological Assessment Resources.
- Holland, J. L., Fritzsche, B. A., & Powell, A. B. (1994). *The Self-Directed Search technical manual*. Odessa, FL: Psychological Assessment Resources.
- Hollenbeck, J. R. (1989). Control theory and the perception of work environments: The effects of focus of attention on affective and behavioral reactions to work.

  \*\*Organizational Behavior and Human Decision Process, 43, 406-430.\*\*
- Hough, L., Barge, B., & Kamp, J. (2001). Assessment of personality, temperament,
  vocational interests, and work outcome preferences. In J. P. Campbell & D. J.
  Knapp (Eds.), *Exploring the limits of personnel selection and classification* (pp. 111-154). Mahwah, NJ: Erlbaum.
- Hoyle, R. H., & Kenny, D. A. (1999). Sample size, reliability, and test of statistical mediation. In R. H. Hoyle (Ed.), *Statistical strategies for small sample research* (pp. 195-222). Thousand Oaks, CA: Sage.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1-55.

- Idaszak, J., & Drasgow, F. (1987). A revision of the Job Diagnostic Survey: Elimination of a measurement artifact. *Journal of Applied Psychology*, 72, 69-74.
- Ivancevich, J. M. & Matteson, M. T. (1984). A type A-B person-work environment interaction model for examining occupational stress and consequences. *Human Relations*, *37*, 491-513.
- James, L. R., Joyce, W. F., & Slocum, J. W. (1988). Organizations do not cognize.

  \*Academy of Management Review, 13(1), 129-132.
- Jex, S. M., & Spector, P. E. (1996). The impact of negative affectivity on stressor strain relations: A replication and extension. *Work and Stress*, *10*, 36-45.
- Jöreskog, K. G., & Sörbom, D. (1996). *LISREL 8: User's reference guide*. Chicago: Scientific Software International. Inc.
- Judge, T. A., & Bretz, R. D. (1992). The effects of work values on job choice decision.
  Journal of Applied Psychology, 77, 261-271.
- Judge, T. A., & Cable, D. M. (1997). Applicant personality, organizational culture, and organizational attraction. *Personnel Psychology*, *50*, 359-393.
- Judge, T. A., Cable, D. M., Boudreau, J. W., & Bretz, R. D., Jr. (1995). An empirical investigation of the predictors of executive career success. *Personnel Psychology*, 48, 485-519.
- Judge, T. A., & Ferris, G. R. (1992). The elusive criterion of fit in human resource staffing decisions. *Human Resource Planning*, 15(4), 47-67.

- 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. (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.
- Kulik, C. T., Oldham, G. R., & Hackman, J. R. (1987). Work design as an approach to person-environment fit. *Journal of Vocational Behavior*, *31*, 278-296.
- Larson, L. M., Rottinghaus, P. J., & Borgen, F. H. (2002). Meta-analyses of big six interests and big five personality factors. *Journal of Vocational Behavior*, *61*, 217-239.
- Lauver, K. J., & Kristof-Brown, A. (2001). Distinguishing between employees' perceptions of person-job fit and person-organization fit. *Journal of Vocational Behavior*, 59, 454-470.
- Lewin, K. (1951). Field theory in social science. New York: Harper.
- Lin, R. L. (1968). Range restriction problems in the use of self-selected groups for test validation. *Psychological Bulletin*, 69(1), 69-73.

- Locke, E. A. (1976). The nature and causes of job satisfaction. In M. Dunnette (Ed.), Handbook of Industrial and Organizational Psychology (pp. 1297-1350). Chicago, IL: Rand McNally.
- MacCallum, R. C., Widaman, K. F., Zhang, S., & Hong, S. (1999). Sample size in factor analysis. *Psychological Methods*, 4(1), 84-99.
- Mael, F., & Ashforth, B. E. (1992). Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior*, 13, 103-123.
- Magaña, Burton, & Ferreira-Pinto (1995). Occupational cognition in three nations. *Journal of Quantitative Anthropology*, 5, 149-168.
- Magnusson, D., & Endler, N. S. (Eds.). (1977). Personality at the crossroads: Current issues in interactional psychology. Hillsdale, NJ: Erlbaum.
- Medsker, G. J., Williams, L. J., & Holahan, P. J. (1994). A review of current practices for evaluating causal models in organizational behavior and human resource management research. *Journal of Management*, 20, 439-464.
- 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, 424-432.
- Meir, E. I., Melamed, S., & Dinur, C. (1995). The benefits of congruence. *The Career Development Quarterly*, 43, 257-266.
- Meir, E. I., & Navon, N. (1992). A longitudinal examination of congruence hypotheses. *Journal of Vocational Behavior*, 41, 35-47.

- Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology*, 78(4), 538-551.
- Mobley, W. H., Horner, S. O., & Hollingsworth, A. T. (1978). An evaluation of precursors of hospital employee turnover. *Journal of Applied Psychology*, *63*, 463-483
- Moos, R. H. (1987). Person-environment congruence in work, school, and health care settings. *Journal of Vocational Behavior*, *31*, 231-247.
- Mount, M. K. (1984). Psychometric properties of subordinate ratings of managerial performance. *Personnel Psychology*, *37*, 687-702.
- Muchinksy, P. M., & Monahan, C. J. (1987). What is person-environment congruence? Supplementary versus complementary models of fit. *Journal of Vocational Behavior*, *31*, 268-277.
- Munz, D. C., Huelsman, T. J., Konold, T. R., & Mckinney, J. J. (1996). Are there methodological and substantive roles for affectivity in job diagnostic survey relationships? *Journal of Applied Psychology*, 81(6), 795-805.
- Murray, H. A. (1938). *Explorations in personality*. Boston, MA: Houghton Mifflin.
- Nisbett, R., & Ross, L. (1980). *Human inference: Strategies and shortcomings of human judgment*. Englewood Cliffs, NJ: Prentice Hall.
- Nunnally, J. C. (1983). *Psychometric theory*. New York: McGraw-Hill.
- O'Reilly, C. (1977). Personality-job fit: Implications for individual attitudes and performance. *Organizational Behavior and Human Performance*, 18, 36-46.

- O'Reilly, C., Chatman, J. A., & Caldwell, D. F. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit.

  \*Academy of Management Journal, 34(3), 487-516.
- Ostroff, C. (1993). Relationships between person-environment congruence and organizational effectiveness. *Group & Organization Management*, 18, 103-122.
- Parasuraman, S., Greenhaus, J. H., & Linnehan, F. (2000). Time, person-career fit, and the boundaryless career. In C. L. Cooper and D. M. Rousseau (Eds.), *Trends in Organizational Behavior* (Vol. 7, pp. 63-78). John Wiley and Sons, Ltd.
- Parkes, L. P., Bochner, S., & Schneider, S. K. (2001). Person-organization fit across cultures: An empirical investigation of individualism and collectivism. *Applied Psychology: An International Review*, 50(1), 81-108.
- Parsons, F. (1909). Choosing a vocation. Boston, MA: Houghton Mifflin.
- Pervin, L. A., & Lewis, M. (Eds.). (1978). *Perspectives in interactional psychology*. New York: Plenum.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903.
- Randahl, G. J. (1991). A typological analysis of the relations between measured vocational interests and abilities. *Journal of Vocational Behavior*, 38, 333-350.
- Reardon, R. C., & Lenz, J. G. (1999). Holland's theory and career assessment. *Journal of Vocational Behavior*, 55, 102-113.

- Reeve, C. L., & Heggestad, E. D. (2004). Differential relations between general cognitive ability and interest-vocation fit. *Journal of Occupational and Organizational Psychology*, 77, 385-402.
- Rolfhus, E. L., & Ackerman, P. L. (1996). Self-report knowledge: At the crossroads of ability, interest, and personality. *Journal of Educational Psychology*, 88(1), 174-188.
- Rounds, J. B., Dawis, R. V., & Lofquist, L. H. (1987). Measurement of personenvironment fit and prediction of satisfaction in the theory of work adjustment. *Journal of Vocational Behavior*, 31, 297-318.
- Rynes, S. L., Bretz, R. D., & Gerhart, B. (1991). The importance of recruitment in job choice: A different way of looking. *Personnel Psychology*, *44*, 487-512.
- Rynes, S. L., & Gerhart, B. (1990). Interviewer assessments of applicant "fit": An exploratory investigation. *Personnel Psychology*, 43, 13-35.
- 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.
- Saks, A. M., & Ashforth, B. E. (2002). Is job search related to employment quality? It all depends on the fit. *Journal of Applied Psychology*, 87(4), 646-654.
- Savickas, M. L., & Gottfredson, G. D. (1999). Holland's theory (1959-1999): 40 years of research and application. *Journal of Vocational Behavior*, 55, 1-4.
- Schein, E. (1992). *Organizational culture and leadership*. San Francisco, CA: Jossey-Bass.

- Schmidt, F., & Hunter, J. (2003). History, development, evolution, and impact of validity generalization and meta-analysis methods, 1975-2001. In K. R. Murphy (Ed.), *Validity generalization: A critical review* (pp. 31-65). Mahwah, NJ: LEA Publishers.
- Schmitt, N., & Borman, W. C. (Eds.). (1993). *Personnel selection in organizations*. San Francisco: Jossey-Bass.
- Schneider, B. (1987). The people make the place. *Personnel Psychology*, 40, 437-453.
- Schneider, B. (2001). Fits about fit. *Applied Psychology: An International Review*, 50(1), 141-152.
- Schneider, B., Smith. D. B, & Goldstein, H. W. (2000). Attraction-selection-attrition:
  Toward a person-environment psychology of organizations. In W. B. Walsh, K.
  H. Craik, & R. H. Price (Eds.), *Person-environment psychology: New directions*and perspectives (pp. 61-85). Mahwah, NJ: LEA Publishers.
- Schneider, B., Smith, D. B., Taylor, S., & Fleenor, J. (1998). Personality and organizations: A test of the homogeneity of personality hypothesis. *Journal of Applied Psychology*, 83(3), 462-470.
- Schwab, D. P. (1999). Research methods for organizational studies. Mahwah, NJ: Erlbaum.
- Schwartz, R. (1992). Is Holland's theory worthy of so much attention or should vocational psychology move on? *Journal of Vocational Behavior*, 40, 179-187.

- Shivy, V. A., Rounds, J., & Jones, L. E. (1999). Applying vocational interest models to naturally occurring occupational perceptions. *Journal of Counseling Psychology*, 46(2), 207-217.
- Snow, C. C., & Snell, S. A. (1993). Staffing as strategy. In N. Schmitt & W. C. Borman (Eds.), Personnel selection in organizations (pp. 448-478). San Francisco, CA: Jossey-Bass.
- Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes, and consequences*. Thousand Oaks, CA: Sage Publications.
- Spokane, A. R. (1985). A review of research on person-environment congruence in holland's theory of careers. *Journal of Vocational Behavior*, 26, 306-343.
- Strong, E. K., Jr. (1927). A vocational interest test. *Educational Record*, *8*, 107-121.

  Stumpf, S. A., & Hartman, K. (1984). Individual exploration to organizational commitment or withdrawal. *Academy of Management Journal*, *27*, 308-329.
- Tabachnick, B. G., & Fidell, L. S. (1996). *Using multivariate statistics*. New York, NY: HarperCollins Publishers Inc.
- Tanaka, J. S. (1987). How big is big enough?: Sample size and goodness of fit in structural equation models with latent variables. *Child Development*, 58, 134-146.
- Taylor, F. W. (1911). The principles of scientific management. New York, NY: Harper.
- Tom, V. R. (1971). The role of personality and organizational images in the recruiting process. *Organizational Behavior and Human Performance*, *6*, 573-592.
- Tracey, T., & Rounds, F. (1993). Evaluating Holland's and Gate's vocational interest models. *Psychological Bulletin*, *113*, 229-246.

- Tracey, T., & Rounds, F. (1995). The arbitrary nature of Holland's RIASEC types: A concrete-circles structure. *Journal of Counseling Psychology*, 42, 431-439.
- Tranberg, M., Slane, S., & Ekeberg, S. E. (1993). The relation between interest congruence and satisfaction: A metaanalysis. *Journal of Vocational Behavior*, 42, 253-264.
- Turban, D. B., & Keon, T. L. (1993). Organizational attractiveness: An interactionist perspective. *Journal of Applied Psychology*, 78, 184-193.
- Upperman, P., & Church, T. (1995). Investigating Holland's typological theory with Army occupational specialties. *Journal of Vocational Behavior*, 47, 61-75.
- Van Dyne, L., & LePine, J. A. (1998). Helping and voice extra-role behaviors: Evidence of construct and predictive validity. *Academy of Management Journal*, 41(1), 108-119.
- Van Vianen, A. E. M. (2000). Person-organization fit: The match between newcomers' and recruiters' preferences for organizational cultures. *Personnel Psychology*, 53(1), 113-149.
- Vancouver, J. B., Millsap, R. E., & Peters, P. A. (1994). Multilevel analysis of organizational goal congruence. *Journal of Applied Psychology*, 79, 666-679.
- Vancouver, J. B., & Schmitt, N. W. (1991). An exploratory examination of personorganization fit: Organizational goal congruence. *Personnel Psychology*, 44, 333-352.

- Vandenberg, R. J., & Lance, C. E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organizational Research Methods*, *3*, 4-69.
- Vandenberg, R. J., Lance, C. E., & Taylor, S. C. (1997). A latent variable approach to rating source equivalence: Who should provide ratings on organizational citizenship behavior dimensions? Paper presented at the annual meeting of the Academy of Management, Boston, MA.
- 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.
- Waldman, D. A., & Spangler, W. D. (1989). Putting together the pieces: A closer look at the determinants of job performance. *Human Performance*, 2, 29-59.
- Walsh, W. B., Craik, K. H., & Price, R. H. (Eds.). (2000). *Person-environment psychology: Models and perspectives*. Mahwah, NJ: Erlbaum.
- Watson, D., & Clark, L. A. (1984). Negative affectivity: The disposition to experience aversive emotional states. *Psychological Bulletin*, *96*, 465-490.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, *54*(6), 1063-1070.
- Werbel, J. D., & Gilliland, S. W. (1999). Person-environment fit in the selection process.

  In G. R. Ferris (Ed.), *Research in personnel and human resource management*(Vol. 17, pp. 209-243). Stamford, CT: JAI Press.

- Westerman, J. W., & Cyr, L. A. (2004). An integrative analysis of person-organization fit theories. *International Journal of Selection and Assessment*, 12(3), 252-261.
- Wiener, Y. (1982). Commitment in organizations: A normative view. *Academy of Management Review*, 7, 418-428.
- Williams, C. R., Labig, C. E., & Stone, T. H. (1993). Recruitment sources and posthire outcomes for job applicants and new hires: A test of two hypotheses. *Journal of Applied Psychology*, 78(2), 163-172.
- Williams, L. J., Gavin, M. B., & Williams, M. L. (1996). Measurement and nonmeasurement processes with negative affectivity and employee attitudes. *Journal of Applied Psychology*, 81(1), 88-101.
- Witt, L. A., & Nye, L. G. (1992, April). *Goal congruence and job attitudes revisited*.

  Paper presented at the seventh annual conference of the Society for Industrial and Organizational Psychology, Montreal, Canada.
- Witt, L. A., & Silver, N. C. (1995, March). *Team politics and person-organization fit predicting team cohesiveness*. Paper presented at the tenth annual meeting of the Society for Industrial and Organizational Psychology, Orlando, FL.
- Young, G., Tokar, D., & Subich, L. (1998). Congruence revisited: Do 11 indices differentially predict job satisfaction and is the relationship moderated by person and situation variables? *Journal of Vocational Behavior*, 52, 208-225.