

THE PREDICTIVE POWER OF VALUES FOR ORGANIZATIONAL OUTCOMES

BY

QIAN QI SONG

THESIS

Submitted in partial fulfillment of the requirements  
for the degree of Master of Arts in Psychology  
in the Graduate College of the  
University of Illinois at Urbana-Champaign, 2015

Urbana, Illinois

Master's Committee:

Professor James Rounds, Director of Research  
Associate Professor Daniel A. Newman

## ABSTRACT

Despite theory suggesting that values guide the perception and behavior of individuals in work settings, values have yet to be systematically investigated in terms of their relationships with organizational outcomes. Moreover, according to Schwartz's value theory (Schwartz, 1992) and person-environment fit theory (e.g., Kristof, 1996), value fit indices, which quantify the degree of match between an individual's and an organization's values, should be more strongly related to organizational outcomes than are value scores alone. Three previous meta-analyses (Verquer, Beehr & Wagner, 2003; Kristof-Brown, Zimmerman & Johnson, 2005; Arthur, Bell, Villado & Doverspike, 2006) have examined the relation between value fit and organizational outcomes. The present paper extends meta-analytic research on values by including value score and focusing on methodological aspects of the measurement of values. The results based on 66 studies and 74 samples showed that values were related to job satisfaction ( $\rho_{\text{value\_score}} = .30$ ;  $\rho_{\text{value\_fit}} = .53$ ) and job performance ( $\rho_{\text{value\_score}} = .14$ ;  $\rho_{\text{value\_fit}} = .24$ ). More importantly, value fit indices had stronger relationships with organizational outcomes ( $\rho_{\text{value\_fit}} = .38$ ) than did value scores ( $\rho_{\text{value\_score}} = .21$ ). Various moderators were analyzed. Value fit indices were more related to job satisfaction and job performance than were value scores. Additionally, work values were more related to OCB, compared to basic values and cultural values. Measurement of value fit using perceived fit had a stronger correlation with withdrawal and job satisfaction, compared to subjective fit and objective fit methods. Finally, mediation analysis showed that job satisfaction mediates the relation between values and job performance. Overall, the results suggest that values hold promise for predicting organizational outcomes, and the value fit between individual and organization was more predictive of organizational outcomes than were value scores alone.

## **ACKNOWLEDGEMENTS**

I would like to express my sincere appreciation to my adviser, Dr. James Rounds for his committed guidance and assistance during the research and preparation of my thesis, and being a supportive and understanding adviser. In addition, special thanks to Dr. Daniel Newman for serving on my graduate committee and providing helpful suggestions and comments on this project and my graduate study. Thanks are also extended to my fellow graduate students who have provided encouragements and worked toward our individual goals together in research and study. And finally, many thanks to my family and friends who have unconditionally supported and accompanied me through my graduate life.

## TABLE OF CONTENTS

INTRODUCTION .....	1
METHODS .....	12
RESULTS .....	18
DISCUSSION .....	23
TABLES .....	29
FIGURES .....	33
REFERENCES .....	35
APPENDIX.....	52

## INTRODUCTION

Values play a central role in an individual's work outcomes. Empirical support for the link of values to organizational outcomes comes from three meta-analyses: Verquer, Beehr and Wagner (2003), Kristof-Brown, Zimmerman and Johnson (2005), and Arthur, Bell, Villado and Doverspike (2006). Verquer et al. (2003) found that value fit was moderately related to job satisfaction and turnover intentions. Kristof-Brown et al. (2005) had extended Verquer et al. (2003)'s definition of value fit, and found links with job satisfaction and turnover intention at the person-organization level of fit. Arthur et al. (2006), on the basis of the previous two works, had found small link between person-organization fit and job performance. The meta-analytic studies have shown that when an individual's values match those of the organization, they are more satisfied with their jobs, identify with the organization, and are less likely to leave the organization (Kristof-Brown et al., 2005; Verquer et al., 2003; Arthur et al., 2006).

The present paper extends past meta-analytic research in terms of scope and methodology. First, the previous meta-analyses (Kristof-Brown et al., 2005; Verquer et al., 2003; Arthur et al., 2006) focused on general fit between person and environment. The current study focuses specifically on values fit, and uses primary studies published since 2006. Second, past meta-analysis did not investigate different methods of measuring values. The effect sizes represented a mixture of findings that correlate value scores and a variety of fit indices with organizational outcomes. Understanding the methodology of how values are related to outcomes is important for theoretical and practical purposes. The present meta-analysis updates previous findings and focus mainly on values. The current study unravels the variety of methods that are used to study values by separately calculating effect sizes for value scores and value fit indices.

We begin by discussing the concepts of values and value fit, noticing that values directly guide individual's behavior while value fit concept is based on the idea of fit between individual's values and the environment. I then discuss theoretical reasons why values would predict job satisfaction and job performance, and provide empirical support for these propositions. Next, I review moderators that might influence the relation between values and organizational outcomes. The moderators include concept of values (i.e., value scores, value fit), different types of value scores (i.e., work values, basic values, culture values), and different methods of measuring value fit (i.e., perceived fit, subjective fit, objective fit). Finally, I explore the relation between values, job satisfaction, and job performance through mediation models.

### **Values Framework**

Consistent with prior research (Meglino & Ravlin, 1998; Rokeach, 1973; Schwartz, 1992; Edwards & Cable, 2009), I refer to values as general beliefs about the importance of desirable behaviors or goals. According to Schwartz's (1992, 2006, 2012; Schwartz et al., 2012) theory of basic individual values: (a) values motivate behavior, (b) values are ordered by importance relative to one another, and (c) the relative importance of values guides action. Schwartz's (2012) nineteen value types are related to each other in a circular arrangement that represents a motivational continuum, where values that are closer to each other in the continuum share similar underlying motivations and values that are more distant in the continuum tend to have contrasting underlying motivations. Values influence behavior when they are important to the individual and relevant to a certain context (Schwartz, 2012). Schwartz's theoretical position is based on the idea of person-environment fit, which is broadly defined as the congruence between an individual's characteristics and his or her work environment (Caplan, 1987; Chatman, 1989; Edwards, 1991; Kristof, 1996).

Value fit, based on the person-environment fit (P-E fit) theory, is referred to as the similarity between values held by individuals and values held by organizations (Edwards & Cable, 2009). According to the theory, an individual's work environment positively reinforces his or her values and other characteristics (Pervin, 1968; Schneider, 1987; Cable & Judge, 1996). The relation between value fit and organizational outcomes is well described in one widely studied aspect of P-E fit, supplementary fit. Supplementary fit occurs when an individual's characteristics (e.g., values, personality) are similar with those of the organization (Muchinsky & Monahan, 1987). According to Schneider's (1987) attraction-selection-attrition (ASA) framework (Schneider, Goldstein, & Smith, 1995; Schneider, Smith & Goldstein, 2000), individuals are attracted to organizations because of similarity between the individual's goals and those of the organization. Organizations also select individuals based on the similarity or match between the organization's and individual's goals. Finally, individuals who have similar goals with those of the organization tend to be satisfied with the organization and stay in the organization for longer. Good fit is associated with positive outcomes for the employee and the organization, including job satisfaction and job performance, whereas poor fit is associated with undesirable outcomes (Maynard & Parfyonava, 2013). For example, job performance, which is one's contribution toward the attainment of organizational goals, will result from good value fit because individuals will be motivated to work toward goals that are also considered important by an organization. Value fit is thus assumed to predict job satisfaction and job performance. We'll discuss this in more detail in the following sections.

### **Values and Job Satisfaction**

Job satisfaction has long been considered a function of both person and environment (e.g., Mount & Muchinsky, 1978). The fit between individual's values and those of the

organization is considered as one potential predictor of job satisfaction. So how does value fit between the individual and their environment lead to job satisfaction? The explanation put forth by Edwards and Cable (2009) is that value fit will (a) enhance communication between individual and the environment (e.g., supervisor and co-workers), (b) increase predictability of the environment or the organization's needs and rewards, (c) influence the individual to be more involved with the environment, and (d) build up trust of the individual toward the environment. Value fit increases the predictability and agreement of the individual toward the environment, because when the individual's values match those of an organization, they are more likely to share similar opinions and goals.

### **Values and Performance**

Motivation is broadly considered as a direct determinant of performance (Campbell, Gasser, & Oswald, 1996; Sackett, Zedeck, & Fogli, 1988). According to motivation theory (Kanfer, 1990), in work settings, motivation drives performance through its influence on (a) the behavior and goals chosen by the individual (direction), (b) the amount of effort that is put forth to achieve the goals (vigor), and (c) the length of time that is invested in the process (persistence). Values motivate behavior through the relative importance of different values in certain context. For example, studies on academic achievement have shown that an individual's perception of what area is important is related to student's motivation to do well in that area (Lee, 2002). Figure 1 illustrates the relations among values, motivation, and performance.

Values are directional because values serve as criteria that guide the selection of individual's actions and events (Schwartz, 2012). Individuals evaluate what is good or bad, worth doing or avoiding based on their values. For example, researchers have argued that when individuals are evaluating which occupation to pursue, work values underlie individual's ideas of

what is important (Ros, Schwartz, & Surkiss, 1999). Work values guide individuals' series of actions such as choice of which occupational aspects to stress during information search and how to sort different occupational choices. Second, values stimulate effort because values act as desirable goals that motivate action (Schwartz, 2012). Individuals take action to meet their desirable goals and invest a reasonable amount of effort. Last, values sustain pursuit. Past meta-analytic estimate of rank-order stability based on 28 longitudinal samples reported that work values were highly stable ( $\rho = .62$ ; Jin & Rounds, 2012). Values tend to be more stable after age of 22 ( $\rho = .63$  for age 12 to 17.9;  $\rho = .57$  for age 18 to 21.9;  $\rho = .66$  for age 22 to 25.9;  $\rho = .65$  for age 26 and after), when the majority of individuals have finished higher education and entered the job market. This stability suggests that values can consistently guide and stimulate efforts of individuals.

Based on the above arguments, I propose my first hypothesis as follows:

*Hypothesis 1: Values are related to job satisfaction and job performance.*

Verquer et al. (2003) found that value fit was moderately related to job satisfaction (Avg  $r = .25$ ,  $\rho = .28$ ; based on 18 effect sizes; 95% CI [.01, .54]). Kristof-Brown et al. (2005) had extended Verquer et al.'s (2003) definition of value fit, and found stronger links of value fit with job satisfaction (Avg  $r = .41$ ,  $\rho = .51$ ; based on 45 effect sizes; 95% CI [.16, .66]) at the person-organization level of fit. Arthur et al. (2006) found moderate link between value fit and job satisfaction (Avg  $r = .29$ ,  $\rho = .36$ ; based on 46 effect sizes; 95% CI [.25, .33]). However, their main focus was not the relation between value fit and job satisfaction. They pointed out that job satisfaction was included in the study for comparison with previous studies (Arthur et al., 2006). I expect to find similar effect sizes between values and satisfaction to those reported in the Kristof-Brown et al.'s (2005) meta-analysis, as Kristof-Brown et al. (2005) is a slightly more

updated work than Verquer et al. (2003) which studied job satisfaction as main outcome variable. Because the current meta-analyses have included additional primary studies, I expect the confidence interval of the current study to be smaller than the confidence interval reported by Kristof-Brown et al. (2005). Past empirical research has reported a weak relation between values and various aspects of job performance (e.g., task performance: Taris & Feij, 2001; OCB: Arthaud-Day et al., 2012; Maynard & Parfyonava, 2013) ranging from to -.05 to .13. Based on the past studies, I expect to find small average correlations, around  $\sim .1$  (Cohen, 1988) for values and performance.

### **Value Scores and Value Fit Indices**

Generally, when studying the relation between values and outcomes such as job satisfaction and job performance, researchers have used two methods of relating values to outcomes: value scores and value fit index.

According to Schwartz's value theory (Schwartz, 1992), values are related to desirable organizational outcomes such as job satisfaction and job performance, because values influence action when they are relevant in the context and important to the individual. Additionally, according to P-E fit theory (e.g., Caplan, 1987; Kristof, 1996), value fit is expected to be related to organizational outcomes because the match between individual's values, needs or goals and the opportunity and resources that the organization can provide will motivate the individual to maximize their performance and be satisfied when goals were reached.

Although there had not been meta-analytic studies looking at the effect of using different types of value measures to predict job satisfaction and job performance, past meta-analytic studies on interests have shown that the correlation between interest fit indices and performance were stronger than for interest scores alone (Nye, Su, Rounds, & Drasgow, 2012). Person-

environment fit theory suggests that beneficial outcomes will result when the characteristics of an individual and the environment are well matched (Kristof, 1996). Thus, I propose a second hypothesis as follows:

*Hypothesis 2: Value fit indices are more related to job satisfaction and job performance than are value scores.*

## **Moderators**

In this section, I consider potential moderators of the relation between values and organizational outcomes.

**Value types.** There are generally three kinds of values: basic values, work values, and cultural values. Basic values refer to goals that act as general guiding principles in individuals' lives, which consists of four higher-order value types: openness to change, conservation, self-transcendence, and self-enhancement (Schwartz, 2012).

Work values are expressions of basic values in a work setting. From Schwartz's perspective, there are four types of work values: intrinsic work values, extrinsic work values, social work values, and prestige work values. Each of the four types of work values is related to higher-order basic value types: openness to change, conservation, self-transcendence, and self-enhancement. Intrinsic work values emphasize importance of pursuit of personal autonomy, interests, and growth in work; extrinsic work values emphasize importance of security and maintenance of order in work through external rewards and supports; social work values refer to importance of individuals maintaining positive social relations and contributing to society through work; prestige work values refer to the importance of individuals' prestige, power, and achievement in work (Ros, Schwartz, Surkiss, 1999). Work values are related to basic values, but

because they are more closely related to work settings, they are more likely to predict performance.

Aside from basic values and work values, there are also culturally-distinct values. Cultural characteristics such as individualism-collectivism and power distance are considered to be valued differently across cultures (e.g., Triandis, 2001). Examples of past findings have shown relations between collectivism and employees' work-related behaviors such as commitment (Wang, Bishop, Chen, & Scott, 2002) and OCB (Cohen & Avrahami, 2006). In general terms, individuals who are oriented toward collectivism tend to have a more salient identity of their membership in various social groups, and are more likely to identify with the profession or organization. The individuals tend to subordinate personal goals to organizational goals (Wang et al. 2002).

Based on different characteristics of basic values, work values, and cultural values, I expect value types to moderate the relation between values and organizational outcomes. I propose my third hypothesis as follows:

*Hypothesis 3: Value types will moderate the relation between value scores and job satisfaction and job performance. Specifically, compared to basic values and cultural values, it is expected that work values are more related to job satisfaction and job performance.*

**Fit types.** There are generally two ways of measuring fit: direct measures and indirect measures. Direct measures of fit ask the individual: to what extent does your characteristic match that of the environment? In comparison, indirect measure assess fit by comparing person and environment characteristics that were obtained through different methods or sources (Kristof-Brown et al., 2005). Direct measures of fit, or perceived fit, refer to direct assessment of the

compatibility of person and environment. Indirect measures of fit are further divided into subjective fit and objective fit. For subjective fit, the information of person and environment's characteristics are both provided by the same individual. For objective fit, the information of the characteristic of person is collected through self-report of the individual, while the information of the characteristic of environment is collected through other sources (e.g., supervisor rating, incumbent ratings). In other words, subjective fit measures the match between the person and environment as they are separately perceived and reported by the person. In comparison, objective fit measures the match between the person as it is perceived and reported by the person and the environment, which exists "independently" from the person's perception (Kristof-Brown et al., 2005).

Perceived fit allows the greatest amount of individual perception because the items used to measure perceived fit are usually similar items that directly ask the respondent their perception of the fit. This allows the respondents to apply their own weighting scheme to various aspects of the environment. Because individual perception is the basis for change of individual attitude and behavior, value fit measured through perceived fit is expected to demonstrate the largest relation with organizational outcomes compared to other ways of measuring value fit. Similar to perceived fit, subjective fit collects information from a single respondent, thus it's also largely dependent on the individual's perception. Thus, it is expected that value fit measured through subjective fit will have similar degree of relation with organizational outcomes as that of perceived fit, with perceived fit having slightly stronger relation with organizational outcomes because it uses individual's holistic assessment of fit. Finally, compared to perceived fit and subjective fit, objective fit is independent of individual's perception of the fit. Thus, objective fit

is expected to have the weakest relation with organizational outcomes, job satisfaction and job performance. I propose my fourth hypothesis as follows:

*Hypothesis 4: Fit types will moderate the relation between value scores and both job satisfaction and job performance. Compared to subjective fit and objective fit, perceived fit is expected to be most related to job satisfaction and job performance.*

### **Job Satisfaction as Mediator of the Effect of Values on Job Performance**

Previous research (e.g., Hulin & Judge, 2003; Crede, Chernyshenko, Stark, Dalal, & Bashshur, 2007) has suggested that job satisfaction is a mediator of the relation between individual's perception of the job situation and volitional workplace behaviors. Theoretical frameworks (e.g., Social-Exchange Theory, Thibaut, & Kelley, 1959; Norm of Reciprocity, Gouldner, 1960; Perceived Organizational Support, Rhoades, & Eisenberger, 2002) have predicted that in organizational settings, when individuals perceive the working situations to be favorable, they will respond with behaviors that are beneficial to the organization and/or other individuals in the organization. In other words, when individuals are satisfied with certain characteristic of the organization (e.g., values), the individuals will tend to engage in better task performance and organizational citizenship behavior. On the other hand, when certain characteristic of the organization (e.g., values) led to less satisfaction, the individual will tend to be involved in behaviors that are harmful for the organization or other individuals in the organization. Examples of such behaviors are counterproductive work behavior and withdrawal. Crede and colleagues (2007) have found that job satisfaction can be placed as an antecedent of job performance, especially negative workplace behaviors. Based on the previous arguments and findings, I propose my fifth hypothesis as follows:

*Hypothesis 5: Job satisfaction mediates the effect of values on job performance, such that the effect of values on job performance operates through job satisfaction.*

The current meta-analysis is a quantitative summary of the relations between values and organizational outcomes of job satisfaction and job performance. Studies that looked at the relations using value scores and value fit indices are studied separately. Different kinds of values and different ways of measuring value fit were expected to moderate the relation between values and organizational outcomes. Finally, the mediation effect of job satisfaction on the relation between values and job performance was studied.

## **METHODS**

### **Literature Search**

We conducted a literature search to identify both published and unpublished studies that investigated the relationship between values and organizational outcomes. Several methods were used to locate relevant studies. First, a literature search was conducted using the PsycINFO database for journal articles and technical reports in the areas of psychology, sociology and education, using combinations of the following two groups of keywords: values (work values, value fit, intrinsic value, self-actualization value, extrinsic value, security value, material value, social value, relational value, status value, power value) and organizational outcomes (job satisfaction, job performance, task performance, organizational citizenship behavior, OCB, contextual performance, withdrawal, behavioral withdrawal, job withdrawal, tardiness, absenteeism, turnover, retirement, psychological withdrawal, work withdrawal, counterproductive work behavior, CWB). Second, I searched in the ProQuest Dissertation Abstracts database for unpublished dissertations using the above keywords. Third, I searched the citations included in Verquer et al. (2003), Kristof-Brown et al. (2005) and Arthur et al. (2006) meta-analyses. Finally, I did a cross-reference check to exclude overlapping studies.

### **Inclusion Criteria**

We eliminated studies if they met any one of the following five criteria. First, studies that reported validity results based on unit-level data only were excluded (Kraimer, 1997), because relations among aggregate data are not comparable to individual data (Ostroff, 1993). Second, studies that reported utility value (e.g., Hulleman, Godes, Hendricks, & Harackiewicz, 2010) or organization-related value (Wang, 2009) were excluded because utility value measures individuals' perceived usefulness of an object (Hulleman et al., 2010) and organization-related

value illustrates the utility value that the organization deems important. Neither of these definitions is consistent with the value definition used in the current study. Studies where the definition of values was not clear (e.g., Ravlin & Ritchie, 2003) or included satisfaction (e.g., Hatstrup, Mueller, & Aguirre, 2007) were also excluded from analysis. Third, studies that used unclear measures of the criterion, or studies where the measures of the criterion were a mixture of the criterion of interest and another criterion (e.g., Posner, 1992 measured work attitude, which included both job satisfaction and organizational commitment) were excluded. Similarly, studies in which values were examined as an interviewer's judgment of applicant fit with the organization (e.g., Adkins, Russell, & Werbel, 1994) were excluded from analysis. Fourth, studies were only included if results were able to be extracted and analyzed in a meta-analysis as a validity estimate. For example, one study used values as criteria to create experimental material (Bonitz, Larson, & Armstrong, 2010). Other examples include literature reviews or theoretical papers that did not report original primary effect size estimates.

We identified 93 studies that appeared to provide data concerning relations between values and the criteria of interest. Of these, 66 studies (71.74%), representing 74 independent samples, met all the criteria. These studies comprised a mix of published journal articles ( $k = 42$ ), technical reports ( $k = 3$ ), dissertations and theses ( $k = 12$ ). Table 1 shows the total number and percentage of studies that were excluded according to each criterion. The input values for all the studies included in the meta-analysis are available in the Appendix.

## **Study Variables**

**Job satisfaction.** Job satisfaction refers to “a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences” (Locke, 1976, p. 1300). Based on

this definition, we went through the studies and coded effect sizes of the relation between values and job satisfaction.

**Performance criteria.** Job performance included task performance, organizational citizenship behavior (OCB), withdrawal, and counterproductive work behavior (CWB). I used the definition provided by Borman and Motowidlo (1993) to code task performance and organizational citizenship behavior (OCB) (or contextual performance, pro-social organizational behavior). Withdrawal included both job withdraw and work withdraw (Hulin, 1991). Finally, counterproductive work behavior (CWB) included aggression, hostility, sabotage, theft, violence, and withholding of output.

**Value score and value fit index.** Value score refers to using specific values to predict an organizational outcome. For example, using individuals' scores on intrinsic values to predict job satisfaction. Value scores are usually measured using specific value scales. Value fit index refers to the match between individual and the environment (e.g., organization, co-worker) in terms of what they think are important. Value fit are either measured using items that directly ask for individual's perception of the fit (perceived value measurement), or are calculated using distance (difference score) between the person and environment's values, Pearson correlation between the person and environment's values, or other methods (subjective value measurement and objective value measurement). The current study adopted two main kinds of value fit index calculation: distance and Pearson correlation. When distance was used as the method of calculation,  $d$  to  $r$  transformation (Schmidt & Hunter, 2014) was adapted to unify the scale of effect size. Polynomial regression (Edwards & Parry, 1993) was recommended as a measure of fit, but because regression coefficients are not typically suitable to be included in meta-analysis

(Schmidt & Hunter, 2014), studies using polynomial regression to measure value fit were omitted from the current analysis.

**Value types.** I examined whether different kinds of value types will have varying influence on the relation between value scores and outcomes. Specifically, basic value, work values and cultural value were taken into consideration. As mentioned above, basic values refer to the basic values individuals hold in life (Schwartz, 1992). Work values refer to values in the work setting. Work values include intrinsic work value, extrinsic work value, social work value, and prestige work value (Ros, Schwartz, Surkiss, 1999). Cultural values refer to values related to cultural characteristics such as individualism-collectivism (e.g., Cohen, 2007; Chen & Kao, 2011; Chan & Snape, 2013).

**Fit types.** I examined whether different methods of measuring value fit moderated the relationship between value fit and organizational outcomes. As mentioned earlier, there are two kinds of fit measures: direct fit measure and indirect fit measure. Measurements of indirect fit include objective fit and perceived fit. According to definitions mentioned earlier, value fit was identified as subjective fit if it was obtained by directly asking an individual how well they thought their values matched those of the organization. Value fit was identified as objective fit if it included someone else's perceptions of the environment other than the target individual, and it was identified as perceived fit if the information of the individual's values and the organization's values were obtained from a single source (Verquer et al., 2003).

### **Meta-Analysis Procedures**

**Effect size estimate.** According to Schmidt and Hunter (2014), the following steps were carried out to arrive at effect size estimates. First, correlations were corrected for unreliability using alpha values from previous meta-analysis or from primary study data. Second, sample

weighted mean correlations were calculated. Finally, variability in correlations were reported based on two indices: 95% confidence interval (95% CI) - estimate variability in the estimated mean correlation; 80% credibility interval (80 % CV) - estimate variability of the individual correlations in the population of studies. For studies that did not report an observed correlation between predictor and criterion of interest but reported means and standard deviations of predictor and criterion, “d” to “r” transformation was performed according to the procedure discussed in Schmidt and Hunter (2014, pp. 285-286). For the few studies that reported more than one effect sizes for a single sample, effect sizes were combined before analysis using methods recommended in Schmidt and Hunter (2014, pp. 135-138).

**Weighted least squares analysis.** Weighted least squares analysis was used to study whether value types (work values, basic values, cultural values) moderated the relation between value scores and organizational outcome variables. Similarly, weighted least squares analysis was also used to study whether fit types (perceived fit, subjective fit, objective fit) moderate the relation between value fit and organizational outcome variables, respectively. Weighted least squares regression accounts for the heteroskedasticity of the samples, and is recommended for testing moderator effects in meta-analysis, rather than ordinary least squares analysis (Schmidt & Hunter, 2014). For a weighted least squares analysis, the criterion-related validity estimates were regressed on the moderators, weighting each study by the inverse of the sampling error variance. Each study's sampling error variance was calculated using formulas from Schmidt and Hunter (2014; pp. 98). Based on the characteristic of the method, the moderators were given binary dummy codes. Specifically, value score type was coded 0 if the study did not use work values, and was coded 1 if the study used work values; value fit types was coded 0 if the study did not use perceived value measure, and was coded 1 if the study used perceived value measure.

**Meta-mediation analysis.** To further study the relation between value, job satisfaction and job performance, I conducted meta-mediation analysis (Shadish, 1996) through subsequent analyses using structural equation modeling via Mplus 7.2. Mediation analysis was conducted using studies included in the current study that looked at value, job satisfaction and job performance at the same time.

## RESULTS

### Hypothesis 1: Criterion-Related Validity

Table 2 presents the meta-analysis results of the relation between values and organizational outcomes. Hypothesis 1 predicted that values are related to job satisfaction and job performance. Specifically, I hypothesized that both value fit and value scores are related to job satisfaction and job performance. The meta-analytic estimates supported hypothesis 1.

**Value scores.** As shown in Table 2, value scores have a moderate relation with job satisfaction ( $\rho = .30$ , Avg  $r = .22$ ). Value scores overall have a weak relation with job performance ( $\rho = .14$ , Avg  $r = .11$ ).

**Value fit.** As shown in Table 2, value fit indices were highly related to job satisfaction ( $\rho = .53$ , Avg  $r = .44$ ). This effect size is similar to Kristof-Brown et al. (2005). They reported an effect size estimate of .51 and sample-weighted average effect size of .41 and larger. Verquer et al. (2003) reported an effect size estimate of .35 and sample-weighted average effect size of .31. Among different value fit measurement methods, perceived fit measure, or direct fit measure, was the best predictor of job satisfaction ( $\rho = .70$ , Avg  $r = .57$ ) compared to subjective value fit ( $\rho = .43$ , Avg  $r = .35$ ) and objective value fit ( $\rho = .15$ , Avg  $r = .12$ ). Value fit indices overall have a moderate relation with job performance ( $\rho = .24$ , Avg  $r = .20$ ). When value fit indices were used, withdrawal was best predicted ( $\rho = -.32$ , Avg  $r = -.27$ ) compared to other job performance types (overall performance  $\rho = .11$ , Avg  $r = .08$ ; task performance  $\rho = .06$ , Avg  $r = .06$ ; OCB  $\rho = .20$ , Avg  $r = .16$ ).

### Hypothesis 2: Comparison between Value Fit and Value Scores

Hypothesis 2 predicted that value fit indices are more related to job satisfaction and job performance than value scores. The meta-analytic estimates supported hypothesis 2.

As shown in Table 2, value scores have a moderate relation with job satisfaction ( $\rho = .30$ , 95% CI [.16, .45]). In comparison, value fit indices were stronger predictors of job satisfaction ( $\rho = .53$ , 95% CI [.42, .64]). However, the 95% confidence intervals of the two estimates overlapped. Figure 2 provides a forest plot to better observe the difference between the effect sizes of value scores and value fit.

### **Hypothesis 3: Moderating Effect of Value Types**

Hypothesis 3 predicted that value types moderated the relation between value scores and organizational outcomes. I expected that work values would be more related to job satisfaction and job performance than other types of values. Hypothesis 3 was partially supported.

As shown in Table 2, the types of value scores did not differ in their relation with job satisfaction (basic values:  $\rho = .26$ , Avg  $r = .18$ ; work values:  $\rho = 0.23$ , Avg  $r = .19$ ). There were fewer than three studies reporting the relation of cultural values to job satisfaction, thus a meta-analytic estimate was not calculated. Value scores best predicted OCB ( $\rho = .16$ , Avg  $r = .12$ ) compared to other types of job performance. In comparison, value scores were relatively weak predictors of withdrawal ( $\rho = -.09$ , Avg  $r = -.07$ ). Validity of value scores in predicting different types of job performance did not differ largely (overall performance  $\rho = .19$ , Avg  $r = .13$ ; task performance  $\rho = .09$ , Avg  $r = .08$ ). Other than the relation between value score and OCB, the effect size estimate of value scores and all other job performance had confidence intervals that included zero. Due to limitation in number of studies, only OCB had a validity estimate of the relation with all three value types: work values, basic values, and cultural values. From the result, work values seem to be the strongest predictor of OCB ( $\rho = .29$ , Avg  $r = .22$ ) compared to the other two types of values (basic value  $\rho = .15$ , Avg  $r = .11$ ; cultural value  $\rho = .08$ , Avg  $r = .06$ ).

Figure 3 provides a forest plot to better observe the difference among the relation between different value fit types (perceived fit, subjective fit, objective fit) and organizational outcomes. Due to limited number of studies, I was only able to obtain all three value types for OCB. Thus, only the results for OCB were reported.

To further test for moderator effects, weighted least squares regression was used. Results are shown in Table 3. For studies with value scores as predictor, moderator effect of value types was tested. I created a dummy-coded variable, such that the dummy-coded variable was coded 1 if value type was work value and coded 0 if the value type was basic value or cultural value. Results showed that value types were a statistically significant bivariate predictor of the relation between value scores and job satisfaction, but not for job performance. Contrary to expectation, the correlation between work values and job satisfaction was weaker compared to other types of values. As a moderator, value types accounted for 51% of the variance in observed validity (shrunken  $R^2 = .49$ ) of the relation between value scores and job satisfaction. Thus, hypothesis 3 was partially supported.

#### **Hypothesis 4: Moderating Effect of Value Fit Types**

Hypothesis 4 predicted that value fit type moderates the relation between value fit index and job satisfaction and the relation between value fit index and job performance. When value fit is measured using perceived fit, it is most related to job satisfaction and job performance. The results partially supported hypothesis 4.

Due to limited number of samples, only withdrawal had effect size estimates available with all the value fit types included in the current study: perceived fit (direct fit), subjective fit (indirect fit), and objective fit (indirect fit). Perceived fit, or direct fit, was the strongest predictor

of withdrawal ( $\rho = -.41$ , Avg  $r = -.35$ ) compared to the other two kinds of value fit measures, or indirect fits (subjective fit:  $\rho = -.30$ , Avg  $r = -.25$ ; objective fit:  $\rho = -.10$ , Avg  $r = -.08$ ).

Figure 3 provides a forest plot to better observe the differences among the relations between different value fit types (perceived fit, subjective fit, objective fit) and organizational outcomes. Because of limited number of studies, I was only able to obtain all three fit types for job satisfaction and withdrawal. Thus, only the results for job satisfaction and withdrawal were reported.

To further test for moderator effects, weighted least squares regression was used. Results are shown in Table 4. For studies with value fit as a predictor, the moderator effect of value fit types was tested. I created a dummy-coded variable, such that the dummy-coded variable was coded 1 if value fit type was perceived fit, and coded 0 if the value fit type was subjective fit or objective fit. Results showed that value fit type was a statistically significant bivariate predictor of the relation between value fit and job satisfaction, but not for job performance. When perceived fit was used as a measure of value fit, the relation between value fit and job satisfaction tended to be stronger compared to when other types of fit measures were used to measure value fit. Fit types accounted for 37% of the variance in observed validity (shrunken  $R^2 = .35$ ) of the relation between value fit and job satisfaction. Hypothesis 4 assumed that fit types, specifically whether value fit was measured using direct fit or indirect fit, will moderate both the relation between value scores and job satisfaction and job performance. Hypothesis 4 was partially supported.

#### **Hypothesis 5: Mediating Effect of Job Satisfaction on the Relation between Value and Job Performance**

Hypothesis 5 predicted that job satisfaction mediates the relation between value and job performance. The results supported hypothesis 5. Results showed that values are more related to job satisfaction than to job performance. To further study the relations among values, job satisfaction, and job performance, a mediation analysis was conducted using cross-sectional studies that are included in the current meta-analysis. The mediation analysis included 8 samples for value scores and 18 samples for value fit.

SEM analyses showed a good model fit for the full mediation model for value scores ( $\chi^2 = 30.00$ ,  $df = 1$ ,  $p = .00$ ; RMSEA = .09; CFI = .95; SRMR = .03) and value fit ( $\chi^2 = 1.07$ ,  $df = 1$ ,  $p = .30$ ; RMSEA = .00; CFI = 1.00; SRMR = .00). The relationship is shown in Figure 4 for value scores and Figure 5 for value fit. The results supported the hypothesized mediation model. Result of the Sobel test (Sobel, 1986; Selig & Preacher, 2008) showed that job satisfaction was statistically significant mediator of the relation between value score and job performance ( $t = 9.55$ ,  $p = .00$ ) and value fit and job performance ( $t = 33.12$ ,  $p = .00$ ). This is consistent with Arthur et al. (2006)'s findings.

## DISCUSSION

The present study provides a quantitative summary of over 42 years of research, consisting of 66 studies, 74 samples, and 173 effect sizes. Overall, results suggest that values are valid predictors of job satisfaction and job performance. Values are stronger predictor of job satisfaction than job performance. Moreover, value fit indices are a better predictor of job satisfaction and job performance than are value scores. When value fit was measured using different methods, perceived value fit was most strongly related to job satisfaction and job performance, compared to subjective and objective value fit.

Our findings are consistent with Kristof-Brown and colleague's (2005) meta-analysis, which reported corrected correlation of .51 and average correlation of .41 (current study found a slightly higher corrected correlation of .53 and average correlation of .44) between value fit and job satisfaction.

The moderator analysis showed that among different types of values, work values are more related to OCB compared to basic values and cultural values. Among different ways of measuring value fit, perceived fit had a stronger relation with withdrawal and job satisfaction compared to subjective fit and objective fit methods. Finally, the mediation analysis supported the hypothesis that job satisfaction mediates the relation between values and job performance.

### **Implications for Theory**

The finding that values predict job satisfaction and job performance provides support for P-E fit theory and Schneider's ASA theory (Schneider, 1987). As mentioned earlier, according to P-E fit theory and Schneider's ASA theory, the match between an individual's characteristic and that of the organization will result in beneficial organizational outcomes (Kristof, 1996). Value fit is a supplementary fit, or the similarity of the individual's values and those of the

organization. High supplementary fit influences individuals to perceive higher satisfaction and strive for better job performance (Muchinsky & Monahan, 1987; Schneider, 1987).

Another implication is that the relation between perceived fit and organizational outcomes differs from the relation between outcomes and fit measured other ways (subjective fit and objective fit); consistent with and supported by theory. As Kristof-Brown and colleagues (2012) summarized, the fit literature has two distinctly different paradigms: one which sees fit as an individual's internal feeling or perception (perceived fit paradigm) and one which sees fit as an interaction between person and environment (P-E fit paradigm; e.g., Cable and Judge, 1996, 1997; Chatman, 1989; Pervin, 1968, 1987; Schneider, 1987). Measurement of fit using perceived fit is based on the perceived fit paradigm where fit was measured by directly asking individuals' perception of the degree to which their specific characteristic (e.g., values) matches that of the organization. Subjective and objective fit are indirect measurements of fit in which the characteristics of the person and the environment were captured separately and a congruence index or measure of fit was calculated based on the data gained from two separate measures. Perceived fit is thought of as the cognitive representation of the person-environment fit, but because perceived fit allows for the greatest cognitive manipulation of individuals in that there are individual differences in the importance individuals put on various dimensions when evaluating fit (Kristof-Brown et al., 2005). Thus, direct fit/perceived fit better captures the aspects of match that most motivate behavior, making it more related to organizational outcomes compared to indirect measures of subjective fit and objective fit.

It is also possible that perceived fit have stronger relationship with outcome variables due to common method bias (Podsakoff, MacKenzie, Lee & Podsakoff, 2003). Common method bias is a systematic measurement error that occurs when observed relationship is attributable to

measurement method rather than construct. Majority of the time, organizational outcomes such as job performance and job performance are measured using self-report. Thus, when perceived fit was used to assess value fit, respondents are asked to describe both their perception of fit and perception of organizational outcomes at same time in same context. Perceived fit have the greatest potential for common method bias through common rater effect and measurement context effect (Podsakoff et al., 2003). Subjective fit and objective fit obtain fit in different context (subjective fit and objective fit) and through different raters (objective fit), making them less vulnerable to common method bias. Alternatively, generally low reliability of difference scores (e.g., Johns, 1981; Edwards, 2001) can also cause significant difference in effect sizes when using direct fit (perceived fit) versus using indirect fit (subjective and objective fit). One way to calculate indirect fit score is to calculate difference score by subtracting respondents' value score from organization's value score. Low reliability will cause attenuation of effect size between two variables (e.g., Schmidt & Hunter, 2015). Since reliability of difference score is often not reported in studies and are difficult to calculate, meta-analytic estimates of effect sizes are not corrected for unreliability of difference score.

A final implication is that job satisfaction is a significant mediator of the effect of values (value scores and value fit) on job performance, suggesting that values operate through job satisfaction to influence job performance, and providing further evidence of the mediating role of job satisfaction on the relation between an individual's perception of the organizational situation and workplace behaviors (e.g., Hulin & Judge, 2003; Crede et al., 2007). Further, the result of the mediation effect based on current studies provides one potential explanation for the current study's finding that values are more related to job satisfaction than to job performance. In the case of the full mediation model, the relation between the independent variable (values) and

dependent variable (job performance) is the product of two path coefficients, or the relations: path coefficient of independent variable (values) to mediator (job satisfaction)  $\times$  path coefficient of mediator (job satisfaction) to dependent variable (job performance). Since path coefficients are always smaller than one, the path coefficient of mediator to dependent variable is always smaller than one. Thus, the relation between independent variable (values) and mediator (job satisfaction) is stronger than the relation between independent variable (values) and dependent variable (job performance). Thus, the mediation effect provides one potential theoretical explanation of current study's finding that values are more related to job satisfaction than to job performance.

### **Implications for Practice**

Despite theoretical propositions that values should be related to performance and persistence in work settings, values have generally been ignored in the employee selection literature (Barnhill, 2002). Values have yet to be fully reconsidered as a potential predictor in personnel selection. The present study strongly supports that values can be important predictors of organizational outcomes, especially job satisfaction, and may have criterion-related validities as high as or higher than other non-cognitive ability predictors (e.g., personality, Barrick & Mount, 1991; vocational interests, Nye et al., 2012). Many organizations use test batteries as part of personnel selection to try to predict potential candidates' future performance. These test batteries consist of contents that are specifically related to the organization or position in terms of ability (e.g., verbal, quantitative, speed) and non-abilities such as personality (e.g., conscientiousness). The results of the present study suggests that values measures (and perceived fit in particular) may be useful additions to these selection methods. The finding of the current study showed that value fit is better predictor of job satisfaction and job performance compared

to direct value scores, which suggests practitioners should use value fit measures instead of direct value scores in selection. The utility of value fit measure in selection requires organizations to have an accurate picture of the core value of the organization or the position that they are hiring for. When a match between the organization's values and the individual's values can be identified, my findings indicate that these individuals are more likely to be satisfied with, and thus perform well in, the organization.

The results of the current study also indicated that if value fit measures were used, value fit measured using perceived fit method is preferred over other types of value fit measures (subjective fit and objective fit). In practice, organizations could develop structured cases with different relevance to the organization's actual cases, for which candidates respond how much they perceive to fit with the different cases to indicate the degree of match between the individual's value fit and that of the organization.

Also, the finding of the current study suggested that if direct value scores are used, basic value measure is a recommended predictor of job satisfaction over other value types (work value and cultural value), and work value measure is a recommended predictor of performance over other value types (basic value and cultural value).

### **Limitation and Future Direction**

The present meta-analysis provides a comprehensive review of the relationship between value and organizational outcomes, job satisfaction and job performance. I also attempted to look at moderators that influence the relation between values and organizational outcomes.

Nonetheless, a number of questions were not examined because too few studies were available. For example, the number of studies on the relation between value and counter-productive work behavior (CWB) did not meet the minimum amount of studies (at least 3 studies per effect size).

CWB, as a part of the general category of work performance (Sackett, 2002), is closely related to other organizational outcomes such as job satisfaction and organizational citizenship behavior (e.g., Dalal, 2005). Based on the relations between CWB and values that were found in previous research and findings from the present study, it is possible that values are also a predictor of CWB. However, previous research also suggested that perceived wrong (Andersson & Pearson, 1999) leads to CWB, and individuals also engage in CWB as a way to gain or maintain power (Berdahl, 2007). Therefore, future research could help to determine the magnitude and characteristics of the relation between values and CWB.

Another future direction would be to assess the incremental validity of values in predicting organizational outcomes over and beyond other predictors such as cognitive ability, personality, and vocational interests. Past research had found support for cognitive ability, personality and interests as significant predictors of organizational outcomes such as job satisfaction and job performance (cognitive ability; Schmidt & Hunter, 1998; personality; Barrick & Mount, 1991; interest; Van Iddekinge, Roth, Putka, & Lanivich, 2011; Nye et al., 2012). It is important for theory and practice to study the incremental validity of values as a predictor of organizational outcomes relative to other predictors. In the process, future studies can also look into the strength and characteristic of each predictor in predicting different aspects of the organizational outcomes. Findings of the incremental studies can provide support to weighting and assessment designs in personnel selection.

## TABLES

**Table 1.**  
*Number and Percentage of Excluded Studies by Inclusion Criterion*

Outcome/inclusion criterion	<i>k</i>	<i>%</i>
Total studies identified for possible inclusion		
Studies that passed all inclusion criteria	66	71.74
Studies that did not pass one or more inclusion criteria		
1. Individual-level data criterion		
Used unit-level data	1	1.09
2. Value criterion		
Measured utility value instead of individual value	3	3.26
Measured organization-specific core value	1	1.09
Measurement of value included satisfaction	2	2.17
Measurement of value fit not clear	3	3.26
3. Performance criterion		
Measurement of performance unclear or outcome of interest mixed with other criterion	2	2.17
Criterion was salary or position raise	1	1.09
Value were studied as selection criteria	2	2.17
4. Reporting of validity results criterion		
Value was used as part of experimental material	1	1.09
Value was studied as the outcome	6	6.52
Could not extract necessary statistics to estimate validity	4	4.35

*Note.* Percentages reflect the percent of excluded studies (total of 28) that were excluded due to each criterion. Table modeled after Van Iddekinge et al., 2011, Table 1.

**Table 2.**  
*Meta-Analysis Result of Relation between Value and Organizational Outcomes*

	<i>k</i>	<i>N</i>	Avg <i>r</i>	$\rho$	<i>SD</i> $\rho$	95% CI		80% CV		% var explained
						Lower	Upper	Lower	Upper	
Value score	41	17121	0.15	0.21	0.27	0.12	0.30	-0.14	0.56	0.05
Job Satisfaction	21	8663	0.22	0.30	0.34	0.16	0.45	-0.13	0.74	0.03
Work value	13	6488	0.18	0.26	0.25	0.12	0.40	-0.06	0.58	0.05
Basic value	6	1582	0.19	0.23	0.40	-0.09	0.56	-0.28	0.75	0.03
Job Performance	30	12384	0.11	0.14	0.19	0.07	0.22	-0.10	0.39	0.11
Overall performance	11	3616	0.13	0.19	0.22	0.05	0.33	-0.09	0.47	0.13
Work value	8	3091	0.15	0.24	0.19	0.10	0.39	-0.01	0.49	0.14
Task	3	811	0.08	0.09	0.28	-0.24	0.42	-0.27	0.45	0.07
OCB	11	5638	0.12	0.16	0.17	0.06	0.27	-0.06	0.38	0.11
Work value	5	2374	0.22	0.29	0.13	0.16	0.42	0.12	0.46	0.16
Basic value	3	1393	0.11	0.15	0.03	0.09	0.21	0.11	0.18	1.27
Cultural value	4	2090	0.06	0.08	0.10	-0.03	0.19	-0.05	0.21	0.23
Withdrawal	9	3304	-0.07	-0.09	0.17	-0.21	0.03	-0.12	0.30	0.15
Work value	8	2942	-0.04	-0.05	0.14	-0.16	0.06	-0.13	0.24	0.19
Value fit	47	14467	0.31	0.38	0.30	0.29	0.47	-0.01	0.77	0.05
Job Satisfaction	36	12219	0.44	0.53	0.32	0.42	0.64	0.12	0.94	0.03
Direct: Perceived	17	6277	0.57	0.70	0.36	0.53	0.87	0.25	1.16	0.02
Indirect: Subjective	14	5156	0.35	0.43	0.11	0.37	0.50	0.29	0.58	0.21
Indirect: Objective	8	1441	0.12	0.15	0.11	0.05	0.25	0.00	0.29	0.37
Job Performance	37	10999	0.20	0.24	0.20	0.17	0.31	-0.02	0.50	0.11
Overall performance	11	2947	0.08	0.11	0.11	0.03	0.19	-0.04	0.25	0.32
Indirect: Objective	6	706	0.05	0.06	0.06	-0.05	0.16	-0.02	0.13	0.80
Task Performance	7	1235	0.06	0.06	0.10	-0.04	0.15	-0.07	0.18	0.42
OCB	9	2037	0.16	0.20	0.10	0.12	0.28	0.08	0.32	0.41
Direct: Perceived	6	1614	0.17	0.21	0.12	0.10	0.32	0.06	0.36	0.29

**Table 2 (cont.)**

Withdrawal	23	7165	-0.27	-0.32	0.21	-0.42	-0.23	0.05	0.60	0.08
Direct: Perceived	8	2536	-0.35	-0.41	0.18	-0.54	-0.28	0.18	0.64	0.08
Indirect: Subjective	11	4262	-0.25	-0.30	0.21	-0.43	-0.17	0.03	0.58	0.07
Indirect: Objective	6	758	-0.08	-0.10	0.15	-0.25	0.05	-0.09	0.29	0.34

*Note.* Number of samples ( $k$ ) and total sample size ( $N$ ) are provided in columns two and three, respectively. Column four presents the sample size weighted mean observed effect size. The fifth column contains the estimated true score correlation ( $\rho$ ), followed by the standard deviation of this estimate in the sixth column ( $SD_\rho$ ). The seventh and eighth columns present the lower and upper bounds of the 95% confidence intervals of effect size estimates. The ninth and tenth column present the lower and upper bound of the 80% credibility intervals, respectively, followed by the percentage of variance accounted for by the artifacts in the last column.

**Table 3.**

*Weighted Least Squares Regression Result for Moderator of Value Score-Outcome Criterion Related Validity Estimates*

	Job satisfaction			
	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>
Intercept	1.00	.02		43.10**
Value score type	-.55	.12	-.70	-4.58**
$R^2 = .51$ , adjusted $R^2 = .49$				
	Job Performance			
	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>
Intercept	-.01	.07		0.09
Value score type	.16	.08	.31	2.00
$R^2 = .10$ , adjusted $R^2 = .05$				

*Note.* *B* = unstandardized regression coefficient; *SE* = standard error of *B*;  $\beta$  = standardized regression coefficient. Value score type was coded 0 if the study did not use work values, and was coded 1 if the study used work values.

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

**Table 4.**

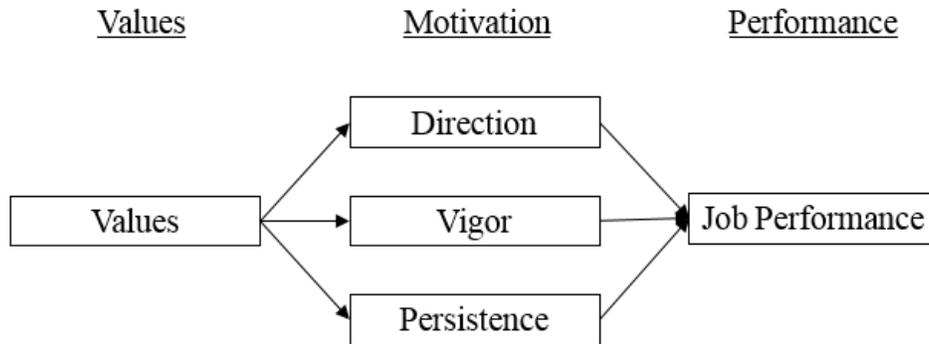
*Weighted Least Squares Regression Result for Moderator of Value Score-Outcome Criterion Related Validity Estimates*

	Job satisfaction			
	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>
Intercept	.41	.08		5.35**
Value fit types	.44	.09	.73	4.73**
$R^2 = .37$ , adjusted $R^2 = .35$				
	Job Performance			
	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>
Intercept	-.20	.06		-3.13**
Value fit types	-.04	.10	-.07	-0.45
$R^2 = .00$ , adjusted $R^2 = .00$				

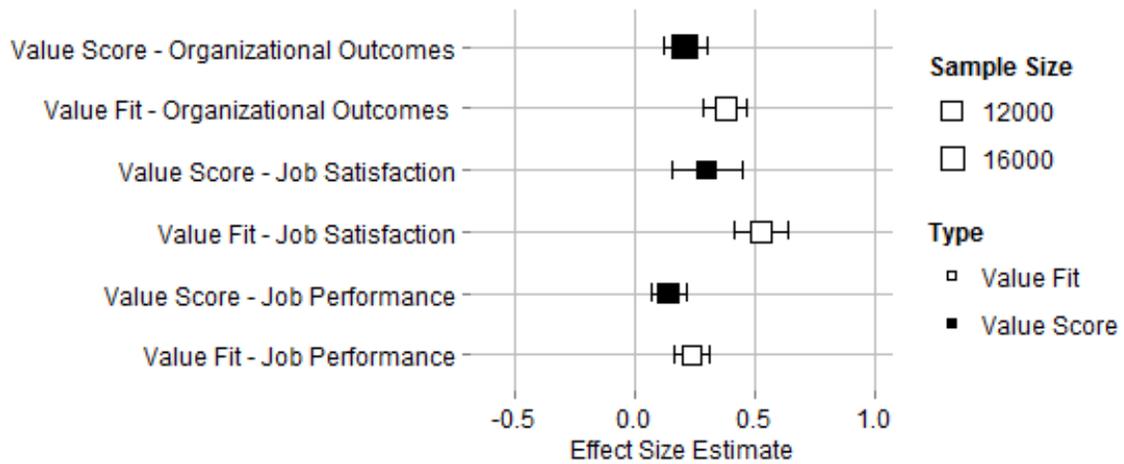
*Note.* *B* = unstandardized regression coefficient; *SE* = standard error of *B*;  $\beta$  = standardized regression coefficient. Value fit types was coded 0 if the study did not use perceived value measure, and was coded 1 if the study used perceived value measure.

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

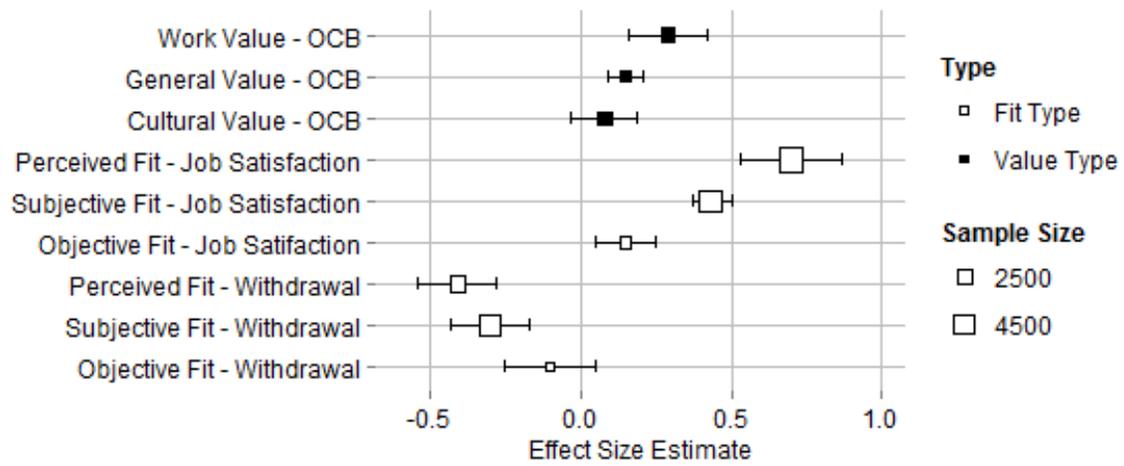
## FIGURES



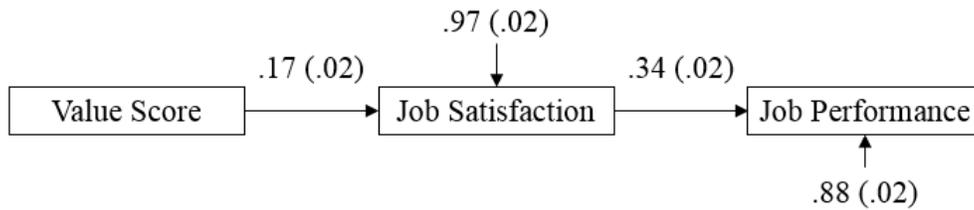
**Figure 1.** Theoretical relationships between value, motivations, and performance.  
*Note.* Notations adapted from Nye, Su, Rounds, Drasgow, 2012



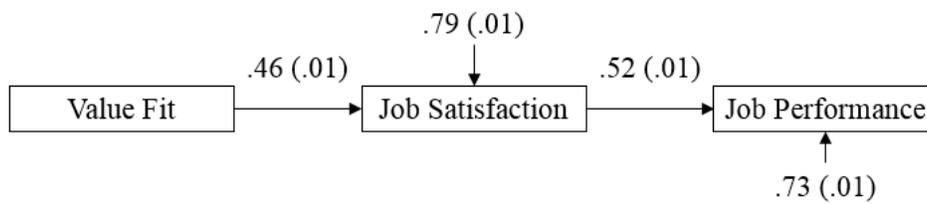
**Figure 2.** Comparison of meta-analytic estimates of value scores and value fit



**Figure 3.** Comparison of meta-analytic estimates for different value types and value fit types



**Figure 4.** Mediation by job satisfaction of the effect of value scores on job performance



**Figure 5.** Mediation by job satisfaction of the effect of value fit on job performance

## REFERENCES

\*References included in the reported meta-analyses results but not the mediation analyses.

\*\*References included both in the reported meta-analyses results and the mediation analyses.

Adkins, C. L., Russell, C. J., & Werbel, J. D. (1994). Judgements of fit in the selection process:

The role of work value congruence. *Personnel Psychology*, 47(3), 605-623. doi:

10.1111/j.1744-6570.1994.tb01740.x

\*Adkins, C. L., Ravlin, E. C., & Meglino, B. M. (1996). Value congruence between co-workers

and its relationship to work outcomes. *Group & Organization Studies (1986-1998)*,

21(4), 439-452. doi: 10.1177/1059601196214005

\*Adkins, C. L., & Russell, C. J. (1997). Supervisor-subordinate work value congruence and

subordinate performance: a pilot study. *Journal of Business and Psychology*, 12(2), 205-

218. doi: 10.1023/A:1025074219049

\*Adkins, B. (2001). Value congruence in groups and organizations: Examining consultants'

connections to their organization and work groups (Doctoral dissertation, ProQuest

Information & Learning).

\*\*Amos, E. A., & Weathington, B. L. (2008). An analysis of the relation between employee-

organization value congruence and employee attitudes. *The Journal of Psychology*,

142(6), 615-631. doi: 10.3200/JRLP.142.6.615-632

Andersson, L. M., & Pearson, C. M. (1999). Tit or tat? The spiraling effect of incivility in the

workplace. *Academy of Management Review*, 24(3), 42-471. doi: 10.2307/259136

\*Arhaud-Day, M. L., Rode, J. C., & Turnley, W. H. (2012). Direct and contextual effects of

individual values on organizational citizenship behavior in teams. *Journal of Applied*

*Psychology*, 97(4), 792-807. doi: 10.1037/a0027352

- \*Barnhill, H. P. (2002). Investigating the relationship between value congruence and individual performance (Order No. AAI3056536). Available from PsycINFO. (619964406; 2002-95023-078).
- Barrick, M. R. & Mount, M. K. (1991). The big five personality dimensions and job performance: A meta-analysis. *Personnel Psychology*, 44. doi: 10.1111/j.1744-6570.1991.tb00688.x
- Berdahl, J. L. (2007). Harassment based on sex: Protecting social status in the context of gender hierarchy. *The Academy of Management Review*, 32(2), 641-658. doi: 10.5465/AMR.2007.24351879
- Bonitz, V. S., Larson, L. M., & Armstrong, P. I. (2010). Interests, self-efficacy, and choice goals: an experimental manipulation. *Journal of Vocational Behavior*, 76, 223-233. doi: 10.1016/j.jvb.2009.09.003
- Borman, W. C., & Motowidlo, S. J. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt, W. C. Borman, & Associates (Eds.), *Personnel selection in organizations* (pp. 71–98). San-Francisco: Jossey-Bass.
- \*\*Bretz, R. D. & Judge, T. A. (1994). Person-organization fit and the theory of work adjustment: Implications for satisfaction, tenure, and career success. *Journal of Vocational Behavior*, 44, 32-54. doi: 10.1006/jvbe.1994.1003
- \*Bouwkamp-Memmer, J. C., Whiston, S. C., & Hartung, P. J. (2013). Work values and job satisfaction of family physicians. *Journal of Vocational Behavior*, 82, 248-255. doi: 10.1016/j.jvb.2013.02.001

- \*\*Cable, D. M., Judge, T. A. (1996). Person-organization fit, job choice decisions, and organizational entry. *Organizational Behavior and Human Decision Processes*, 67(3), 294-311. doi: 10.1006/obhd.1996.0081
- Cable, D. M., & Judge, T. A. (1997). Interviewer's perceptions of person-organization fit and organizational selection decisions. *Journal of Applied Psychology*, 82(4), 546-561. doi: 10.1108/02683940710726375
- Campbell, J. P., Gasser, M. B., & Oswald, F. L. (1996). The substantive nature of job performance variability. In K. R. Murphy (Ed.), *Individual differences and behavior in organizations* (pp. 258–299). Hillsdale, NJ: Erlbaum.
- Caplan, R. D. (1987). Person-environment fit theory and organizations: Commensurate dimensions, time perspectives, and mechanisms. *Journal of Vocational Behavior*, 31, 248-267. doi: 10.1016/0001-8791(87)90042.x
- \*Cennamo, L., & Gardner, D. (2008). Generational differences in work values, outcomes and person-organization values fit. *Journal of Managerial Psychology*, 23(8), 891-906. doi: 10.1108/02683940810904385
- \*Chan, A. W., & Snape, E. (2013). Are cultural values associated with organizational and union commitment and citizenship behavior? A study of Chinese manufacturing workers. *Asian Pacific Journal of Management*, 30, 169-190. doi: 10.1007/s10490-012-9323-7
- \*Chang, J. Y., Choi, J. N., & Kim, M. U. (2008). Turnover of highly educated R & D professionals: the role of pre-entry cognitive style, work values and career orientation. *Journal of Occupational and Organizational Psychology*, 81, 299-317. doi: 10.1348/096317907X204453

- Chatman, J. A. (1989). Improving interactional organizational research: a model of person-organization fit. *Academy of Management Review*, 14(3), 333-349. doi: 10.5465/AMR.1989.4279063
- \*\*Chatman, J. A. (1991). Matching people and organizations: selection and socialization on public accounting firms. *Administrative Science Quarterly*, 36, 459-484. doi: 10.5465/AMBPP.1989.4980837
- \*Chen, C. V., & Kao, R. H. (2012). Work values and service-oriented organizational citizenship behaviors: The mediation of psychological contract and professional commitment: a case of students in Taiwan police college. *Social Indicators Research*, 107, 149-169. doi: 10.1007/s11205-011-9832-7
- \*\*Cheng, P. Y., Yang, J. T., Wan, C. S., & Chu, M. C. (2013). Ethical contexts and employee job responses in the hotel industry: The roles of work values and perceived organizational support. *International Journal of Hospitality Management*, 34, 108-115. doi: 10.5539/ijbm.v9n3p1
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Earlbaum Associates.
- Cohen, A., & Avrahami, A. (2006). The relationship between individualism, collectivism, the perception of justice, demographic characteristics and organizational citizenship behavior. *The Service Industries Journal*, 26(8), 889-901. doi: 10.1080/02642060601011707
- \*Cohen, A. (2007). One nation, many cultures: a cross-cultural study of the relationship between personal cultural values and commitment in the workplace to in-role performance and

- organizational citizenship behavior. *Cross-Cultural Research*, 41(3), 273-300. doi: 10.1177/1069397107302090
- Crede, M., Chernyshenko, O. S., Stark, S., Dalal, R. S., & Bashshur, M. (2007). Job satisfaction as mediator: An assessment of job satisfaction's position within the nomological network. *Journal of Occupational and Organizational Psychology*, 80, 515-538. doi: 10.1348/096317906X136180
- Dalal, R. S. (2005). A meta-analysis of the relationship between organizational citizenship behavior and counterproductive work behavior. *Journal of Applied Psychology*, 90(6), 1241-1255. doi: 10.1037/0021-9010.90.6.1241
- \*De Clercq, S., & Fontaine, J. R. J. (2006). Extending the Schwartz value theory for assessing supplementary person-organization fit. Unpublished PhD. dissertation, Universiteit Ghent, Belgium.
- Edwards & Cable (2009). The value of value fit. *Journal of Applied Psychology*, 94(3), 654-677. doi: 10.1037/a0014891
- Edwards, J. R., & Parry, M. E. (1993). On the use of polynomial regression equations as an alternative to difference scores on organizational research. *Academy of Management Journal*, 36(6), 1577-1613. doi: 10.2307/256822
- Edwards, J. R. (1991). Person-job fit: A conceptual integration, literature review, and methodological critique. *International review of industrial and organizational psychology*, Oxford, England: John Wiley & Sons.
- Edwards, J. R. (2001). Ten difference score myths. *Organizational Research Methods*, 4(3), 265-287. doi: 10.1177/109442810143005

- \*Erdogan, B., Kraimer, M. L., & Rober, 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. doi: 10.1111/j.1744-6570.2004.tb02493.x
- \*Erdogan, E., & Bauer, T. N. (2005). Enhancing career benefits of employee proactive personality: The role of fit with jobs and organization. *Personnel Psychology*, 58, 859-891. doi: 10.1111/j.1744-6570.2005.00772.x
- \*\*Feather, N. T., & Rauter, K. A. (2004). Organizational citizenship behaviours in relation to job status, job insecurity, organizational commitment and identification, job satisfaction and work values. *Journal of Occupational and Organizational Psychology*, 77, 81-94. doi: 10.1348/096317904322915928
- \*Flores, N. J. (2013). The effect of choice and degree of participation on customer value and performance outcomes (Order No. AAI3542566). Available from PsycINFO. (1435853612; 2013-99151-208).
- \*\*George, J. M., & Jones, G. R. (1996). The experience of work and turnover intentions: interactive effects of value attainment, job satisfaction, and positive mood. *Journal of Applied Psychology*, 81(3), 318-325. doi: 10.1037/0021-9010.81.3.318
- \*Greenhaus, J. H., Seidel, C., & Marinis, M. (1983). The impact of expectations and values on job attitudes. *Organizational Behavior and Human Performance*, 31, 394-417. doi: 10.1037/0021-9010.77.3.288
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, 25, 161-178. doi: 10.2307/254580

- \*\*Guo, X. W. (2012). Counterproductive work behaviors, confucian values, and production deviance: the mediating effect of job satisfaction. *Social Behavior and Personality*, 40(6), 1045-1056. doi: 10.2224/sbp.2012.40.6.1045
- Hamdan, M. H. (2011). Mediators of the relationship between person-organisation fit and individual outcomes (Doctoral dissertation, Queensland University of Technology Australia 2011).
- \*Harris, S. G., & Mossholder, K. W. (1996). The affective implications of perceived congruence with culture dimensions during organizational transformation. *Journal of Management*, 22(4), 527-547. Retrieved from <http://search.proquest.com/docview/618809191>
- Hattrup, K., Mueller, K., & Aguirre, P. (2007). Operationalizing value importance in cross-cultural research: comparing direct and indirect measures. *Journal of Occupational and Organizational Psychology*, 80, 499-513. doi: 10.1348/096317906X130843
- \*Hinrichs, J. R. (1972). Value adaptation of new PhD's to academic and industrial environments: A comparative longitudinal study. *Personnel Psychology*, 25, 545-565. doi: 10.1111/j.1744-6570.1972.tb00838.x
- \*Hsu, Y. I. (2002). The relationship between task value, self-efficacy and student performance in performance assessment (Order No. AAI3027727). Available from PsycINFO. (619962347; 2002-95005-104).
- Hulin, C. (1991). Adaptation, persistence, and commitment in organizations. *Handbook of industrial and organizational psychology*, vol. 2 (2nd ed.). (pp. 445-505) Consulting Psychologists Press, Palo Alto, CA.
- Hulin, C. L., & Judge, T. A. (2003). Job attitudes. In W. C. Borman, D. R. Ilgen, & R. J. Klimoski (Eds.), *Handbook of psychology* (Vol. 12, pp. 255-276). Hoboken: Wiley.

Hulleman, C. S., Godes, O., Hendricks, B. L., & Harackiewicz, J. M. (2010, October 11).

Enhancing interest and performance with a utility value intervention. *Journal of Educational Psychology*. Advance online publication. doi: 10.1037/a0019506

\*Hutcheson, J. M. (1999). An examination of three levels of person-environment fit. (work outcome, fit outcome relationship) (Order No. AAI9934188). Available from PsycINFO. (619445426; 1999-95024-252). Retrieved from <http://search.proquest.com/docview/619445426>

\*Ingerick, M., Diaz, T., & Putka, D. (2009). *Investigations into Army enlisted classification systems: Concurrent validation report* (Technical Report 1244). Arlington, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.

\*\*Jehn, K. A., Northcraft, G. B., & Neale, M. A. (1999). Why differences make a difference: a field study of diversity, conflict, and performance in workgroups. *Administrative Science Quarterly*, 44(4), 741-763. doi: 10.2307/2667054

Jin, J., & Rounds, J. (2012). Stability and change in work values: a meta-analysis of longitudinal studies. *Journal of Vocational Behavior*, 80, 326-339. doi: 10.1016/j.jvb.2011.10.007

Johns, G. (1981). Difference score measures of organizational behavior variables: A critique. *Organizational Behavior & Human Performance*, 27(3), 443-463. Retrieved from <http://search.proquest.com/docview/616519859>

\*\*Kabasakal, H., Dastmalchian, A., & Imer, P. (2011). Organizational citizenship behavior: A study of young executives in Canada, Iran, and Turkey, *The International Journal of Human Resource Management*, 22(13), 2703-2729. doi: 10.1080/09585192.2011.599943

- \*Kalliah, T. J., Bluedorn, A. C., & Strube, M. J. (1999). A test of value congruence effects. *Journal of Organizational Behavior*, 20(7), 1175-1198. Retrieved from <http://search.proquest.com/docview/619520118>
- Kanfer, R. (1990). Motivation theory and industrial and organizational psychology. *Handbook of industrial and organizational psychology*, vol. 1 (2nd ed.). (pp. 75-170) Consulting Psychologists Press, Palo Alto, CA.
- \*Knapp, D. J., & Tremble, T. R. (Eds) (2007). *Concurrent validation of experimental Army enlisted personnel selection and classification measures* (Technical Report 1205). Arlington, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Kraimer, M. L. (1997). Organizational goals and values: a socialization model. *Human Resource Management Review*, 7(4), 425-447. doi: 10.1016/S1053-4822(97)90028-0
- Kristof, A. L. (1996). Person–organization fit: An integrative review of its conceptualizations, measurements, and implications. *Personnel Psychology*, 49, 1–49. doi: 10.1111/j.1744-6570.1996.tb01790.x
- Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology*, 58, 281-342. doi: 10.1111/j.1744-6570.2005.00672.x
- Kristof-Brown, A., & Jansen, K. J. (2007). Issues of person-organization fit. *Perspectives on organizational fit*. (pp. 123-153) Lawrence Erlbaum Associates Publishers, Mahwah, NJ.
- \*\*Lauver, K. J., & Kristof-Brown, A. (2001). Distinguishing between employees' perceptions of person-job and person-organization fit. *Journal of Vocational Behavior*, 59, 454-470. doi: 10.1006/jvbe.2001.1807

- \*Lee, C. (2002). *The impact of self-efficacy and task value on job satisfaction and job performance in a web-based course* (Order No. AAI3054599). Available from PsycINFO. (619972148; 2002-95021-122).
- \*\*Livingstone, L. P., Nelson, D. L., & Barr, S. H. (1997). Person-environment fit and creativity: an examination of supply-value and demand-ability versions of fit. *Journal of Management*, 23(2), 119-146. doi: 10.1016/S0149-2063(97)90040-4
- Locke, E. A. (1976). The nature and causes of job satisfaction. In M.D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp.1297-1349). Chicago: Rand McNally.
- \*Maynard, D. C., & Parfyonova, N. M. (2013). Perceived overqualification and withdrawal behaviours: Examining the roles of job attitudes and work values. *Journal of Occupational and Organizational Psychology*, 86, 435-455. doi: 10.1111/joop.12006
- \*Meglino, B. M., Ravlin, E. C., & Adkins, C. L. (1989). A work values approach to corporate culture: A field test of the value congruence process and its relationship to individual outcomes. *Journal of Applied Psychology*, 74(3), 424-432. doi: 10.1037/0021-9010.74.3.424
- \*Melino, B. M., Ravlin, E. C., & Adkins, C. L. (1991). Value congruence and satisfaction with a leader: An examination of the role of interaction. *Human Relations*, 44(5), 481-495. doi: 10.1177/001872679104400504
- \*Meglino, B. M., Ravlin, E. C., & Adkins, C. L. (1992). The measurement of work value congruence: A field study comparison. *Journal of Management*, 18(33), 33-43. doi: 10.1177/014920639201800103

- Meglino, B. M., & Ravlin, E. C. (1998). Individual values in organizations: Concepts, controversies, and research. *Journal of Management*, 24, 351–389. doi: 10.1177/014920639802400304
- \*\*Morris, S. G. (1995). *Turnover among professionals: The role of person-culture fit and mentoring* (Order No. AAM9525717). Available from PsycINFO. (618752221; 1995-95019-124).
- Mount, M. K., & Muchinsky, P. M. (1978). Person-environment congruence and employee job satisfaction: A test of Holland's theory. *Journal of Vocational Behavior*, 13, 84-100. doi: 10.1016/0001-8791(78)90074-X
- Muchinsky P.M., Monahan, C.J. (1987). What is person-environment congruence? Supplementary versus complementary models of fit. *Journal of Vocational Behavior*, 31(3), 268-277. doi: 10.1016/0001-8791(87)90043-1
- Netemeyer, R. G., Boles, J. S., McKee, D. O., & McMurrian, R. (1997). An investigation into the antecedents of organizational citizenship behaviors in a personal selling context. *Journal of Marketing*, 61(3), 85-98. Retrieved from <http://search.proquest.com/docview/619117472>
- Nye, C., Su, R., Rounds, J., & Drasgow, F. (2012). Vocational interests and performance: A quantitative summary of over 60 years of research. *Perspectives on Psychological Science*, 7(4), 384-403. doi: 10.1177/1745691612449021
- \*\*O'Reilly, C. A., Chatman, J., & Caldwell, D. F. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit. *The Academy of Management Journal*, 34(3), 487-516. doi: 10.2307/256404

- Ostroff, C. (1993). Relationships between person-environment congruence and organizational effectiveness. *Group & Organization Management*, 18(1), 103-122. doi: 10.1177/1059601193181007
- Pervin, L. A. (1968). Job satisfaction and job performance as a function of individual-environment fit. *Psychological Bulletin*, 69(1), 56-68. doi: 10.1037/h0025271
- Pervin, L. A. (1987). Person-environment congruence in the light of the person-situation controversy. *Journal of Vocational Behavior*, 31(3), 222-230. doi: 10.1016/0001-8791(87)90040-6
- 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. doi: 10.1037/0021-9010.88.5.879
- \*Posner, B. Z. (1992). Person-organization values congruence: No support for individual differences as a moderating influence. *Human Relations*, 45(4), 351-364. doi: 10.1177/001872679204500403
- Ravlin, E. C., & Ritchie, M. (2003). Sharing In-use and espoused values: attitudinal and behavioral outcomes. *Southern Management Association 2003 Meeting*.
- Rhoades, L. & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87, 698-714. doi: 10.1037/0021-9010.87.4.698
- \*\*Rich, B. L., Lepine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal*, 53(3), 617-635. doi: 10.5465/AMJ.2010.51468988
- Rokeach, M. (1973). *The nature of human values*, Free Press, New York, NY.

- Ros, M., Schwartz, S.H., & Surkiss, S. (1999). Basic individual values, work values, and the meaning of work. *Applied Psychology: An International Review*, 48, 48-71. doi: 10.1111/j.1464-0597.1999.tb00048.x
- Sackett, P. R., Zedeck, S., & Fogli, L. (1988). Relations between measures of typical and maximum job performance. *Journal of Applied Psychology*, 73(3), 482-486. doi: 10.1037/0021-9010.73.3.482
- Sackett, P. R., & DeVore, C. J. (2002). Counterproductive behaviors at work. *Handbook of industrial, work and organizational psychology, volume 1: Personnel psychology*. (pp. 145-164) Sage Publications Ltd, Thousand Oaks, CA. Retrieved from <http://search.proquest.com/docview/619981985>
- Schmidt, F. & Hunter, J. (1998). The validity and utility of selection methods in personnel psychology: Practical and Theoretical Implications of 85 years of research findings. *Psychological Bulletin*, 124(2), 262-274. doi: 10.1037/0033-2909.124.2.262
- Schmidt, F. L., & Hunter, J. E. (2014). *Methods of meta-analysis: correcting error and bias on research findings (3rd edition)*, SAGE Publications, Inc.: London.
- Schneider, B. (1987). The people make the place. *Personnel Psychology*, 40, 437-453. doi: 10.1111/j.1744-6570.1987.tb00609.x
- Schneider, B., Goldstein, H. W., & Smith, D. B. (1995). The ASA framework: an update. *Personnel Psychology*, 48, 747-773. doi: 10.1111/j.1744-6570.1995.tb01780.x
- Schneider, B., Smith, D. B., & Goldstein, H. W. (2000). Attraction–selection–attrition: Toward a person–environment psychology of organizations. *Person–environment psychology: New directions and perspectives (2nd ed.)*. (pp. 61-85) Lawrence Erlbaum Associates Publishers, Mahwah, NJ.

- \*Schultz, R. (2004). The impact of leader-group value similarity and organizational culture on group performance (Order No. AAI3128842). Available from PsycINFO. (620632653; 2004-99020-039).
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology*, 25, 1–65. doi: 10.1016/S0065-2601(08)60281-6
- Schwartz, S. H. (2012). An overview of the Schwartz Theory of Basic Values. *Online Readings in Psychology and Culture*, 2(1). doi: 10.9707/2307-0919.1116
- Schwartz, S. H., Cieciuch, J., Vecchione, M., Davidov, E., Fischer, R., Beierlein, C., Ramos, A., Verkasalo, M., Lönnqvist, J.-E., Demirutku, K., Dirilen-Gumus, O., & Konty, M. (2012, July 23). Refining the Theory of Basic Individual Values. *Journal of Personality and Social Psychology*. Advance online publication. doi: 10.1037/a0029393
- \*Shaw, J. D., & Gupta, N. (2004). Job complexity, performance, and well-being: When does supplies-values fit matter? *Personnel Psychology*, 57, 847-879. doi: 10.1111/j.1744-6570.2004.00008.x
- \*Sinar, E. F. (2001). Value centrality as a moderator of the effects of person-environment congruence on job job satisfaction and job performance (Order No. AAI3016163). Available from PsycINFO. (619719429; 2001-95024-015).
- \*Sosik, J. J., Jung, D., & Dinger, S. L. (2009). Values in authentic action: examining the roots and rewards of altruistic leadership. *Group & Organization Management*, 34(4), 395-431. doi: 10.1177/1059601108329212
- \*Sparrow, P. R., Chadrakumara, A. & Perera, N. (2010). Impact of work values and ethics on citizenship and task performance in local and foreign invested firms: A test in a

developing country context. *11th International Human Resource Management Conference (pp.1-25)*. Birmingham, UK: Aston Business School

- \*Supeli, A., & Creed, P. A. (2014). The incremental validity of perceived goal congruence: The assessment of person–organizational fit. *Journal of Career Assessment*, 22(1), 28-42. doi: 10.1177/1069072713487849
- \*Swaney, K. B., Allen, J., Casillas, A., Hanson, M. A., & Robbins, S. B. (2012). Interests, work values, and occupations: Predicting work outcomes with the WorkKeys Fit Assessment. *Journal of Career Assessment*, 20(4), 359-374. doi: 10.1177/1069072712448730
- \*\*Taris, R. & Feij, J. A. (2001). Longitudinal examination of the relationship between supplies-values fit and work outcomes. *Applied Psychology: An International Review*, 50(1), 52-80. doi: 10.1111/1464-0597.00048
- \*\*Taris, R., Feij, J. A., & Van Vianen, A. E. M. (2005). Met expectations and supplies: Values fit of Dutch young adults as determinants of work outcomes. *International Journal of Human Resource Management*, 16(3), 366-382. doi: 10.1080/0958519042000339552
- Thibaut, J. W., & Kelley, H. H. (1959). *The social psychology of groups*. New York: Wiley.
- \*\*Tepeci, M. (2001). *The effect of personal values, organizational culture, and person-organization fit on individual outcomes in the restaurant industry* (Order No. AAI3016673). Available from PsycINFO. (619708821; 2001-95023-027)
- Triandis, H. C. (2001). Individualism-collectivism and personality. *Journal of Personality*, 69(6), 907-924. doi: 10.1111/1467-6494.696169
- \*Tsai, W., Chen, H., & Chen, C. (2012). Incremental validity of person-organization fit over the big five personality measures. *The Journal of Psychology: Interdisciplinary and Applied*, 146(5), 485-509. doi: 10.1080/00223980.2012.656154

- \*Ucanok, B. (2009). The effects of work values, work-value congruence and work centrality on organizational citizenship behavior. *International Journal of Human and Social Sciences*, 4(9), 626-639. doi: 10.1002/hrdq.21156
- Van Iddekinge, C., Roth, P., Putka, D., & Lanivich, S. (2011). Are you interested? A meta-analysis of relations between vocational interests and employee performance and turnover. *Journal of Applied Psychology*, 96(6), 1167-1194. doi: 10.1037/a0024343
- Van Vianen, A. E. M., De Pater, I. E., & Van Dijk, F. (2007). Work value fit and turnover intention: same-source or different-source fit. *Journal of Managerial Psychology*, 22(2), 188-202. doi: 10.1108/02683940710726438
- \*Vansteenkiste, M., Neyrinck, B., Niemiec, C. P., Soenens, B., De Witte, H., & Van den Droeck, A. (2007). On the relations among work value orientations, psychological need satisfaction and job outcomes: a self-determination theory approach. *Journal of Occupational and Organizational Psychology*, 80, 251-277. doi: 10.1348/096317906X111024
- \*\*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. doi: 10.1016/S0001-8791(02)00036-2
- Wang, L., Bishop, J. W., Chen, X., & Scott, K. D. (2002). Collectivist orientations as a predictor of affective organizational commitment: A study conducted in China. *The International Journal of Organizational Analysis*, 10(3), 226-239. doi: 10.1108/eb028951
- Wang, Y. (2009). Examination on philosophy-based management of contemporary Japanese corporations: philosophy, value orientation and performance. *Journal of Business Ethics*, 85, 1-12. doi: 10.1007/s10551-008-9727-y

- \*\*Wang, C. Y., Chen, M. H., Hyde, B., & Hsieh, L. (2010). Chinese employees' work values and turnover intentions in multinational companies: The mediating effect of pay satisfaction. *Social Behavior and Personality*, 38(7), 871-894. doi: 10.2224/sbp.2010.38.7.871
- Wang, L., Howell, J. P., Hinrichs, K. T., & Prieto, L. (2010). Organizational citizenship behavior: The role of value/identity-based motivation. *Journal of Leadership & Organizational Studies*, 18(1), 14-24. doi: 10.1177/1548051810382011
- \*Weeks, W. A., Chonko, L. B., & Kahle, L. R. (1989). Performance congruence and value congruence impact on sales force annual sales. *Journal of the Academy of Marketing Science*, 17(4), 345-351. doi: 10.1007/BF02726645
- \*Welchans, T. D. (1996). The effects of telecommuting and communication media on perceived value congruence, organizational support and job satisfaction (Order No. AAM9620088). Available from PsycINFO. (619009709; 1996-95016-171).
- \*\*Westerman, J. W. (1997). An integrative analysis of person-organization fit theories: Effects on individual attitudes and behavior (Order No. AAM9725800). Available from PsycINFO. (619255688; 1997-95017-161).

## APPENDIX

Main Codes and Input Values for Primary Studies in Meta-Analysis

Study	<i>N</i>	Criterion	Value score or value fit	Value score type	Value fit type	Value score reliability <i>r<sub>xx</sub></i>	Value fit reliability <i>r<sub>ff</sub></i>	Criterion reliability <i>r<sub>yy</sub></i>	Value score effect size <i>r<sub>xy</sub></i>	Value fit effect size <i>r<sub>fy</sub></i>
Adkins & Russell, 1997 Adkins, Ravilin, Meglino, 1996	163	Overall performance	Value fit		Objective (indirect)		1.00	0.86		-0.03
Sample 1	114	Satisfaction	Value fit		Objective (indirect)		1.00	0.64		0.17
Sample 2	100	Overall performance	Value fit		Objective (indirect)		1.00	0.60		-0.05
	100	Withdrawal	Value fit		Objective (indirect)		1.00	0.61		-0.02
Sample 3	89	Overall performance	Value fit		Objective (indirect)		1.00	0.60		-0.05
	89	Withdrawal	Value fit		Objective (indirect)		1.00	0.61		0.00
Adkins, 2000	136	Withdrawal	Value fit		Objective (indirect)		1.00	0.77		-0.24
	136	Satisfaction	Value fit		Objective (indirect)		1.00	0.86		0.27
Amos, Weathington, 2008	151	Satisfaction	Value fit		Subjective (indirect)		0.75	0.89		0.41
	151	Withdrawal	Value fit		Subjective (indirect)		0.75	0.86		-0.37
Army Report Ingerick, Diaz, Putka, 2009	514	Overall performance	Value score	Work value		0.62		0.61	0.03	
	487	Overall performance	Value score	Work value		0.62		0.61	0.19	

Army Report Putka, 2007	282	Overall performance	Value score	Work value	0.62	0.61	0.23	
	280	Overall performance	Value score	Work value	0.62	0.61	0.22	
	486	Overall performance	Value score	Work value	0.62	0.61	0.22	
	541	Satisfaction	Value score	Work value	0.62	0.60	0.36	
	668	Overall performance	Value fit			1.00	0.65	0.11
	668	Satisfaction Organizational citizenship behavior	Value fit			1.00	0.87	0.37
Arthaud-Day, Turnley, Rode, 2012	582	Overall performance	Value score	Basic value	0.73	0.89	0.16	
Barnhill, 2002	246	Overall performance	Value fit			0.56	0.89	0.18
Bretz & Judge, 1994	513	Satisfaction	Value fit			1.00	0.61	0.36
	513	Withdrawal	Value fit			1.00	0.61	0.18
Bouwkamp-Memmer, Whiston, & Hartung, 2013	340	Satisfaction	Value score	Work value	0.84	0.87	-0.04	
Cable & Judge, 1996	65	Withdrawal	Value fit			0.68	0.86	-0.19
	65	Satisfaction	Value fit			0.68	0.74	0.23
	65	Withdrawal	Value fit			0.78	0.86	-0.64
	65	Satisfaction	Value fit			0.78	0.74	0.65
Cennamo, 2008	504	Satisfaction	Value fit			0.78	0.87	0.50
	504	Withdrawal	Value fit			0.78	0.89	-0.39

Chan, Snape, 2012	350	Organizational citizenship behavior	Value score	Cultural value	0.74	0.82	0.23	
Chang, Choi, Kim, 2008	132	Withdrawal	Value score	Work value	0.71	1.00	0.16	
Chatman, 1991	112	Satisfaction	Value fit	Subjective (indirect) Subjective (indirect)	0.78	0.61	0.39	
	112	Withdrawal	Value fit		0.78	0.81	-0.33	
Chen, Kao, 2011 Cheng, Yang, Wan, Chu, 2013	815	Organizational citizenship behavior	Value score	Work value	0.77	0.79	0.35	
	377	Satisfaction	Value score	Work value	0.82	0.82	0.64	
	377	Withdrawal	Value score	Work value	0.82	0.87	-0.27	
Cohen, 2007 De Clercq, 2006	1328	Organizational citizenship behavior	Value score	Cultural value	0.72	0.85	0.00	
	591	Satisfaction	Value score	Basic value	0.84	0.85	-0.01	
	591	Satisfaction	Value score	Basic value	0.84	0.85	-0.12	
	591	Satisfaction	Value score	Basic value	0.84	0.85	-0.14	
	591	Satisfaction	Value score	Basic value	0.84	0.85	0.20	
	591	Satisfaction	Value score	Basic value	0.84	0.85	-0.13	
	591	Satisfaction	Value score	Basic value	0.84	0.85	0.13	
	591	Organizational citizenship behavior	Value score	Basic value	0.84	0.70	0.01	
	591	Organizational citizenship behavior	Value score	Basic value	0.84	0.70	-0.04	
	591	Organizational citizenship behavior	Value score	Basic value	0.84	0.70	0.14	
591	Organizational citizenship behavior	Value score	Basic value	0.84	0.70	-0.20		

	591	Organizational citizenship behavior	Value score	Basic value	0.84	0.70	-0.10	
	591	Organizational citizenship behavior	Value score	Basic value	0.84	0.70	0.24	
Erdogan & Bauer, 2005	264	Satisfaction	Value fit			1.00	0.72	0.16
	264	Satisfaction	Value fit			0.89	0.78	0.52
Erdogan, Kraimer, Liden, 2004	267	Satisfaction	Value fit			0.81	0.86	0.19
Feather, Rauter, 2004	154	Satisfaction	Value fit			0.83	0.76	0.53
	154	Organizational citizenship behavior	Value fit					
Flores, 2012	314	Satisfaction	Value score	Basic value	0.92	0.83	0.70	0.06
							0.97	0.86
George, Jones, 1996	336	Satisfaction	Value fit			0.85	0.91	0.40
	336	Withdrawal	Value fit			0.85	0.86	-0.33
Greenhaus, 1983	125	Satisfaction	Value fit			0.61	0.78	0.74
Guo, 2012	362	Satisfaction	Value score	Cultural value	0.83		0.79	0.17
	362	Withdrawal	Value score	Cultural value	0.83		0.77	-0.28
Hamdan, 2011	558	Overall performance	Value fit			0.87	0.80	0.26
	558	Satisfaction	Value fit			0.87	0.67	0.36
	558	Overall performance	Value score	Work value	0.64		0.80	0.30
	558	Overall performance	Value score	Work value	0.57		0.80	0.22
	558	Overall performance	Value score	Work value	0.67		0.80	0.17

Harris & Mossholder, 1996	558	Overall performance	Value score	Work value	0.63		0.80	0.23		
	558	Overall performance	Value score	Work value	1.00		0.80	0.14		
	558	Satisfaction	Value score	Work value	0.64		0.67	0.18		
	558	Satisfaction	Value score	Work value	0.57		0.67	0.15		
	558	Satisfaction	Value score	Work value	0.67		0.67	0.11		
	558	Satisfaction	Value score	Work value	0.63		0.67	0.13		
	558	Satisfaction	Value score	Work value	1.00		0.67	0.22		
	226	Satisfaction	Value fit			Subjective (indirect)	1.00	0.82	0.28	0.84
	226	Satisfaction	Value fit			Subjective (indirect)	1.00	0.82	0.07	0.63
	226	Satisfaction	Value fit			Subjective (indirect)	1.00	0.82	0.08	0.71
226	Satisfaction	Value fit			Subjective (indirect)	1.00	0.82	-0.04	0.70	
226	Organizational citizenship behavior	Value fit			Subjective (indirect)	1.00	0.82	-0.19	0.84	
226	Organizational citizenship behavior	Value fit			Subjective (indirect)	1.00	0.82	-0.12	0.63	
226	Organizational citizenship behavior	Value fit			Subjective (indirect)	1.00	0.82	-0.17	0.71	
226	Organizational citizenship behavior	Value fit			Subjective (indirect)	1.00	0.82	-0.08	0.70	
Hinrichs, 1972	127	Satisfaction	Value score	Work value	0.46		0.76	0.69		
Hsu, 2001	127	Overall performance	Value score	Work value	0.46		1.00	-0.37		
	40	Satisfaction	Value score	Work value	0.87		0.60	0.53		
Hutcheson, 1999	126	Task performance	Value fit			Objective (indirect)	1.00	0.77	0.01	

Jehn, Northcraft, Neale, 1999	126	Satisfaction	Value fit		Objective (indirect)	1.00	0.71		-0.08
	126	Organizational citizenship behavior	Value fit		Objective (indirect)	1.00	0.77		0.26
	126	Organizational citizenship behavior	Value fit		Objective (indirect)	1.00	0.92		0.08
	126	Withdrawal	Value fit		Objective (indirect)	1.00	0.59		0.15
	545	Satisfaction	Value fit		Perceived fit (direct)	0.85	0.85		0.17
	545	Withdrawal	Value fit		Perceived fit (direct)	0.85	0.96		-0.18
Kabasakal, Dastmalchian, Imer, 2011	220	Organizational citizenship behavior	Value score	Work value		0.84	0.72	0.33	
	220	Organizational citizenship behavior	Value score	Cultural value		0.82	0.72	0.06	
	220	Organizational citizenship behavior	Value score	Basic value		0.81	0.72	0.05	
	220	Satisfaction	Value score	Basic value		0.88	0.91	0.24	
	220	Satisfaction	Value score	Work value		0.84	0.91	0.28	
	1358	Satisfaction	Value score	Work value		0.78	0.80	0.27	
Kalliath, Bluedorn, Strube, 1999					Perceived fit (direct)				
	193	Withdrawal	Value fit		Perceived fit (direct)	0.81	0.85		-0.55
	193	Satisfaction	Value fit		Perceived fit (direct)	0.81	0.84		0.61
	193	Task performance	Value fit		Perceived fit (direct)	0.81	0.84		-0.09
Lauver & Kristof, 2001	193	Organizational citizenship behavior	Value fit		Perceived fit (direct)	0.81	0.93		0.18

Lee, 2002	69	Satisfaction	Value score	Work value		0.96	0.96	0.57	
Lepine, Crawford, 2010	245	Satisfaction	Value fit		Perceived fit (direct)		0.70	0.83	0.44
	245	Task performance	Value fit		Perceived fit (direct)		0.70	0.90	0.21
Livingstone, 1997	245	Organizational citizenship behavior	Value fit		Perceived fit (direct)	0.70	0.93		0.29
	143	Satisfaction Overall	Value score	Basic value		0.88	0.78	0.19	
	143	performance	Value score	Basic value		0.88	0.82	0.21	
Maynard, Parfyonava, 2013	147	Satisfaction	Value score	Basic value		0.93	0.75	0.04	
	Sample 1	494	Satisfaction	Value score	Work value	0.83	0.92	0.01	
	Sample 2	343	Withdrawal	Value score	Work value	0.83	0.93	0.10	
	Sample 3	368	Withdrawal	Value score	Work value	0.83	0.60	0.06	
Meglino et al., 1992	174	Satisfaction	Value fit		Objective (indirect)	1.00	0.67		0.20
Meglino, Ravlin, Adkins, 1991	Sample 1	124	Satisfaction	Value fit	Subjective (indirect)	1.00	0.60		0.27
	Sample 2	102	Satisfaction	Value fit	Subjective (indirect)	1.00	0.60		0.19
Meglino, Ravlin, Adkins, 1989	Sample 1	180	Satisfaction	Value fit	Perceived fit (direct)	0.81	0.71		0.09
	Sample 2	178	Withdrawal Overall	Value fit	Perceived fit (direct)	0.81	0.60		-0.09
		178	performance	Value fit	Perceived fit (direct)	0.81	0.61		0.04
	178	Satisfaction	Value fit		Subjective (indirect)	1.00	0.67		0.22

	178	Withdrawal Task	Value fit	Subjective (indirect)	1.00	1.00	-0.13
	178	performance	Value fit	Subjective (indirect)	1.00	1.00	-0.01
	178	Satisfaction	Value fit	Objective (indirect)	1.00	0.67	0.02
	178	Withdrawal Task	Value fit	Objective (indirect)	1.00	1.00	-0.11
	178	performance	Value fit	Objective (indirect)	1.00	1.00	0.04
Morris, 1995	675	Satisfaction Overall	Value fit	Subjective (indirect)	0.89	0.88	0.45
	675	performance	Value fit	Subjective (indirect)	0.89	0.73	-0.03
Netemeyer et al., 1997	675	Withdrawal	Value fit	Subjective (indirect)	0.89	0.70	-0.38
Sample 1	91	Organizational citizenship behavior	Value fit	Perceived fit (direct)	0.88	0.69	0.41
	91	Satisfaction	Value fit	Perceived fit (direct)	0.88	0.91	0.77
Sample 2	182	Organizational citizenship behavior	Value fit	Perceived fit (direct)	0.86	0.55	0.29
	182	Satisfaction	Value fit	Perceived fit (direct)	0.86	0.94	0.50
O'Reilly et al., 1991	1349	Satisfaction	Value fit	Subjective (indirect)	0.76	0.68	0.35
	1349	Withdrawal	Value fit	Subjective (indirect)	0.76	0.84	-0.27
Posner, 1992	1634	Satisfaction Task	Value fit	Perceived fit (direct)	0.89	0.68	0.98
Schultz, 2004	120	performance	Value fit	Perceived fit (direct)	0.89	0.88	0.25

Shaw, Gupta, 2004 Sinar, 2001	357	Overall performance	Value score	Work value	0.62	0.60	0.07	
Sample 1	147	Overall performance	Value fit			1.00	0.61	-0.03
	147	Satisfaction	Value fit			1.00	0.61	-0.15
Sample 2	101	Overall performance	Value fit			1.00	0.61	0.04
Sosik, 2009	218	Overall performance	Value score	Basic value	0.75	0.80	-0.05	
	242	Overall performance	Value score	Basic value	0.76	0.80	0.07	
Sparrow, 2010	416	Organizational citizenship behavior	Value score	Work value	0.63	0.81	0.20	
	416	Task performance	Value score	Work value	0.63	0.89	0.22	
Supeli & Creed, 2013	895	Satisfaction	Value fit			0.90	0.71	0.34
	895	Withdrawal Task	Value fit			0.90	0.87	-0.31
Swaney et al., 2012	242	performance	Value score	Work value	0.62	0.84	0.19	
	242	Organizational citizenship behavior	Value score	Work value	0.62	0.84	0.02	
	242	Withdrawal	Value score	Work value	0.62	0.84	-0.04	
Taris, Feij, 2001	467	Withdrawal	Value score	Work value	0.64	0.79	0.00	
	467	Satisfaction	Value score	Work value	0.64	0.60	0.07	
Taris, Feij, Vianen, 2005	969	Satisfaction	Value score	Work value	0.63	0.61	0.02	
	969	Withdrawal	Value score	Work value	0.63	0.80	-0.06	
Tepeci, 2001	326	Satisfaction	Value fit			0.79	0.89	0.61

	326	Satisfaction	Value fit		Subjective (indirect)	1.00	0.89	0.17
	326	Withdrawal	Value fit		Perceived fit (direct)	0.79	0.80	-0.54
	326	Withdrawal	Value fit		Subjective (indirect)	1.00	0.80	-0.24
	326	Satisfaction	Value fit		Perceived fit (direct)	0.79	0.89	0.61
	326	Withdrawal	Value fit		Perceived fit (direct)	0.79	0.80	-0.54
Tsai, Chen, Chen, 2012	134	Task performance	Value fit		Objective (indirect)	1.00	0.76	0.03
	134	Organizational citizenship behavior	Value fit		Objective (indirect)	1.00	0.93	0.22
Ucanok, 2009	749	Organizational citizenship behavior	Value score	Work value		0.80	0.81	0.12
	749	Organizational citizenship behavior	Value fit		Perceived fit (direct)	0.76	0.81	0.09
Vansteenkiste et al., 2007	885	Satisfaction	Value score	Work value		0.63	0.60	0.04
Verquer, 2002	213	Satisfaction	Value fit		Objective (indirect)	0.91	0.93	0.13
	213	Withdrawal	Value fit		Objective (indirect)	0.91	0.79	-0.05
Vianen, Pater, Dijik, 2007	94	Withdrawal	Value fit		Objective (indirect)	1.00	0.68	-0.35
Wang, Chen, Hyde, Hsieh, 2010	112	Satisfaction	Value score	Work value		0.82	0.86	0.25
	112	Withdrawal	Value score	Work value		0.82	0.61	-0.29
		Organizational citizenship behavior						
Wang, Howell, Hinrichs, Prieto, 2010	192	Organizational citizenship behavior	Value score	Cultural value		0.73	0.89	0.18

Weeks, 1989	239	Task performance	Value fit	Objective (indirect)	1.00	1.00	0.01
Welchans, 1996	484	Satisfaction	Value fit	Perceived fit (direct)	0.63	0.85	0.54
Westerman, 1997	163	Satisfaction	Value fit	Subjective (indirect)	0.58	0.91	0.44
	163	Withdrawal Organizational citizenship behavior	Value fit	Subjective (indirect)	0.58	0.88	-0.53
	163	Overall performance	Value fit	Subjective (indirect)	0.58	0.95	0.07
	163	Overall performance	Value fit	Subjective (indirect)	0.58	0.91	0.05