ABSTRACT

AHMAD, UNBER SAEED. Exploring Salience Weights with Person-Environment Fit. (Under the direction of Dr. Adam W. Meade).

Person-environment fit (PE fit) is the compatibility between an individual and their environment, and it is related to numerous beneficial outcomes for individuals and organizations (Kristof-Brown & Guay, 2011). Researchers' attempts to unify PE fit theory have often yielded multidimensional, integrative models (Edwards & Billsberry, 2010; Jansen & Kristof-Brown, 2006; Seong & Kristof-Brown, 2012). This study compares multiple different approaches to creating a multidimensional, aggregate PE fit construct through different salience weighting methods. Formative modeling was tested because PE fit is well-suited to this modeling approach in which the subcomponents of the higher-order construct *constitute* the overall construct instead of being manifestations (indicators) of the latent construct. As well, previously attempted methods to derive salience weights for the subdimensions of PE fit were compared to novel methods that directly assess salience weights for PE fit on an individual-level. Finally, group-level methods based on a latent profile analysis were also investigated. Results showed that incorporation of individual-level salience weights did not significantly improve measurement of PE fit or the prediction of outcomes. As well, correlations obtained through sample-level weights (i.e., relative weights analysis) and group-level weights (i.e., latent profile analysis) did not significantly differ, thus simpler approaches are adequate. Finally, most individuals seem to weight all operationalizations of PE fit similarly. Implications of these findings were discussed.

Exploring Salience Weights with Person-Environment Fit

by
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DEDICATION

To my extraordinarily resilient, generous, and loving mother who has continuously encouraged my every goal and whose endless personal sacrifice and unconditional love has allowed me to become the person I am today. My ultimate goal is to make her proud.

BIOGRAPHY

Unber Ahmad was born in Raleigh, North Carolina to parents Robina and Saeed Ahmad. She has three sisters Jabeen, Huma, and Sanam. She graduated from the North Carolina School of Science and Mathematics in 2008 before earning a B.S in Psychology with a minor in Linguistics in 2012 from the University of North Carolina at Chapel Hill. In 2015, she began her graduate studies in Industrial-Organizational Psychology at North Carolina State University. She earned her M.S. in Industrial-Organizational Psychology in 2018, and a Masters of Statistics in 2020. While in graduate school she has served in analytics and consulting roles within the private sector. She is currently serving as Psychometrician to a national certification and licensure board.

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Exploring Salience Weights with Person-Environment Fit

Human behavior is best understood as a function of both the person and the environment (Lewin, 1951; Muchinsky & Monahan, 1987; Terborg, 1981). Decades ago, this premise gave rise to the construct of person-environment fit (PE fit), the compatibility of an individual with their environment, which has been the focus of a great deal of research (Caldwell & O'Reilly, 1990; Chatman, 1989; Hoffman & Woehr, 2006; Kristof 1996, Kristof-Brown & Guay, 2011). Maximizing fit between the person and their environment yields numerous benefits for individuals and organizations alike (Kristof-Brown et al., 2005; Kristof-Brown & Guay, 2011; Verquer et al., 2003). Research shows that having a high alignment between person and environment is related to increased tenure, increased job satisfaction, increased organizational commitment, reduced intentions to quit, improved health outcomes, and increased overall performance (Edwards, 1991; Kristof 1996; Kristof-Brown et al., 2005; Kristof-Brown & Guay, 2011; Verquer et al., 2003). Conversely, misfit yields counterproductive outcomes including burnout and turnover (Kristof-Brown & Guay, 2011). In fact, the value of PE fit has become so evident that job interviews have started to target not only job knowledge and relevant experience but also fit from the perspective of both the applicant making a job choice and the organization selecting a new employee (Arthur et al., 2006; Cable & Judge, 1996).

Perhaps because of the relationships between PE fit and these important outcomes, PE fit has garnered increased researcher attention since its earliest investigations in the 1980s (Chatman, 1989; Kristof-Brown & Guay, 2011). Despite the clear value of and growing research interest in the construct, it is not without its challenges (Edwards & Shipp, 2007; Kristof-Brown & Guay, 2011). The influx of studies has been fragmented and disjointed, and existing studies have contradictory results (Kristof, 1996; Kristof-Brown et al., 2003; Kristof-Brown & Guay,

2011). PE fit has been considered an “elusive and ill-defined” construct (Judge & Ferris, 1992) that can be conceptualized differently, operationalized differently, and measured differently (Edwards & Shipp, 1997; Kristof 1996; Kristof-Brown et al., 2005; Kristof-Brown & Guay, 2011). The vast variability in how PE fit is defined and studied has led to a clear lack of integration in theory pertaining to this construct (Kristof-Brown & Guay, 2011; Kristof-Brown et al., 2005; Lauver & Kristof-Brown, 2001; Verquer et al., 2003). The disjointed research and mixed findings related to PE fit coupled with the high value of the construct in real-life decisions leads to a clear need for a consistent way to define and measure PE fit that is capable of integrating previous work. PE fit researchers have endorsed continued investigative efforts to this end (Edwards, 2008; Jansen & Kristof-Brown, 2006; Kristof, 1996; Kristof-Brown & Guay, 2011).

In response to the need for integrative models, researchers have explored multidimensional models of PE fit in which different types of PE fit are considered collectively (Edwards & Billsberry, 2010; Jansen & Kristof-Brown, 2006; Kristof, 1996; Seong & Kristof-Brown, 2012). Some of these efforts have conceptualized PE fit as a higher-order construct linked to more narrow types of PE fit on the lower levels (Darrow & Behrend, 2017; Edwards & Billsberry, 2010; Jansen & Kristof-Brown, 2006; Kristof-Brown et al., 2002). However, the relationship between the lower-level constructs and the overall PE fit construct is still the subject of investigation. Some research has supported the model of PE fit as a superordinate, higher-order reflective construct that yields more specific types of PE fit (Edwards & Billsberry, 2010; Jansen & Kristof-Brown, 2006; Kristof-Brown et al., 2002; Seong & Kristof-Brown, 2012), but other researchers have found that PE fit is more appropriately defined as a formative construct

created as a composite of different types of PE fit (Darrow & Behrend, 2017; Jansen & Kristof-Brown, 2006; Kristof-Brown & Guay, 2011).

Given the importance of PE fit and a strong theoretical rationale for why perceptions of fit should be modeled as a formative construct, it is important to further investigate the application of formative modeling to PE fit. To this end, the purpose of this study was to explore different weighting methods that can be used to create the optimal composite to measure PE fit.

Person-Environment Fit

PE fit, the compatibility that exists when the characteristics of the individual and the environment are well-aligned, has received attention for decades leading to different approaches to study the construct and a diverse and complex theoretical base for PE fit (Kristof, 1996; Kristof-Brown et al., 2005; Kristof-Brown & Guay, 2011, O'Reilly et al., 1991; van Vianen, 2018). In one study alone, over 40 different types of PE fit were identified such as supplementary person-vocation fit, needs-supplies person-organization fit, and demands-ability person-job fit (Edwards & Shipp, 2007). The term has been used to encompass many different conceptualizations, operationalizations, and measurement methods (Kristof, 1996, Kristof-Brown & Guay, 2011), which are described further below.

Conceptualizations

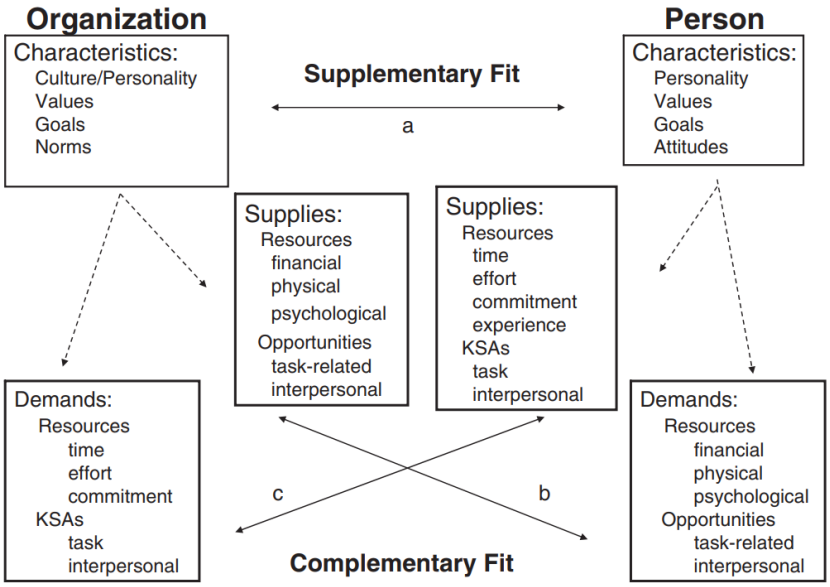
Different researchers have defined PE fit in different ways, but overall, a few main conceptualizations have garnered significant research attention (Kristof, 1996). First, there is a distinction between supplementary and complementary fit (Kristof, 1996; Kristof-Brown & Guay, 2011). Supplementary fit is defined as the fit that occurs when a person "supplements, embellishes, or possesses characteristics which are similar to other individuals" in an environment (Muchinsky & Monahan, 1987, p. 269). Said differently, the individual blends into

the environment. An example item measuring supplementary fit is “My personality matches my organization’s culture” (Badger & Behrend, 2013). This approach has been used widely in research (e.g., assessing the match between an individual’s values and the culture of their organization) and can be represented by an item like “My values ‘match’ or fit the values of this organization” (Cable & Judge, 1996). Complementary fit, on the other hand, is defined as the fit that exists when a person adds to the existing environment by contributing something that is otherwise missing (Muchinsky & Monahan, 1987, p. 271) or the environment provides something that is missing to the individual (Kristof & Guay, 2011). For example, “My organization fulfills what I need from an employer” (Badger & Behrend, 2013; Cable & DeRue, 2002).

Another conceptualization distinguishes between needs-supplies fit and demands-abilities fit (Kristof, 1996). Needs-supplies fit occurs when an environment *provides* aspects that address the *“needs, desires, or preferences”* of the individual (Kristof, 1996, p.3). From this perspective, the environment serves to satisfy the individual’s needs. On the other hand, demands-abilities fit occurs when the individual has the *abilities* to meet the *demands* of the environment. Efforts towards integration of PE fit have deemed needs-supplies fit and demands-abilities fit as types of complementary fit (Sekiguchi; 2004). Thus, supplementary fit, needs-supplies fit, and demands-abilities fit each reflect a different type of fit (Kristof, 1996; Sekiguchi; 2004). Rather than being redundant, all three can be assessed simultaneously to create a more holistic understanding of PE fit (Kristof, 1996). For illustration, Figure 1 presents an example of how the different conceptualizations applied to PO fit can interact (Kristof, 1996).

Figure 1

Integrative Model of Person-Organization Fit.



Note. This figure shows how the different conceptualizations of PE fit can interact in an integrative model of PE fit. KSA = knowledge, skills, and abilities.

Operationalizations

In addition to of the distinction between supplementary fit, needs-supplies fit, and complementary fit, different types of PE fit exist which vary based on how the "environment" is operationalized (Kristof, 1996; Kristof-Brown & Guay, 2011). Specifically, the person can fit, under all three conceptualizations, different aspects of the environment. The most common operationalizations of the environment include vocation, organization, job, group, and supervisor (Darrow & Behrend, 2017; Kristof, 1996; Kristof-Brown & Guay, 2011). Thus, PE fit can measure person-vocation (PV), person-organization (PO), person-job (PJ), person-group (PG), and person-supervisor (PS) fit (Kristof, 1996). Again, these types of fit are not redundant with the different conceptualizations of fit but instead can be combined to offer unique information

about an individual's fit with their work environment (Kristof, 1996). For example, PO fit can be assessed as supplementary fit ("My values 'match' or fit this organization."; Badger & Behrend, 2013), needs-supplies fit ("My organization fulfills what I need from a organization."; Cable & DeRue, 2002), or demands-abilities fit ("I am able to meet the demands of my organization."; Cable & DeRue, 2002).

At the broadest level, person-vocation fit is defined as an assessment of the compatibility of an individual with their occupation. It is most often measured with Holland's RIASEC typology (Holland 1985; Kristof, 1996; Kristof-Brown & Guay, 2011). Holland's vocational typology describes six different types of occupations: realistic, investigative, artistic, social, enterprising, and conventional. These different occupational types appeal differently to different people (Holland, 1985). PV fit level varies depending on how well an individual's personality matches their chosen occupation. Person-organization (PO) fit is another form of PE fit in which the environmental target is the organization. Often, measuring this form of PE fit includes assessing the congruence between the values of the individual and the values of the organization.

Narrowing the environmental scope further focuses the lens on the job of the individual – specifically the day-to-day tasks and responsibilities. The abilities and needs of the individual are contrasted against the requirements of and opportunities provided by the job (i.e., person-job; PJ fit). Next, in considering the interpersonal aspects of the workspace, person-group (PG) fit assesses the match between an individual and those with whom they work in terms of team cohesiveness, similarity, or even shared goals. Finally, person-supervisor (PS) fit is the narrowest level of the common forms of PE fit in which satisfaction and suitability of the individual their work supervisor is measured.

All five operationalizations of PE fit can be measured through supplementary, needs-supplies, or demands-abilities fit conceptualizations. As can be seen from these descriptions, while there may be some conceptual overlap between these different forms of PE fit, they each can be built to reflect unique aspects of the work environment making each important to consider in its own right (Kristof, 1996; Kristof-Brown & Guay, 2011; van Vianen, 2018).

Measurement Methods

PE fit and all its subtypes can be measured directly or indirectly. Direct measurement involves responding to questions that explicitly target fit (Kristof, 1996). For example, “I fit in well with my work group” is an example of an item that directly measures fit. Direct measurement is also known as “perceived fit" because the individuals' responses indicate the degree to which they *perceive* that fit exists. Indirect fit, on the other hand, involves measuring the individual and environmental aspects separately and empirically assessing differences between the two targets (Kristof 1996). Thereby, indirect measurements reflect mathematically derived “actual fit.” Most often, perceived fit is used in research (Kristof-Brown et al., 2005; Verquer et al., 2003), and research has shown that perceived fit is better at predicting outcomes than objective or subjective types of fit (Cable & Judge, 1995; Cable & Judge, 1997; Ferris & Judge, 1991; Kristof-Brown et al., 2005; Verquer et al., 2003).

Movement Towards Integration

Given the numerous non-redundant measurement methods, conceptualizations, and operationalizations of PE fit, contemporary researchers in this field have advocated for the development of integrative models of PE fit (Chuang et al., 2016; Edwards & Billsberry, 2010; Jansen & Kristof-Brown, 2006; Kristof, 1996; Kristof-Brown & Guay, 2011; Kristof-Brown et al., 2002; Seong & Kristof-Brown, 2012). These efforts generally result in studies assessing

more than one type of fit at once time to better understand the antecedents and consequences of different kinds of fit and how they relate to each other.

In some studies, multiple types of fit are considered simultaneously to understand incremental and differential prediction. For example, PO fit and PJ fit are often considered together (Kristof-Brown, 2000; Lauver & Kristof-Brown, 2001; Vogel & Feldman, 2009), and their relationship to each other has been inconsistent. In some studies, the two are highly correlated (Kristof-Brown, 2000), while in other studies, they are only moderately or weakly correlated (Lauver & Kristof-Brown, 2001; O'Reilly et al, 1991). Further, they differentially predict outcomes. For instance, PO fit was found to relate to organizational commitment more strongly, while PJ fit related stronger with job satisfaction (Lauver & Kristof-Brown, 2001).

Overall, investigations into the intercorrelations of PE fit types show a large range of results. For example, in one meta-analysis of PE fit correlations between the multiple types of fit ranged from .37 to .74 (Kristof-Brown et al., 2005). Moreover, a good deal of research has shown that types of PE fit are distinct from each other and have unique relationships with antecedents and outcomes (Kristof, 1996; Kristof-Brown, 2000; Kristof-Brown et al., 2002; Lauver & Kristof-Brown, 2001; Vogel & Feldman, 2009).

Further investigations have corroborated the unique roles of different types of fit and extended the argument for unique types of fit by showing interactive effects. For example, in one study that investigated the simultaneous effects of PJ fit, PO fit, and PG fit using a policy-capturing approach, it was discovered that individuals with a more diverse work history were more concerned with PO fit, while those with greater job tenure cared more about PJ fit (Kristof-Brown et al., 2002). These results suggest that different kinds of fit are differentially important to different individuals. Moreover, the different types of fit interacted with each other and were not

additive in nature but rather compensatory. The compensatory nature of the types of fit implies that a high level of one type of PE fit may overcome low levels on another. Further investigation of the salience of different types of PE fit and how they combine has been recommended (Jansen & Kristof-Brown, 2006; Kristof-Brown & Guay, 2011).

Other efforts towards integration have focused on modeling PE fit, and its subtypes, as a multidimensional variable (Chuang et al., 2016; Darrow & Behrend, 2017; Edwards & Billsberry, 2010; Jansen & Kristof-Brown, 2006; Li et al., 2018; Seong & Kristof-Brown, 2012). Multidimensional constructs are those that involve multiple, distinct dimensions that can be treated as a singular theoretical concept (Law et al., 1998; MacKenzie et al., 2011). Eminent researchers in the PE fit arena Jansen and Kristof-Brown (2006) proposed a multidimensional theory of PE fit in which they suggested that an overall PE fit variable could be formulated by an algebraic combination of the multiple perceptions of different kinds of fit. Further, they hypothesized that individual differences, environmental differences, and stage of the hiring process would all impact the salience of the different kinds of fit. These propositions were extensions of their earlier work into the different types of PE fit and how they are combined (Kristof-Brown et al., 2002).

Edwards and Billsberry (2010) tested Jansen and Kristof's (2006) proposed multidimensional theory by comparing two competing models – one considering all subtypes separately and one considering a composite higher-order PE fit variable. However, their results suggested that there may be no overarching type of PE fit but rather the different types should be considered separately. These results were incongruent with the propositions of Jansen and Kristof-Brown (2006) suggesting a higher-order multidimensional PE fit construct.

Specific types of PE fit have also been investigated as multidimensional. For example, person-group fit has been studied as a multidimensional construct formulated by value-based fit, personality-based fit, and ability-based fit (Li et al, 2018). In this study, results supported the presence of a higher-order PG fit contrasting with the results of Edwards and Billsberry's work (2010).

Superordinate and Aggregate Constructs

The accumulation of these efforts towards developing a theory of multidimensionality has led to repeated inquiries into the appropriate model for a higher-order PE fit variable (Chuang et al., 2016; Darrow & Behrend, 2017; Edwards & Billsberry, 2010; Li et al., 2018; Kristof-Brown et al., 2002). Multidimensional constructs can appear in one of two forms: superordinate or aggregate (Edwards, 2001; MacKenzie et al., 2011). Superordinate constructs are produced by reflective models, which are based in classical test theory and are commonly used in industrial-organizational psychology for a variety of unobserved, latent variables (e.g., personality and attitudes, Diamantopoulos & Winklhofer, 2001). Aggregate constructs are produced by lesser-known formative models and are based on completely different model assumptions. Socioeconomic status may be the most popularly known formative construct, which is measured as a composite of other variables like education, income, place of residence, parental education, etc. Formative variables are gaining popularity and are deemed to be a necessary and valid route to modeling many constructs in social sciences (Bollen & Diamantopoulos, 2017).

There are several important elements that differentiate reflective and formative models. First, the direction of causality is opposite (Bollen & Diamantopoulos, 2007; Edwards, 2011; Freeze & Raschke, 2007). Reflective variables are modeled as overarching variables that *cause*

responses on lower-level variables (i.e., reflective indicators). Many traditional constructs in psychology are considered reflective in nature. For example, personality is considered a reflective construct as it is assumed that responses to personality items originate from a construct within the person who is responding to the external stimuli of the scale items. Many individual difference variables (e.g., cognitive ability, personality, values, etc.) are also considered reflective in nature. On the other hand, formative variables are ***caused by*** the amalgamation of the lower-level formative indicators. For example, socioeconomic status is not a unitary construct originating from within the individual and thus does not ***cause*** income or education level but rather income and education (along with the other formative indicators) combine to lead to a particular level of socioeconomic status. Thus, in reflective models, indicators are caused by the construct; in formative models, the construct is caused by the indicators (Edwards, 2011).

Moreover, with reflective variables, there is an assumption that reflective indicators related to the same superordinate variable are largely interchangeable (Edwards, 2011; MacKenzie et al., 2011). In fact, in a typical scale development for a reflective construct, efforts are made to retain highly intercorrelated items such that the removal of one item does not necessary change the underlying latent construct (Bollen & Diamantopoulos, 2017). By extension, when the items are highly correlated to each other, their levels are expected to increase or decrease collectively.

In contrast, formative models are built with unique formative indicators that are assumed to tap into separate portions of the construct and not overlap such that the removal of any formative indicator would render the construct changed or incomplete (MacKenzie et al., 2011). There is no expectation of uniformly positive or negative intercorrelations between formative indicators, and in fact, two indicators may be negatively related to each other and still be

necessary dimensions of the latent construct. As an outcome of these assumptions, reflective constructs are assumed to be unidimensional while formative constructs are not (Freeze & Raschke, 2007).

Person-Environment Fit as an Aggregate Construct

PE fit, or one of its subtypes, has been considered multiple times as a formative construct and is a viable candidate for such consideration for multiple reasons (Chuang et al., 2012; Darrow & Behrend, 2017; Edwards & Billsberry, 2010; Jansen & Kristof-Brown, 2006; Li et al, 2018). First, PE fit does not, by definition, originate entirely within the individual. Instead, PE fit is an assessment of properties of both the individual and the environment. Second, PE fit can be measured by multiple different subtypes that have been demonstrated to be distinct and not redundant (Cable & Judge, 2005; Kristof-Brown & Guay, 2011; Lauver & Kristof-Brown, 2000). Third, the assumption that if one type of fit (e.g., PO fit) increases, the others will as well (e.g., PS fit) is highly suspect. There is rationally no reason to assume that a better fit with a job will *necessarily* yield a better fit with a particular supervisor, or that being in the ideal vocation means that you will necessarily get along with your work group. It is not difficult to imagine a high level of fit with your supervisor but a low level of fit with your occupation. Finally, the direction of causality in reflective models may not be appropriate to PE fit. A high PE fit is unlikely to uniformly increase all other subtypes of PE fit, but it is more logical to expect that an overall perception of PE fit is formulated by aggregating perceptions of lower levels of PE fit as has been the case with other formative variables (e.g., job satisfaction can be measured as a composite of different types of satisfaction including pay, supervisor, etc.; Smith et al., 1969). In summary, for the measurement model to accurately reflect theoretical assumptions, PE fit should

be measured as a formative construct (Li et al., 2018). Theory should always precede measurement rather than vice versa (MacKenzie et al., 2011).

Measuring PE fit with a formative model has been found in limited studies to date. Darrow and Behrend (2017) tested both forms of multidimensional constructs and found support for PE fit, and all five main subtypes, as a formative construct rather than a reflective one based on model fit. In 2018, Li and colleagues applied a formative model to an overall person-group fit comprised of subdimensions of PG fit and found that the aggregate construct (and formative model) was supported by the data.

Despite the logic of applying formative modeling to PE fit, and some empirical support, previous research has attempted to empirically justify using a reflective rather than formative model. When the formative model was assessed by Edwards and Billsberry in 2010 in comparison to a model with no over-arching higher-order construct, model fit resultant from a confirmatory factor analyses suggested that the aggregate construct was suboptimal compared to the non-formative model. In 2016, researchers explored the different models of a higher-order PE fit, and they suggested that the superordinate PE fit construct was more appropriate than the aggregate formative PE fit construct (Chuang et al., 2016). Explorations into PG fit, specifically, have also favored the superordinate construct (reflective model) over the aggregate construct (formative model; Seong & Kristof-Brown, 2012; Seong et al., 2015).

This evidence favoring the superordinate model should not dissuade from the use of the formative model outright because the studies investigating the superordinate model are not without weaknesses (Chuang et al., 2016; Edwards & Billsberry, 2010; Seong & Kristof-Brown, 2012). Notably, the lack of support for the formative model is often based on comparing model fit indices of competing models. Comparing non-nested models is difficult as statistical tests of

better/worse fit (via the likelihood ratio test) are not possible in non-nested models thus researchers are left to rely on other indices of fit that are based in part on the number of parameters estimated in the model. As reflective models of PE fit and formative models of PE fit are not nested, a clear preference of one over the other cannot be decided upon by model fit alone (Li et al., 2018; MacKenzie et al., 2011).

Moreover, often in prior work, the formative PE construct being examined was not modeled with consideration of best practices related to formative measurement (Edwards, 2011; Hardin et al., 2011). As formative models have gained in notoriety in recent years, their critics and supporters have debated their utility (Bollen & Bauldry, 2011; Bollen & Diamantopoulos, 2011; Edwards, 2011; Hardin & Marcoulides, 2011). Critics argue that because formative models are not identified, two reflective measures must be included in all modeling efforts. Resulting estimates may vary based on which reflective measures are used leading to a problem known as "interpretational confounding" (Edwards, 2011). Recent work in formative measures argues that the best practice for their use involve models with a higher-order formative measure built by lower order reflective variables and the use of two single-item "direct, reflective measures" (Edwards, 2011, p. 383) of the formative construct (Edwards, 2011; Hardin et al., 2011; MacKenize et al., 2011). These best practices have not been adopted in all research where formative models of PE fit were not favored. Therefore, the lack of support for formative approaching to PE fit is not unassailable. Further, the theoretical appropriateness of the formative model should not be ignored in favor of empirical results.

Current Study

In line with choosing a model that most appropriately reflects theory, PE fit should be modeled as an aggregate construct. Formative constructs are mathematical composites of

formative indicators, and this framework allows for the subdimensions of the construct to be weighted independently of each other. Previous research has suggested that different types of PE fit would be differentially salient to different people, and this warrants further exploration (Jansen & Kristof-Brown, 2006; Kristof-Brown et al., 2002; Kristof-Brown & Guay, 2011). Measurement and prediction are improved when the appropriate model specification is used (Jarvis et al., 2003), thus efforts to improve the measurement of PE fit is worthwhile. To this end, the purpose of this paper was to explore the aggregate PE fit construct by creating the higher-order variable through different methods of deriving weights for subdimensions.

Jansen and Kristof-Brown (2006) first suggested the overall PE fit variable could be constructed as an algebraic sum of weighted PE fit subdimensions though never gave specifics on where the weights would originate. Subsequent efforts in this vein have used different approaches to determine the relative importance of the PE fit types. For example, when PO fit, PJ fit, and PG fit were studied collectively, relative importance of each was estimated using hierarchical linear modeling (Raudenbush & Bryk, 2002), with the beta weights reflecting the relative importance of each type of fit (Kristof-Brown et al., 2002). Edwards and Billsberry (2010) used structural equation modeling to estimate the relative contribution of each subtype of PE fit upon the overall aggregate fit variable. The contribution was reflected by each factor loading relating the subtypes of PE fit to the overall PE fit variable. Seong and Kristof-Brown (2012) arrived at a higher-order PE fit variable through structural equation modeling as well; however, the relative contribution of each lower-level variable was reflected in standardized structural coefficients rather than factor loadings. Chuang and colleagues (2016) and Li and colleagues (2018) estimated the relative contribution of each type of PE fit through relative weights analysis (RWA). Though these different methods have been used to determine the

relative importance, or contribution, of the subtypes of PE fit towards overall PE fit, they have not been directly used to create PE fit composite scores. To this end, I investigated both RWA and factor loading methods in creating PE fit composites that were then used to predict outcomes. The predictability of outcomes depending on weighting method was then compared.

Research Question 1: How does prediction of outcomes vary when salience weights are based on RWA versus factor loadings?

Though the aforementioned approaches have merit, they provide results in aggregate across the entire sample. While this information is useful for summarizing across persons, with this approach, the same weights are applied to all individuals in the sample when creating composite scores. This creates the dubious implicit assumption that all individuals in a sample will place the same importance on each of the different PE fit subdimensions. Relative weights of each type of PE fit are derived through sample-level data and applied to each individual rather than allowing for differences in weights across persons. It is highly unlikely that there is uniform salience of the different types of fits to each individual because individuals have different priorities. For some, serving in a specific vocation is of the utmost importance, while for others having a good fit to the supervisor may be the only thing determining overall PE fit. Failing to account for that difference may be degrading the value of the higher-order formative construct. Thus, in this paper, I explored several different methods of generating salience weights (i.e., weights reflective of the relative importance of each subdimension of PE fit) for the constituent types of PE fit.

To account for individual differences in salience weights, I directly asked participants to indicate the importance of the different kinds of fit to see if these ratings improve upon prediction of outcomes in comparison to extant methods. Specifically, I created PE fit variables

as an algebraic sum weighted by self-stated importance ratings. Respondents were directly asked how important each type of PE fit was, and those weights were applied to their raw data to see if prediction of outcomes was enhanced.

Research Question 2: Do PE fit estimates created through directly assessed salience weights predict outcomes better than PE fit estimates based on salience weights derived from the data – specifically (a) RWA or (b) factor loadings?

Further, early explorations into the types of PE fit have found that the types of fit have complicated interactions (Kristof-Brown et al., 2002). Given that there are three conceptualizations of PE fit and each can be operationalized in five different ways, there are fifteen potential delineations of fit that could interact in complex ways. Examining so many potential interactions between variables is not feasible. Therefore, rather than using a variable-centered approach, a person-centered approach may be beneficial.

The person-centered approach is favorable over variable-centered approaches when seeking to account for differences within individuals by identifying subgroups that are similarly characterized rather than using the assumption that derived patterns apply to all in the full sample (Craig & Smith, 2000). When using a variable-centered approach, variables are assessed for all individuals in the sample, and there is an assumption that identified relationships will hold across all the individuals within the sample. On the other hand, the person-centered approach identifies individuals that share particular traits and investigates differential outcomes for individuals in the different groups. Since 15-way interactions are not interpretable, using a person-centered approach to derive profiles may be a better way to see how the types of fit interact. Thus, if individuals do weigh different aspects of PE fit differently, we should next explore if there are

naturally occurring groups of people with similar weighting schemes. To test this, I proposed the following research question.

Research Question 3: Are there naturally occurring groups of people who weight the aspects of PE fit similarly?

If there are naturally occurring groups, knowledge of these groups could assist organizations with planning interventions at a higher-level rather than trying to understand the needs of each individual, which may be impossible or far too time-consuming. Thus, the next extension is to see if group-based weights are notably better or worse at prediction than individual-weights or collective sample weights.

Research Question 4: If there are naturally occurring groups, does a salience weighting scheme based on group-level preference (i.e., latent profile mean scores) better predict than (a) RWA, (b) factor loadings, or (c) individually-stated salience weights?

Summary of Contributions

Overall, this research contributes to extant literature and practice concerning PE fit by determining the best measurement method for the overall composite construct. Specifically, this research provides a better understanding of overall PE fit by using best practices in creating an aggregate construct of PE fit and incorporating the individual differences in the salience and importance of different subtypes of fit. Further, this study explores whether a person-centered approach to the salience weights can provide parsimony while improving prediction beyond sample-based weights. This contributes to theory because the current theoretical base of PE fit is fragmented, and researchers are not able to test an integrative framework without an appropriate way to measure higher-order PE fit. These results will also benefit practitioners because PE fit is often used in selection, thus better measurement of PE fit will improve outcomes that hinge on it

such as job choices and job offers. Organizations can better sell their jobs, and candidates can better focus on what really matters to them.

Methods

Participants

To determine the necessary sample size for this study, I considered the intended analyses: RWA, structural equation modeling, latent profile analysis, and correlations. Using G*Power for RWA for linear multiple regression with five predictors (one for each subtype of PE fit), to detect effect sizes of 0.15 with 0.95 power, the minimum required sample size needed for analyses was determined to be 139. For the structural equation model, previous research efforts into formative models of PE fit showed that analyses could be executed with less than 700 (Darrow & Behrend, 2017). For the latent profile analysis, Tein, Coxe, and Cham's (2013) investigation of sample size requirements suggested that a sample size of at least 250 would be adequate to find a Cohen's d of 1.5 between classes with at least six indicators in the analysis. This study was designed to use five indicators in the latent profile analysis. Finally, for the correlations, a sample of size of 571 is suggested by G*Power to find a correlation of 0.15 with 0.95 power. Accounting for data cleaning procedures to eliminate careless responders, I aimed to collect 1,000 observations to be conservative in the sample size necessary for analyses.

Data Collection and Screening

Data were gathered from Amazon's Mechanical Turk. Participants were required to be at least 18 years old, living in the United States, and working at least 30 hours per week. Participants were compensated $0.50 for completion of the survey. The survey was accessed by 1,272 respondents. Of those, 357 were removed from analyses because they either did not meet eligibility criteria (i.e., at least 18 years old and working at least 30 hours per week) or because they missed any of three instructed-response items. One individual was below 18 years of age,

113 were not employed full-time, and 243 individuals missed at least one of the three instructed-response items. An instructed-response item is an index of data quality in which participants are told to pick a specific response to a survey item (e.g., “Please select ‘slightly important’ for this item.”). Failure to respond according to instructions is an indicator of careless or inattentive responding.

After removing these individuals, 915 respondents were left in the dataset. Survey response time was then investigated, and extreme responses were removed. All but three of the respondents completed the survey in less than 120 minutes. The three extreme values (e.g., 5,937 minutes) were therefore removed leaving 912 observations. The resultant average response time for the survey was 14.29 minutes (*SD* = 12.19). One observation was more extreme than one standard deviation below the mean and was thus removed. The remaining data were then explored for extreme or illogical responses to open-ended demographic items. Individuals who indicated nonsensical ages (e.g., 331,987 years of age), tenure (in months) at current company (e.g., 70,000 months), or number of jobs held throughout life (e.g., 500 jobs) were removed from the sample leaving 895 observations.

These data were then further refined and screened using post-hoc careless responding indicators: Mahalanobis distance, Even Odd consistency, psychometric synonyms, LongString, and self-reported indices of effort and diligence. For a thorough review of these indices, refer to Meade and Craig (2012), which was used to guide procedures to screen for data quality and careless responding. These are continuous indicators, so observations were dichotomously flagged for Mahalanobis distance, Even Odd consistency, psychometric synonyms, and LongString values that were more extreme than one standard deviation below the mean (Francavilla, Meade & Young, 2019). Observations were then removed from analyses if they

were below one standard deviation for Mahalanobis distance and either Even Odd consistency or psychometrics synonyms or if the observations were flagged for LongString and either Even Odd or psychometric synonyms. Next, three self-reported items measuring effort and diligence (e.g., "I carefully answered every survey item"; Meade & Craig 2012) were considered, and only observations that were not identified as lower-end outliers after averaging the three items were kept in the sample. Finally, a single self-reported item ("In your honest opinion, should we use your responses for our study?") was considered. Respondents must have indicated "yes" to be kept in analyses. After screening for careless responding, 838 responses were included in the final sample.

Demographics

The final sample was on average 37.59 years of age (*SD* = 11.10 years) and 51% male. Participants self-identified as 78% White, 13% Black or African American, 5% Asian, 2% American Indian or Alaska Native, 2% two or more races, and 1% Native Hawaiian or Other Pacific Islander. Twenty-seven percent of the sample identified as ethnically Hispanic or Latinx. Per inclusion criteria, all respondents worked full-time (at least 30 hours per week), and it was most common to have worked two jobs in their lifetimes (*M* = 4.91, *SD* = 4.83, *Mdn* = 3). On average, they had been with their current companies for 56.52 months (*SD* =71.74 months) and in their current roles for 39.43 months (*SD* = 56.48 months). Sixty-eight percent of the participants were in managerial positions, and 34% stated they were in entry-level to mid-level positions, 54% declared themselves to be in middle management, and 12% reported being members of upper management. Finally, 55% of the sample had a bachelor's degree, and 25% had a graduate or professional degree.

Procedure

After accessing the MTurk HIT and being redirected to the survey, participants first completed the aforementioned demographic items, and then completed survey items assessing the importance of each type of PE fit in general. Next, they were instructed to consider their current job and complete scales assessing their fit on all five subtypes of PE fit. Then, items were presented assessing the six different outcome variables, and finally, the self-reported careless responding items concluded the survey. A full list of all survey items is available in Appendix A. All items were rated on a Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) unless otherwise noted.

Importance Ratings

The importance of each subtype of PE fit was evaluated in two different ways. First, participants were given definitions of the five targets of the subtypes (see Appendix A) and then asked to distribute 100 points among each target to reflect the relative importance of that subtype of fit. This measure is ipsative in nature and prevents respondents from being able to endorse all subtypes equally (for more information, see Meade, 2004). This is distinctive from the second method where four-item scales were used for each subtype of PE fit. These four items included one item each for overall fit, supplementary fit, needs-supplies fit, and demands abilities fit. The same items were used for each subtype, and only the target was modified. Items were adapted from the PE fit items (see Appendix A) but were revised to include the phrase "It is important to me that…" Example items include "It is important to me that my job fulfills what I need from a job" and "It is important to me that I am able to meet the demands of my supervisor." These items were rated on a Likert scale from 0 (*not at all important*) to 4 (*extremely important*). All five scales had acceptable internal consistency reliability. A confirmatory factor analysis was

conducted for each variable and a five-factor model, and results supported the theorized structure of the scale based on recommendations by Hu and Bentler (1999). As well, all estimates were significant, and all factor loadings were greater than 0.40. See Table 1 for these indices.

Table 1

Reliability and Confirmatory Factor Analyses Model Fit Indices for Importance Ratings.

	α	S-B χ^2 (df)	CFI	TLI	RMSEA	SRMSR
IMPPS	0.70	25.56(2)***	0.94	0.83	0.12[0.08, 0.16]**	0.04
IMPPG	0.77	5.49(2)	0.99	0.98	0.05[0.00, 0.08]	0.02
IMPPJ	0.71	1.02(2)	1.00	1.01	0.00[0.00, 0.05]	0.01
IMPPO	0.73	7.87(2)*	0.99	0.96	0.06[0.03, 0.10]	0.02
IMPPV	0.71	2.87(2)	1.00	1.00	0.02[0.00, 0.07]	0.01
5-factor model	---	1243.42(160)***	0.78	0.75	0.09[0.09, 0.09]***	0.07

Note. The Sartorra-Bentler (S-B) estimator was used for analyses because data were not normally distributed. IMPPS=importance of PS fit; IMPPG=importance of PG fit, IMPPJ=importance of PJ fit; IMPPO=importance of PO fit; IMPPV=importance of PV fit.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Subtypes of Person-Environment Fit

To measure the subtypes of PE fit, nine items were used for each subtype (i.e., PV, PO, PJ, PG, PS). The nine items included three items measuring overall fit (adapted from Piasentin & Chapman, 2007), and two items assessing supplementary fit (adapted from Badger & Behrend, 2013), needs-supplies fit (adapted from Cable & DeRue, 2002), and demands-abilities fit (adapted from Cable & DeRue, 2002) each. The same items were used for each of the five subtypes, but items were modified to reflect the different operationalizations of fit. Sample items include “I think other people would say that I fit into this occupation”, “My organization fulfills

what I need from an employer" and "I am able to meet the demands of my team." Internal consistency reliability and confirmatory factor analyses were favorable for all five scales (Table 2), and exploration of a five-factor model supported the distinctiveness of each type of fit. As before, all estimates were significant, and all factor loadings were greater than 0.40.

Table 2

Reliability and Confirmatory Factor Analyses Model Fit Indices for PE Fit Subtype Ratings.

	α	S-B χ^2 (df)	CFI	TLI	RMSEA	SRMSR
PS	0.92	128.90(27)***	0.95	0.93	0.07[0.06, 0.08]**	0.04
PG	0.91	149.37(27)***	0.93	0.91	0.07[0.07, 0.08]***	0.04
PJ	0.88	223.80(27)***	0.87	0.82	0.09[0.09, 0.10]***	0.06
PO	0.89	150.10(27)***	0.92	0.90	0.07[0.07, 0.08]***	0.05
PV	0.89	179.48(27)***	0.91	0.88	0.08[0.07, 0.09]***	0.05
5-factor model	---	4175.74(935)***	0.77	0.75	0.06[0.06, 0.07]***	0.07

Note. The Sartorra-Bentler (S-B) estimator was used for analyses because data were not normally distributed.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Person-Environment Fit

Overall person-environment fit was assessed as a composite of the subtypes of PE fit; however, for identification of the formative model, two single-item reflective indicators of PE fit must be used. Two items were adapted from Piasentin and Chapman's (2007) overall PO fit scale. The two items selected are "I fit in well with other people in my overall work environment" and "My overall work environment is a good fit for me in terms of what I look for in my professional life." Given that this is a two-item scale, the Spearman-Brown coefficient is

reported instead of Cronbach's alpha for internal consistency (Eising et al., 2013); this coefficient was found to be 0.82.

Outcome Variables

In line with previous studies and meta-analyses, six outcome variables were studied. Three variables were selected to assess work attitudes (i.e., job satisfaction, organizational commitment, and turnover intentions). These three variables were selected because they are most often studied in meta-analyses regarding person-environment fit and have historically been found to have strong relationships with PE fit and its subtypes (Kristof-Brown & Guay, 2011).

Three other variables – burnout, job involvement, and job stress – were also investigated to provide a more holistic understanding of PE fit and to further grow the nomological network of the construct. Burnout, job involvement, and job stress were explored to better understand the impact of PE fit on stress and strain. Burnout has been previously linked to lower person-environment fit (Tong et al., 2015), but this relationship warrants further investigation to solidify trust in results. Job involvement, defined as one's self-identification with the work (Reeve & Smith, 2001), also needs greater exploration as it has not been yet investigated. Finally, job stress was evaluated to understand the psychological impact of misalignment between the person and environment. Lack of PE fit is largely understood to be a precursor to forms of stress and strain (Kristof-Brown & Guay, 2011).

Job Satisfaction. Job satisfaction was assessed with the three-item global job satisfaction scale from the Michigan Organizational Assessment Questionnaire (Cammann, et al., 1979). One sample item is: "All in all, I am satisfied with my job." Confirmatory factor analyses revealed one item had a suboptimal factor loading (e.g., 0.314), and thus was dropped. Consequently, the

two-item scale had suitable internal reliability as assessed through the Spearman-Brown coefficient, but the model fit indices cannot be estimated with only two items (see Table 3).

Table 3

Reliability and Confirmatory Factor Analyses Model Fit Indices for Outcomes.

	α	S-B χ^2 (df)	CFI	TLI	RMSEA	SRMSR
JS	0.89†	---	---	---	---	---
OC	0.83	24.04(2)***	0.97	0.91	.11[.08, .15]**	0.30
TI	0.94	5.32(5)	1.00	1.00	.01[.00, .04]	0.01
BO	0.96	274.59(35)***	0.98	0.97	0.09[0.08, 0.10]***	0.03
JI	0.86	52.00(9)***	0.97	0.95	0.08[0.06,0.09]**	0.04
JStress	0.97	270.65(65)***	0.98	0.98	0.06[0.06,0.07]***	0.03

Note. The Sartorra-Bentler (S-B) estimator was used for analyses because data were not normally distributed. JS = job satisfaction; OC = organizational commitment; TI = turnover intentions; BO = burnout; JI = job involvement; JStress = job stress.

* $p < .05$. ** $p < .01$. *** $p < .001$.

† indicates the use of Spearman-Brown for internal consistency reliability.

Organizational Commitment. Organizational commitment was measured with an eight-item scale from Allen and Meyer (1990). An example item is “I would be very happy to spend the rest of my career with my organization.” Confirmatory factor analyses revealed four items with insufficient factor loadings; those items were removed from analyses. Subsequently, Cronbach’s alpha and model fit indices were appropriate (see Table 3).

Turnover Intentions. Turnover intentions were measured with two items from the Michigan Organizational Assessment Questionnaire (Cammann et al., 1979), such as the item “I

often think about quitting" and three items from O'Reilly et al. (1991) such as the item "I would prefer another job to the one I have now."

Burnout. The 10-item short version of Malach-Pines' (2005) burnout scale was used to assess burnout. An example item is "When you think about your work overall, how often do you feel tired?" These items were rated on a scale from 1 (*never*) to 7 (*always*). Internal consistency reliability was very high at 0.96, and confirmatory factor analysis supported the one-factor structure.

Job Involvement. The psychological identification with one's job was evaluated with nine items measuring the "centrality of one's job to the self-concept" (Reeve & Smith, 2001, p. 95). A sample item is "The major satisfaction in my life comes from my job." Three items with low factor loadings were removed from analyses, and remaining items had strongly internal consistency, 0.86, and desirable model fit.

Job Stress. Job stress was measured with 13-items (adapted from Parker & DeCotiis, 1983) such as "My job gets to me more than it should." This variable assessed the psychological impact of the work on the individual. Data supported the internal reliability consistency (i.e., Cronbach's alpha = 0.97) and confirmatory factor analysis model fit indices (Table 3).

Results

Descriptive statistics reflecting means, standard deviations, and intercorrelations among study variables are presented in Table 4. Specific analyses and results for each research question are delineated below.

Table 4

Means, Standard Deviations, and Intercorrelations of Study Variables.

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. PE	5.56	0.99																
2. PS	5.49	0.95	.59**															
3. PG	5.53	0.86	.73**	.63**														
4. PJ	5.59	0.79	.66**	.65**	.72**													
5. PO	5.52	0.82	.71**	.72**	.75**	.83**												
6. PV	5.59	0.80	.61**	.60**	.69**	.88**	.80**											
7. ImpPS	3.74	0.68	.37**	.52**	.43**	.45**	.46**	.40**										
8. ImpPG	3.85	0.66	.37**	.43**	.46**	.43**	.43**	.41**	.64**									
9. ImpPJ	3.95	0.64	.35**	.40**	.44**	.49**	.43**	.49**	.53**	.55**								
10. ImpPO	3.90	0.64	.38**	.44**	.45**	.48**	.48**	.48**	.58**	.64**	.67**							
11. ImpPV	3.94	0.62	.33**	.39**	.44**	.49**	.45**	.49**	.49**	.52**	.65**	.70**						
12. JS	5.68	1.06	.61**	.59**	.52**	.65**	.67**	.63**	.30**	.30**	.30**	.29**	.28**					
13. OC	4.99	1.24	.61**	.55**	.48**	.52**	.59**	.50**	.37**	.37**	.25**	.29**	.28**	.60**				
14. TI	4.35	1.75	-.15**	-.16**	-.11**	-.19**	-.18**	-.18**	.07*	.07	-.05	-.02	-.05	-.28**	.02			
15. BO	3.79	1.61	-.07	-.09**	-.08*	-.11**	-.10**	-.13**	.13**	.09**	-.02	-.01	-.03	-.21**	.13**	.70**		
16. JI	4.78	1.28	.39**	.32**	.27**	.33**	.34**	.30**	.28**	.32**	.17**	.22**	.18**	.35**	.69**	.37**	.38**	
17. JStress	4.38	1.59	.03	-.04	-.00	-.04	-.03	-.05	.14**	.14**	-.01	.00	-.02	-.08*	.25**	.78**	.74**	.59**

Note. *M* and *SD* are used to represent mean and standard deviation, respectively. * $p < .05$. ** $p < .01$. *** $p < 0.001$

Research Question 1: Comparing Correlations

Research Question 1 sought to compare the correlations that arise from using a RWA approach to form the composite PE variable and the correlations resulting from a factor loading approach to creating the composite PE variable. First, RWA was conducted. RWA is an analytic process by which the relative contribution of multiple predictors in multiple linear regression is determined (Tonidandel et al, 2009). In this case, the outcome variable was one of the PE fit items that assessed overall fit to the environment, and the predictors were the scale scores (i.e., means) of each subtypes of PE fit. RWA with conducted using R (R Core Team, 2019) using the 'rwa' package. The analyses revealed that PO fit had the greatest influence on PE fit at 24%, followed by PJ fit at 23%, PG fit at 21%, PS fit at 17%, and PV fit at 16%. All composites were created using the following formula:

$$PE_{comp} = s_1*PS + s_2*PG + s_3*PJ + s_4*PO + s_5*PV$$

In this formula, PE_{comp}, represents the overall PE composite, and *s* reflects the respective salience of each subtype of PE on the overall composite. For RWA, s_1 to s_5 were .24, .23, .21, .17, and .16, respectively. Once the PE composite was created, it was correlated with all six outcomes leading to six correlation coefficients displayed in Table 5. Five of the six correlations were significant, and all correlations were in the expected direction and ranged from small to large. Job stress was the only outcome found to not have a significant correlation with PE fit.

Table 5

Comparing the PE Fit Composites Created through Sample-Level Methods.

	RWA	FL	*t*
JS	0.690***	0.552***	10.065***

Table 5 (continued)

OC	0.599***	0.491***	7.124***
TI	-0.185***	-0.132***	-2.885**
BO	-0.112**	-0.061	-2.702**
JI	0.354***	0.296***	3.241**
JStress	-0.038	-0.006	-1.670

Note. JS = job satisfaction; OC = organizational commitment; TI = turnover intentions; BO = burnout; JI = job involvement; JStress = job stress; RWA = relative weights analysis; FL = composite formed from using factor loadings for salience weights. *t* = test statistics for significance tests comparing correlations between RWA and FL methods.

* $p < .05$. ** $p < .01$. *** $p < .001$.

For the second composite's creation, structural equation modeling including the use of a formative model was needed. First, a structural equation model comprised of the five subtypes being reflectively modeled with their items was estimated in order to create factor scores representing levels of each PE fit subtype. The model fit indices were $\chi_2(2) = 4175.74$, $p < .001$, *CFI* = .77, *TLI* = .75, *RMSEA* = .06 [.06, .07], $p < .001$, *SRMSR* = .07. The incremental fit indices (CFI and TLI) were below recommended criteria; however, based on the absolute fit indices (RMSEA and SRMSR), the model has acceptable fit. Once factor scores were generated for each subtype of PE fit, those factor scores were then used to estimate the overall, higher-order PE fit variable using a formative model. As described by best practices for formative models, the composite variable was regressed on two self-reflective indicator items to allow for model identification (Edwards, 2011). As well, correlations between all subtypes at the lower level were freely estimated.

From this point, the composite was created by using the factor loadings derived from the formative model as salience weights that were then entered into the same formula for the weighted sum used for the RWA composite. The salience weights derived from the factor loading method and used for composite creation are -0.046 (PS Fit), 0.646 (PG Fit), 0.980 (PJ Fit), 0.379 (PO Fit), and -0.965 (PV Fit). Correlations between the outcome variables and the PE composite created by the factor loading method are displayed in Table 5. Overall, the factor loading method appears to be less useful in predicting outcomes as all correlations were weaker than those derived through RWA, and two of the six correlations were non-significant. Notably, with both methods, no correlations were found between PE fit and job stress.

To assess whether there was a true difference between the correlations resulting from RWA and factor loadings, a significance test to compare correlations was utilized. Based on the recommendation of Steiger (1980), the standard Williams' *t* significance test was utilized to compare correlations (Hittner et al., 2003; Williams, 1959). Notably, since these correlations are based on data from the same sample, they are considered dependent, and because we are comparing correlations with one variable in common (i.e., the outcome variable), the correlations are also considered overlapping. Accounting for both these factors, the standard Williams' *t* test statistic was estimated based on the null hypothesis that both correlations are equal. Results from the significance test are in Table 5.

Five of the six significance tests comparing relative weights analyses and factor loading methods were significant. This indicates that there is a significant difference between the PE composites derived from both methods, and the RWA method produces composites that are more strongly related to outcomes of interest. Thus, in response to Research Question 1, the RWA

method for creating a PE fit composite is better than the factor loadings method for the prediction of outcomes.

Research Question 2: Comparing Self-Reported Ratings

For Research Question 2, a third method was introduced: self-reported importance weights. As previously stated, two different approaches were available to estimate the self-reported importance of PE fit subtypes ratings. One method involved using scale scores derived from the importance ratings (SRscale), and the second method involved using the relative importance reflected in the point distribution from the ipsative measure of PE fit (SRipsa). Both methods were assessed, and the results are presented in Table 6. The second approach (SRipsa) produced stronger and more significant correlations; thus, it was used for further analyses, and the scale score method was dropped for the remainder of analyses.

Table 6

Comparing the PE Fit Composites Created through Both Self-Report Methods.

	SRscale	SRipsa	*t*
JS	0.580***	0.677***	-7.786***
OC	0.545**	0.567***	-1.572
TI	-0.111**	-0.199***	5.341***
BO	-0.046	-0.127***	4.858***
JI	0.352***	0.335***	1.054
JStress	0.005	-0.053	3.425***

Note. JS = job satisfaction; OC = organizational commitment; TI = turnover intentions; BO = burnout; JI = job involvement; JStress = job stress; SRscale = self-reported importance ratings assessed through scale scores; SRipsa = self-reported ipsative measure of importance.

* $p < .05$. ** $p < .01$. *** $p < .001$.

From visual inspection alone, the correlations produced through the RWA and self-reported importance (SRipsa) look very comparable. To further explore this observation, the significance tests comparing dependent, overlapping correlations were conducted. Five correlations were significantly different but neither method was consistently favored. For example, the correlations for job satisfaction, organizational commitment, and job involvement derived by RWA were larger in magnitude than those obtained from self-reported importance, but the reverse was found for turnover intentions. The significance test comparing correlations for job stress were significant, but this significance is meaningless given that the underlying correlations themselves were nonsignificant. Overall, it is unclear which method is preferable.

This evaluation was repeated to compare the factor loadings methods with self-reported importance ratings. In all cases, the magnitudes of the correlations were larger using self-reported importance ratings, and in all cases, this difference was found to be significant (Table 7). Thus, it is clear that self-reported importance ratings leading to the PE composite are better at predicting outcomes than the factor loadings approach.

Table 7

Comparing the PE Fit Composite Created through Self-Reported Ratings

	RWA	FL	SR	$t_{rwa.sr}$	$t_{fl.sr}$
JS	0.690***	0.552***	0.677***	2.861**	-8.369***
OC	0.599***	0.491***	0.567***	6.625***	-4.548***
TI	-0.186***	-0.132***	-0.199***	2.301*	3.408***
BO	-0.112**	-0.061	-0.127***	2.456*	3.281**
JI	0.354***	0.296***	0.335***	3.288**	-2.023*

Table 7 (continued)

JStress	-0.038	-0.006	-0.053	2.49*	2.315*

Note. JS = job satisfaction; OC = organizational commitment; TI = turnover intentions; BO = burnout; JI = job involvement; JStress = job stress; RWA = relative weights analysis-based composite; FL = factor loading based composite; SR = self-reported ipsative measure-based composite; $t_{rwa.sr}$ = test statistic comparing correlations between RWA and SR; $t_{fl.sr}$ = test statistic comparing correlations between FL and SR.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Research Question 3: Latent Profile Analysis

The third research question focused on determining if there are naturally occurring groups of people who value the different types of fit in the same way. To examine this, I conducted a latent profile analysis using Mplus 8.4 on the five different importance ratings extracted from the ipsative measure of importance. Several indices were considered in determining the best fitting profile structure for the data: Akaike's Information Criterion (AIC), Bayesian Information Criterion (BIC), sample size adjusted BIC (ABIC), Lo-Mendell-Rubin likelihood ratio test (LMRLRT), parametric bootstrap likelihood ratio test (BLRT), interpretability of the solution (Nylund et al., 2007), and percentage of class membership.

All solutions ranging from 1-profile to 6-profiles were explored. AIC, BIC, and sample-size adjusted BIC all favored solutions with more profiles. Likewise, the statistics associated with the BLRT were significant for all six solutions (see Table 8); however, the LMRLRT was no longer significant when moving from 5-profiles to 6-profiles. Thus, no more than 5-profiles were supported by the data. The 5-profile solution was discarded because the 5-profile solution had one group comprised of only 1.4% of the sample (e.g., 12 individuals), and best practices

suggest a 3% proportion at a minimum to be considered a meaningful classification. Moreover, the resultant profiles were also less interpretable than the four-profile solution.

Table 8

Latent Profile Analysis Model Fit Summary.

# of Profiles	AIC	BIC	ABIC	LMRLRT	BLRT
1	31500.29	31547.60	31515.84	---	---
2	31072.61	31148.31	31097.50	429.05***	-15740.14***
3	30699.51	30803.59	30733.72	375.80*	-15520.31***
4	30463.33	30595.80	30506.88	242.18*	-15327.75***
5	30268.72	30429.58	30321.61	201.61*	-15203.66***
6	30105.02	30294.26	30167.23	171.46	-15100.36

Note. AIC = Akaike Information Criterion; BIC = Bayesian Information Criterion; ABIC = Adjusted BIC; LMRLRT = Lo, Mendel, & Rubin likelihood ratio test; BLRT = Bootstrap likelihood ratio test.

* $p < .05$. ** $p < .01$. *** $p < .001$.

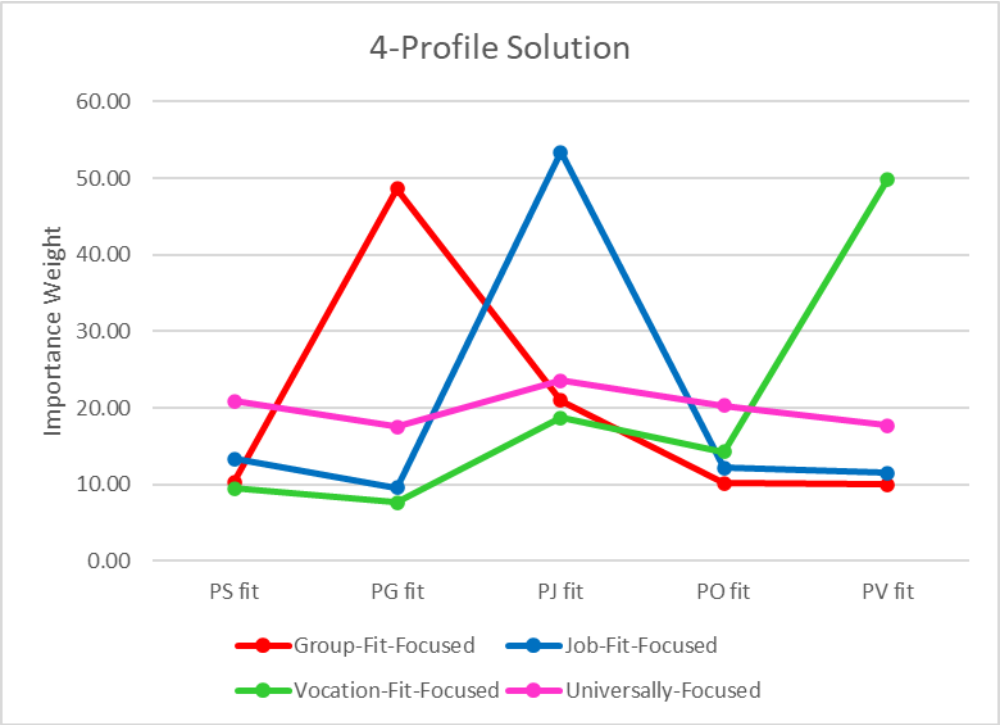
The 4-profile solution was selected due to preferable AIC, BIC, and sample size-adjusted BIC; a significant LMRLRT and BLRT result; interpretability, and desirable class membership proportions. Information criteria indices all decreased as the number of profiles increased, but these indices alone tend to overestimate the appropriate number of solutions (Nylund et al., 2007). The LMRLRT and BLRT were both significant for the 4-profile solution indicating that the data better supported 4-profiles over a 3-profile alternative. As well, the classes were easy to interpret, and the smallest resulting class held 3% of the sample. Considered all together, the 4-profile solution was best supported by the data.

The resulting four groups were relatively similar in how they weighted PS fit and PO fit but were distinguished by PG fit, PJ fit, and PV fit. The largest class, comprised of 79% of the

sample, was marked by relatively similar value given to all five subtypes of PE fit. This profile was labeled “Universally-Focused.” The next largest group, representing 10% of the sample, was distinguished by a large importance rating on PJ fit. This group was deemed “Job-Fit-Focused.” Likewise, 8% of the sample, the “Vocation-Fit-Focused”, emphasized the importance of PV fit, and the smallest group, representing only 3% of the sample, was marked by a high importance given to PG fit. This group was labeled “Group-Fit-Focused”. Figure 2 displays all four classifications and their mean scores importance rating for all five subtypes of PE fit.

Figure 2

Graph of Latent Profile Mean Scores.



Research Question 4: Latent Profile Analysis Ratings

The final research question asked if salience weighting based on group-level preferences would be better for predicting outcomes than (a) RWA, (b) factor loadings, or (c) individually-stated self-reported importance weights. Five of the six correlations derived from the LPA mean scores were significant, which is consistent with the RWA method and self-reported importance rating method (see Table 9). For part (a), only one of the six differences in correlations were significant, and it favored the RWA method (see Table 9). According to these findings, the RWA and LPA methods are largely similar with a slight advantage towards the RWA method for the prediction of organizational commitment.

In comparing the latent profile analysis and factor loading methods, five of the six correlations were significantly different. Job stress, again, did not correlate with PE fit calculated through either composite method. For the other five outcomes, the LPA method led to stronger correlations than the factor loading method. In comparing self-reported importance ratings and the LPA method, results were mixed. For job satisfaction, organizational commitment, and job involvement, the LPA method was better for prediction, but turnover intentions and burnout were better predicted using the self-reported importance ratings.

Table 9

Comparing the PE Fit Composite Created through Latent Profile Analysis.

	RWA	FL	SR	LPA	$t_{rwa.lpa}$	$t_{fl.lpa}$	$t_{sr.lpa}$
JS	0.69***	0.55***	0.68***	0.69***	-0.17	-9.50***	-4.14***
OC	0.60***	0.49***	0.57***	0.59***	3.24**	-6.01***	-6.23***
TI	-0.19***	-0.13***	-0.20***	-0.19***	1.48	3.02**	-1.88
BO	-0.11**	-0.06	-0.13***	-0.12***	1.48	2.84**	-2.09*

Table 9 (continued)

JI	0.35***	0.30***	0.34***	0.36***	-0.25	-3.11**	-4.85***
JStress	-0.04	-0.01	-0.05	-0.04	0.97	1.77	-2.59**

Note. JS = job satisfaction; OC = organizational commitment; TI = turnover intentions; BO = burnout; JI = job involvement; JStress = job stress; RWA = relative weights analysis-based composite; FL = factor loading based composite; SR = self-reported ipsative measure-based composite; LPA = latent profile analysis classification-based composite. $t_{rwa.lpa}$ = test statistic comparing correlations between RWA and LPA; $t_{fl.lpa}$ = test statistic comparing correlations between FL and LPA; $t_{sr.lpa}$ = test statistic comparing correlations between SR and LPA.

* $p < .05$. **$p < .01$. ***$p < .001$.

Results Summary

Table 10 displays the mean and standard deviations for the PE composite variable created through all methods as well as the salience weights derived through each method. Notably, the RWA method, self-reported importance ratings, and latent profile analysis methods all correlated strongly with each other (r = 0.99); the factor loading method correlated with the other methods less, but still had large magnitudes (r's from = 0.83 to r = 0.85).

Table 10

Mean, Standard Deviations, and Salience Weights Derived from All Methods.

				LPA			
	RWA	FL	SR	Group-Fit-Focused	Job-Fit-Focused	Vocation-Fit-Focused	Universally-Focused
M	554.325	5.500	556.491	523.719	566.378	565.157	553.665
SD	74.434	0.900	74.319	107.529	70.961	78.681	73.120

Table 10 (continued)

PS wgt	16.671	-0.046	19.055†	10.305	13.314	9.469	20.899
PG wgt	20.794	0.646	16.853†	48.597	9.604	7.689	17.505
PJ wgt	22.678	0.980	25.805†	20.989	53.402	18.725	23.581
PO wgt	23.615	0.379	18.853†	10.127	12.164	14.233	20.323
PV wgt	16.243	-0.965	19.435†	9.982	11.516	49.883	17.693

Note. RWA = relative weights analysis-based composite; FL = factor loading based composite; SR = self-reported ipsative measure-based composite; LPA = latent profile analysis classification-based composite; *M* = mean of PE fit composite; *SD* = standard deviation of PE fit composite; PS wgt = salience weight of PS fit; PG wgt = salience weight of PG fit; PJ wgt = salience weight of PJ fit; PO wgt = salience weight of PO fit; PV wgt = salience weight of PV fit. † indicates means calculated across the whole sample though weights were individually applied in this method.

Supplementary Analyses

Because four distinct groups were identified in the latent profile analysis, supplementary analyses were conducted to identify if the groups differed on any demographic variables that could aid in the prediction of what sorts of individuals are most likely to be in any particular group, and therefore value a specific type of PE fit. One-way analyses of variance tests were conducted to examine mean differences between numeric demographic variables (e.g., organizational tenure, job tenure, number of jobs in work history), and chi-squared tests of independence were used to examine if relationships existed between categorical demographic variables (e.g., gender, race, income level, education) and group membership. None of the ANOVAs or chi-square tests reached significance; however, two variables approached significance: organizational tenure (p = 0.094) and job tenure (p = 0.050). These variables were

higher for the Job-Fit-Focused individuals than the Universally-Focused individuals. Although they did not reach significance here, they warrant further investigation in samples that have a larger number of individuals and thus more power in the Job-Fit-Focused group.

Discussion

The purpose of this research was to further investigate the multidimensional construct of PE fit, the best route for creating the composite in order to predict outcomes, and whether incorporating individual or group-level weights would enhance prediction of important outcomes. Findings are discussed below along with implications, limitations, and future directions for research.

Sample-Level Weighting Methods

Research Question 1 explored how two common approaches to formulating the multidimensional, higher-order PE fit construct compare in the prediction of outcomes of interest. To this end, RWA and factor loadings derived from a formative modeling of PE fit were used to obtain salience weights for creating the weighted sum.

The RWA route led to a PE composite that was most weighted by PJ fit and least by PV fit, but for the most part, salience weights were relatively similar. The composite was correlated to five of the six outcomes, but job stress did not appear to be related to PE fit. Job satisfaction and organizational commitment were both strongly related to PE fit, as expected, and previously reported in existing research (Kristof-Brown & Guay, 2011), but the correlation with turnover intentions was weaker than reported in meta-analyses (r = -0.47; Kristof-Brown et al., 2005). This weaker correlation may be reflective of the current state of the job market given the COVID-19 pandemic. With the economic downturn and elevated unemployment due to the pandemic, work-related attitudes and experiences are very likely affected. It is possible that

irrespective of how much one likes or fits with their job, their turnover intentions are reduced because of the unstable economic climate and reduced chances of securing a new position. Likewise, the relatively small magnitude of the correlation with burnout could be a consequence of the pandemic as well. Given the current elevated states of stress nationwide and globally, burnout may be a ubiquitous experience that is independent of PE fit.

Job involvement was also positively correlated with PE fit, which is a useful finding to grow the nomological network of PE fit. As operationalized in this study, job involvement involves assessing the centrality of one's job in their life. This value may be elevated due to the pandemic as well, but further research is necessary to better understand this relationship. Job stress, on the other hand, was uncorrelated with PE fit; this result is surprising given that misfit at work is often considered a form of job stress. The lack of correlation between PE fit and job stress may also be a temporary result of the COVID-19 pandemic impacting perceptions and experiences of the workplace. Further investigation should be conducted to better understand the relationships between PE fit and these three less researched variables: burnout, job involvement, and job stress.

For the second approach, using factor loadings, structural equation modeling was used to generate factor scores for each subtype of PE fit. Each subtype was modeled reflectively, but a formative structure was used for the higher-order aggregate construct. A composite was created by using the factor loadings related to the aggregate construct as salience weights that were applied through a weighted sum. The salience weights derived from the factor score method diverged from the salience weights obtained through RWA. Where RWA showed roughly even influence of all subtypes on the PE fit composite, the factor loading method was most strongly influenced by PJ fit and PV fit. The differences between these findings are noteworthy given that

the composites created through RWA and the factor loading method were also strongly correlated (r = 0.85). However, the salience of the weights obtained through the factor loading method did not match the pattern of the RWA salience weights in terms of either magnitude or directionality.

Correlations produced with factor loadings led to significant but weaker correlations than the relative weights method. Thus, in response to Research Question 1, we can conclude that the relative weights analyses method is preferable to the factor loading method and leads to stronger prediction of outcomes. This finding, along with the weakness of the factor scores method, supports the critics of formative models who do not find utility in formative modeling approaches. In order to examine this further, I conducted exploratory, supplemental analyses that showed that the derived salience weights based on the formative model varied greatly depending on which single-item variables were used for identification of the model. As stated by critics (e.g., Edwards, 2011), this dependence on external variables for model identification leads to unstable estimates that degrade the generalizability of the model. Thus, future research should focus on creating more stable estimates in formative models before utilizing them in the measurement of PE fit. All other alternatives to create an aggregate construct used in this paper were more effective and should be used instead of formative models until this estimation issue is resolved. Fortunately for researchers, this suggests that a simpler, more efficient method is better for prediction.

Individual-Level Weighting Methods

Research Question 2 went beyond the extant approaches to create a PE fit composite and explored the suitability of using individual-level data to create salience weights. Both approaches from Research Question 1 applied the same salience weights to all individuals in the sample, and

Research Question 2 sought to explore whether directly assessing each individual's perspectives in creating the PE fit composite would enhance prediction. To date, this individualized approach has not been explored.

Two different methods were used to solicit self-reported importance weights for each subtype of PE fit. The first method utilized an ipsative measure in which respondents were forced to distribute a finite number of points (i.e., 100) to each subtype of PE fit. This approach has strengths and weaknesses. On the one hand, the ipsative measure prevents respondents from indiscriminately weighting each subtype of PE fit as highly important. However, ipsative measures are limited by dependency between measures which violates basic assumptions of classical test theory and creates artifactual negative intercorrelations between the variables being rated. However, its potential to force differentiation across the PE fit variables made this method worthy of inclusion. Further, the approach to offer 100 points for disbursement is similar to the relative weights approach, in which salience weights sum to 100%.

The second approach utilized four-item Likert scale ratings to create an importance score for each subtype of PE fit. This method allowed individuals to rate the importance of each subtype of PE fit separately to indicate how important each subtype was to them. Analyses revealed that this approach was not as useful in predicting outcomes because the distributions (mean and standard deviation) for each of importance scale scores was nearly identical. This suggests that when people are given the opportunity to evaluate each type of PE fit individually, they believe that each domain of the workplace is important, and consequently, they rate each target uniformly highly. Alternatively, it could mean that they are not able to adequately differentiate among PE fit dimensions. This may reflect an idealized perception of the workplace and mask true differences between the subtypes of PE fit. However, when forced to consider all

five operationalizations at the same time, and prevented from highly rating each, difference salience for each type of PE fit appeared.

The ipsative method produced stronger correlations with correlations, and those correlations appeared to be more congruent with the RWA results than the scale score method. Given that the goal of this research was to identify how best to measure PE fit to predict outcomes, the superior ipsative measure was used for analyses comparing self-reported importance weights to RWA and factor loading methods. The advantage of the ipsative measure was present for all outcomes when compared to the factor loading approach, which fell short in prediction for every outcome. The comparison of RWA and self-reported importance methods showed a significant difference in correlations on all six outcomes, but job stress can be disregarded since neither of the underlying correlations were significant.

Group-Level Weighting Methods

Research Question 3 applied a person-centered approach to explore the presence of organic clusters of people who value different types of fit to the workplace in similar ways. If such groups existed, then the PE fit phenomenon could possibly be considered on a group-level rather than requiring solicitation of every individuals' personal salience weights. Latent profile analysis suggested four distinct classifications of individuals that valued the dimensions of PE fit differently.

The members of largest group valued all elements of the workplace as uniformly important. This group accounts for nearly 80% of the sample and indicates that most people consider the totality of their workplace in establishing their own perception of fit. Or, alternatively, they fail to differentiate among the PE fit elements. Smaller groups, representing 10%, 8% and 3% of the sample were more attuned to their fit with the specific job, specific

vocation, and specific workgroup. For all three groups, a single focal subtype was considered far above and beyond all other subtypes. This result is noteworthy but somewhat surprising. Often the workplace is considered in terms of “what you do” and “who you work with.” I was expecting to see profiles that reflected an emphasis on the supervisor and the group and perhaps another profile focusing on the job or organization. It was also surprising that for the three smaller groups, only one aspect of the environment was highlighted. This is somewhat curious but may suggest that individuals are not as adept as partitioning the workplace, despite instructions, and their overall PE perceptions may narrow and focus on only one specific conceptualization of PE fit. The absence of a profile which focused on fit with the organization was interesting in today’s world where organizational culture and brand are highly prominent. It was also noteworthy that the importance of supervisor fit was never dominant among the subtypes in any methodology. Considering that one’s supervisor can be a very large part of one’s daily experience at work, and supervisor fit is related to job satisfaction (r = .35, Kristof-Brown et al, 2005), PS fit was expected to be more important. Finally, the relatively low proportions of individuals who cared about fitting in with their coworkers is also surprising. This may reflect the changing nature of work where interpersonal interactions are important because work is being completed remotely. Future research should explore whether remote work influences PE fit and the assessment of its subtypes.

Moreover, future research should be done to better assess whether person-level characteristics can predict group membership as was considered in the supplemental analyses I performed. While no demographic variables were found to significantly associate with class membership, here, organizational tenure and job tenure were approaching significance. This vein of research should be further studied.

Comparisons Across Weighting Methods

Overall, when comparing the LPA-based PE fit composite to the RWA-based PE fit composite, they were found to be virtually identical (r = 0.99). Both approaches lead to strong prediction of outcomes, but the RWA approach requires less time and effort from researchers and study participants. This finding is important as it suggests that individual-differences in salience weights can be entirely ignored in favor of parsimonious sample-level weights. Like the RWA approach, the LPA method outperformed the factor loadings method for all variables, indicating virtually no value to the factor loading approach to composite creation in comparison to alternative methods. Finally, when comparing the self-reported ipsative measure of PE fit to the LPA-based PE composite, both methods appear to yield virtually identical correlations with outcomes, but the LPA method was marginally stronger in prediction. Again, the LPA method was slightly better at prediction of positive outcomes (i.e., job satisfaction, organization commitment, and job involvement) while the prediction of negative outcomes (i.e., turnover intentions and burnout) was improved by the self-report ratings method. Again, this suggests that the salience of each subtype could vary depending on whether the outcome in question is positive or negative.

When considering RWA, the results follow an interesting pattern. Positive outcomes are better predicted by the RWA approach, but for the two negative outcomes, prediction is enhanced when applying the self-reported methodology to composite formation. The distinction in prediction of positive and negative outcomes could indicate positive outcomes are best estimated by considering all aspects of PE equally seeing that the RWA method produced a composite that was weighted by all five subtypes relatively equally. However, when considering the negative outcomes, like intentions to quit, prediction is enhanced when each individual's

ratings are considered. Thus, it is possible that all aspects of PE fit are considered when thinking about the positive outcomes, but if the most important PE subtype for an individual is low, then the risk for negative outcomes is substantially increased. However, this is speculation that should be explored with further research. Altogether, there is merit and value in considering the individual perspective on the workplace and gathering individually-determined ratings of importance of PE subtypes, but it may be questionable whether the effort is worthwhile when RWA predicts nearly equally as well.

Limitations

The results in this study may be limited by the world context in which the data were collected (late fall of 2020). The worldwide COVID-19 pandemic has had widespread effects that have influenced people's home and work domains. Many different industries have suffered, and this has led to businesses closing. People have lost their jobs, their homes, and suffered many other physical and psychological health risks (Singh et al., 2020). Thus, it is hard to know the generalizability of the results of this study given the unique state of the world today. It will be critical to reassess the various PE fit and outcome measures and to revisit the research questions explored in this study once the pandemic has passed. For example, future researchers should reexamine the finding in this study that all types of PE fit are equally important to the majority of employees.

Another limitation of this study may be the definitions used to convey meaningful differences between the different operationalizations of the environment and instructions provided to guide participants. It was assumed that individuals would attend to the variable definitions and survey instructions and that they would respond to the survey accordingly. But the uniform preference for all types of PE fit may indicate that individuals might not have

understood how these types of PE fit differed conceptually from one another. This is not dissimilar to the phenomenon of halo error that can diminish the accuracy of supervisor ratings (Jacobs & Kozlowski, 1985). Future research may benefit from attempting to replicate this work with an even stronger efforts to distinguish between the PE fit operationalizations.

One other limitation of this study may be the utilization of MTurk. The sample used was general in nature and specifically not limited to any particular industry. It is possible that some effects of PE fit are being masked by this broadly employed MTurk sample. Future research should perhaps try to replicate this study with a more selective industry in order to investigate this effect.

Conclusions

This research in its totality essentially suggests that the construct of PE fit might be more unidimensional in nature, at least at present times. Most individuals seemed to weight all forms of PE fit similarly and the effort to incorporate nuance through group-level salience ratings and individual-level salience ratings was not worthwhile. Given this result, researchers should opt to use RWA to explore the weighting of the PE fit construct because it is simpler to apply and performs just as well as the other more complicated weighting processes examined in this study. Future research should explore individual differences for negative outcomes, which could be more important since turnover is expensive. Practitioners may be interested in the LPA results because if organizations can quickly assess what group an individual is a part of, they can better focus recruiting efforts. Moreover, the LPA patterns are also interesting to note because they show that vocation fit matters where supervisor fit does not. If this is the case, organizational efforts towards leadership development and training supervisors may not be as fruitful as

attempts to match individuals with their vocational preferences. All in all, this research suggests PE fit is perceived similarly across individuals, and all aspects of the environmental fit matter.

REFERENCES

Allen, N. J., & Meyer, J. P. (1990). Organizational socialization tactics: A longitudinal analysis of links to newcomers' commitment and role orientation. *Academy of Management Journal*, *33*(4), 847-858.

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

Badger, J. M., & Behrend, T. S. (2013, April). The measurement and dimensionality of perceived person-organization fit. In *28th annual conference of the Society for Industrial & Organizational Psychology, Houston, TX. Badger, JM, Kaminsky, S., & Behrend, TS (in press). Media richness and information acquisition in Internet recruitment. Journal of Managerial Psychology*.

Bollen, K. A., & Bauldry, S. (2011). Three Cs in measurement models: Causal indicators, composite indicators, and covariates. *Psychological Methods*, *16*(3), 265-284.

Bollen, K. A., & Diamantopoulos, A. (2017). In defense of causal-formative indicators: A minority report. *Psychological Methods*, *22*(3), 581-596.

Cable, D. M. & Judge, T. A. (1995). The role of person-organization fit in organizational selection decisions (CAHRS Working Paper #95-07). Ithaca, NY: Cornell University, School of Industrial and Labor Relations, Center for Advanced Human Resource Studies. http://digitalcommons.ilr.cornell.edu/cahrswp/197

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

Cable, D. M., & Judge, T. A. (1997). Interviewers' perceptions of person–organization fit and organizational selection decisions. *Journal of Applied Psychology*, *82*(4), 546-561.

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

Caldwell, D. F., & O'Reilly III, C. A. (1990). Measuring person-job fit with a profile-comparison process. *Journal of Applied Psychology*, *75*(6), 648-657.

Cammann, C., Fichman, M., Jenkins, D., & Klesh, J. (1979). The Michigan organizational assessment questionnaire. *Unpublished manuscript, University of Michigan, Ann Arbor*, 71-138.

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

Chuang, A., Shen, C. T., & Judge, T. A. (2016). Development of a Multidimensional Instrument of Person–Environment Fit: The Perceived Person–Environment Fit Scale (PPEFS). *Applied Psychology*, *65*(1), 66-98.

Craig, S. and Smith, J. (2000), “Integrity and personality: a person-oriented investigation”, paper presented at the 15th Annual Conference of the Society for Industrial Organizational Psychology, New Orleans, LA, April.

Darrow, J. B., & Behrend, T. S. (2017). Person-environment fit is a formative construct. *Journal of Vocational Behavior*, *103*, 117-131.

Diamantopoulos, A., & Winklhofer, H. M. (2001). Index construction with formative indicators: An alternative to scale development. *Journal of Marketing Research*, *38*(2), 269-277.

Edwards, J. A., & Billsberry, J. (2010). Testing a multidimensional theory of person-environment fit. *Journal of Managerial Issues*, 476-493.

Edwards, J. R. (1991). *Person-job fit: A conceptual integration, literature review, and methodological critique*. John Wiley & Sons.

Edwards, J. R. (2001). Multidimensional constructs in organizational behavior research: An integrative analytical framework. *Organizational Research Methods*, *4*(2), 144-192.

Edwards, J. R. (2008). 4 person–environment fit in organizations: An assessment of theoretical progress. *Academy of Management Annals*, *2*(1), 167-230.

Edwards, J. R. (2011). The fallacy of formative measurement. *Organizational Research Methods*, *14*(2), 370-388.

Edwards, J. R., & Shipp, A. J. (2007). The relationship between person-environment fit and outcomes: An integrative theoretical framework. In C. Ostroff & T. A. Judge (Eds.), *Perspectives on organizational fit* (pp. 209-258). San Francisco: Jossey-Bass, 2007.

Eisinga, R., Te Grotenhuis, M., & Pelzer, B. (2013). The reliability of a two-item scale: Pearson, Cronbach, or Spearman-Brown? *International journal of public health*, *58*(4), 637-642.

Ferris, G. R., & Judge, T. A. (1991). Personnel/human resources management: A political influence perspective. *Journal of management*, *17*(2), 447-488.

Francavilla, N. M., Meade, A. W., & Young, A. L. (2019). Social Interaction and Internet-Based Surveys: Examining the Effects of Virtual and In-Person Proctors on Careless Response. *Applied Psychology*, *68*(2), 223-249.

Freeze, R., & Raschke, R. L. (2007). An assessment of formative and reflective constructs in IS research. *ECIS 2007 Proceedings*, 171.

Hardin, A. M., Chang, J. C. J., Fuller, M. A., & Torkzadeh, G. (2011). Formative measurement and academic research: In search of measurement theory. *Educational and Psychological Measurement*, *71*(2), 281-305.

Hardin, A., & Marcoulides, G. A. (2011). A commentary on the use of formative measurement. *Educational and Psychological Measurement*, *71*(5), 753-764.

Hittner, J. B., May, K., & Silver, N. C. (2003). A Monte Carlo evaluation of tests for comparing dependent correlations. *The Journal of general psychology*, *130*(2), 149-168.

Hoffman, B. J., & Woehr, D. J. (2006). A quantitative review of the relationship between person–organization fit and behavioral outcomes. *Journal of Vocational Behavior*, *68*(3), 389-399.

Holland, J. L. (1985). Making vocational choices: A theory of vocational personalities and work environments (2nd ed.). Englewood Cliffs, NJ: Prentice Hall.

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal*, *6*(1), 1-55.

Jacobs, R., & Kozlowski, S. W. (1985). A closer look at halo error in performance ratings. *Academy of Management Journal*, *28*(1), 201-212.

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

Jarvis, C. B., MacKenzie, S. B., & Podsakoff, P. M. (2003). A critical review of construct indicators and measurement model misspecification in marketing and consumer research. *Journal of Consumer Research*, *30*(2), 199-218.

Judge, T. A., & Ferris, G. R. (1992). The Elusive Criterion of Fit in Human Resources Staffing Decisions. *Human Resource Planning*, *15*(4), 47-67.

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

Kristof-Brown, A. L. (2000). Perceived applicant fit: Distinguishing between recruiters' perceptions of person-job and person-organization fit. *Personnel Psychology*, *53*(3), 643-671.

Kristof-Brown, A., & Guay, R. P. (2011). Person–environment fit. In *APA handbook of industrial and organizational psychology, Vol 3: Maintaining, expanding, and contracting the organization.* (pp. 3-50). American Psychological Association.

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

Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta-analysis of person–job, person–organization, person–group, and person–supervisor fit. *Personnel Psychology*, *58*(2), 281-342.

Lauver, K. J., & Kristof-Brown, A. (2001). Distinguishing between employees' perceptions of person–job and person–organization fit. *Journal of Vocational Behavior*, *59*(3), 454-470.

Law, K. S., Wong, C. S., & Mobley, W. M. (1998). Toward a taxonomy of multidimensional constructs. *Academy of Management Review*, *23*(4), 741-755.

Lewin, K. (1951). Field theory in social science: selected theoretical papers (Edited by Dorwin Cartwright.).

Li, C. S., Kristof-Brown, A. L., & Nielsen, J. D. (2019). Fitting in a group: Theoretical development and validation of the Multidimensional Perceived Person–Group Fit scale. *Personnel Psychology*, *72*(1), 139-171.

MacKenzie, S. B., Podsakoff, P. M., & Podsakoff, N. P. (2011). Construct measurement and validation procedures in MIS and behavioral research: Integrating new and existing techniques. *MIS Quarterly*, *35*(2), 293-334.

Malach-Pines, A. (2005). The burnout measure, short version. *International Journal of Stress Management*, *12*(1), 78.

Meade, A. W. (2004). Psychometric problems and issues involved with creating and using ipsative measures for selection. *Journal of Occupational and Organizational Psychology*, *77*(4), 531-551.

Meade, A. W., & Craig, S. B. (2012). Identifying careless responses in survey data. *Psychological Methods*, *17*(3), 437-455.

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.

Nylund, K. L., Asparouhov, T., & Muthén, B. O. (2007). Deciding on the number of classes in latent class analysis and growth mixture modeling: A Monte Carlo simulation study. *Structural Equation Modeling: A Multidisciplinary Journal*, *14*(4), 535-569.

O'Reilly III, C. A., Chatman, J., & Caldwell, D. F. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit. *Academy of Management Journal*, *34*(3), 487-516.

Parker, D. F., & DeCotiis, T. A. (1983). Organizational determinants of job stress. *Organizational Behavior and Human Performance*, *32*(2), 160-177.

Piasentin, K. A., & Chapman, D. S. (2007). Perceived similarity and complementarity as predictors of subjective person-organization fit. *Journal of Occupational and Organizational Psychology*, *80*(2), 341-354.

R Core Team (2019). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. URL https://www.R-project.org/.

Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods* (Vol. 1). Sage.

Reeve, C. L., & Smith, C. S. (2001). Refining Lodahl and Kejner's job involvement scale with a convergent evidence approach: Applying multiple methods to multiple samples. *Organizational Research Methods*, *4*(2), 91-111.

Sekiguchi, T. (2004). Person-organization fit and person-job fit in employee selection: A review of the literature. *Osaka Keidai Ronshu*, *54*(6), 179-196.

Seong, J. Y., & Kristof-Brown, A. L. (2012). Testing multidimensional models of person-group fit. *Journal of Managerial Psychology*, *27(6)*, 536-556.

Seong, J. Y., Kristof-Brown, A. L., Park, W. W., Hong, D. S., & Shin, Y. (2015). Person-group fit: Diversity antecedents, proximal outcomes, and performance at the group level. *Journal of Management*, *41*(4), 1184-1213.

Singh, S., Roy, M. D., Sinha, C. P. T. M. K., Parveen, C. P. T. M. S., Sharma, C. P. T. G., & Joshi, C. P. T. G. (2020). Impact of COVID-19 and lockdown on mental health of children and adolescents: A narrative review with recommendations. *Psychiatry research*, 113429.

Smith, P. C., Kendall, L. M., & Hulin, C. L. (1969). *The measurement of satisfaction in work and retirement.* Chicago, IL: Rand McNally.

Steiger, J. H. (1980). Tests for comparing elements of a correlation matrix. *Psychological Bulletin*, *87*(2), 245-251.

Tein, J. Y., Coxe, S., & Cham, H. (2013). Statistical power to detect the correct number of classes in latent profile analysis. *Structural Equation Modeling: A Multidisciplinary Journal*, *20*(4), 640-657.

Terborg, J. R. (1981). Interactional psychology and research on human behavior in organizations. *Academy of Management Review*, *6*(4), 569-576.

Tong, J., Wang, L., & Peng, K. (2015). From person-environment misfit to job burnout: Theoretical extensions. *Journal of Managerial Psychology*.

Tonidandel, S., LeBreton, J. M., & Johnson, J. W. (2009). Determining the statistical significance of relative weights. *Psychological methods*, *14*(4), 387.

van Vianen, A. E. (2018). Person–environment fit: A review of its basic tenets. *Annual Review of Organizational Psychology and Organizational Behavior*, *5*, 75-101.

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*(3), 473-489.

Vogel, R. M., & Feldman, D. C. (2009). Integrating the levels of person-environment fit: The roles of vocational fit and group fit. *Journal of Vocational Behavior*, *75*(1), 68-81.

Williams, E. J. (1959). 136. Query: Significance of Difference between Two Non-Independent Correlation Coefficients. *Biometrics*, *15*(1), 135-136.

APPENDICES

Appendix A: Survey Items

All items below are rated on a Likert scale ranging from (1) *strongly disagree* to (7) *strongly agree* unless otherwise stated.

Demographics

1. What is your gender?
2. What is your age (in years)?
3. What is your race or ethnicity?
4. What is the highest level of education you have completed?
5. Which best describes your current employment situation?
    a. Full time (30 or more hours a week)
    b. Part time (less than 30 hours a week)
    c. Unemployed
    d. Retired
6. What is your current job title?
7. What industry do you currently work in?
8. How long have you been employed in your current position (in months)?
9. How long have you been employed at your current company?
10. How many jobs have you had in your lifetime?

Person-Environment Fit *(adapted from Piasentin & Chapman, 2007)*

1. I fit in well with other people in my overall work environment.
2. My overall work environment is a good fit for me in terms of what I look for in my professional life.

Person-Vocation Fit *(adapted from Badger & Behrend, 2013; Cable & DeRue, 2002, Piasentin & Chapman, 2007)*

1. I fit in well with other people who work in my occupation.
2. This occupation is a good fit for me in terms of what I look for in an occupation.
3. I think other people would say that I fit into this occupation.
4. My values "match" or fit my occupation.
5. My personality matches my occupation's culture.
6. My occupation fulfills what I need from a profession.
7. There is a good fit between what my occupation offers me and what I am looking for from an occupation.
8. My abilities are a good fit with the requirements of my occupation.
9. I am able to meet the demands of my occupation.

Person-Organization Fit *(adapted from Badger & Behrend, 2013; Cable & DeRue, 2002, Piasentin & Chapman, 2007)*

1. I fit in well with other people who work for my organization.
2. This organization is a good fit for me in terms of what I look for in an employer.
3. I think other people would say that I fit into this organization.
4. My values "match" or fit this organization.

5. My personality matches my organization's culture.
6. My organization fulfills what I need from an employer.
7. There is a good fit between what my organization offers me and what I am looking for from an organization.
8. My abilities are a good fit with the requirements of my organization.
9. I am able to meet the demands of my organization.

Person-Group Fit *(adapted from Badger & Behrend, 2013; Cable & DeRue, 2002, Piasentin & Chapman, 2007)*

1. I fit in well with other people who work in my team.
2. This team is a good fit for me in terms of what I look for in a team.
3. I think other people would say that I fit into this team.
4. My values "match" or fit my team members' values.
5. My personality matches my team's culture.
6. My team fulfills what I need from a workgroup.
7. There is a good fit between what my team offers me and what I am looking for from a team.
8. My abilities are a good fit with the requirements of my team.
9. I am able to meet the demands of my team.

Person-Job Fit *(adapted from Badger & Behrend, 2013; Cable & DeRue, 2002, Piasentin & Chapman, 2007)*

1. I fit in well with other people who have the same job as me.
2. This job is a good fit for me in terms of what I look for in a job.
3. I think other people would say that I am a good fit for this job.
4. My values "match" or fit with other people who have my same job.
5. My personality matches the personalities of other people in my job.
6. My job fulfills what I need from a job.
7. There is a good fit between what my job offers me and what I am looking for in a job.
8. My abilities are a good fit with the requirements of my job.
9. I am able to meet the demands of my job.

Person-Supervisor Fit *(adapted from Badger & Behrend, 2013; Cable & DeRue, 2002, Piasentin & Chapman, 2007)*

1. I fit well with my supervisor.
2. My supervisor is a good fit for me in terms of what I look for in a boss.
3. I think other people would say that I am a good fit with my supervisor.
4. My values "match" or fit my supervisor's values.
5. My personality matches my supervisor's personality.
6. There is a good fit between what my supervisor offers me and what I am looking for from a supervisor.
7. My supervisor fulfills what I need from a supervisor.
8. My abilities are a good fit with the requirements of my supervisor.
9. I am able to meet the demands of my supervisor.

Importance of Person-Vocation Fit *(adapted from Badger & Behrend, 2013; Cable & DeRue, 2002, Piasentin & Chapman, 2007) – rated 0 (not at all important) to 4 (extremely important).*

1. It is important that I fit in well with my occupation.
2. It is important that my personality matches my occupation's culture.
3. It is important that my occupation fulfills what I need from a profession.
4. It is important that my abilities are a good fit with the requirements of my occupation.

Importance of Person-Organization Fit *(adapted from Badger & Behrend, 2013; Cable & DeRue, 2002, Piasentin & Chapman, 2007) – rated 0 (not at all important) to 4 (extremely important).*

1. It is important that I fit in well with my organization.
2. It is important that my personality matches my organization's culture.
3. It is important my organization fulfills what I need from an employer.
4. It is important that my abilities are a good fit with the requirements of my organization.

Importance of Person-Job Fit *(adapted from Badger & Behrend, 2013; Cable & DeRue, 2002, Piasentin & Chapman, 2007) – rated 0 (not at all important) to 4 (extremely important).*

1. It is important that I fit in well with my job
2. It is important that my personality matches the personalities of other people in my job.
3. It is important that my job fulfills what I need from a job.
4. It is important that my abilities are a good fit with the requirements of my job.

Importance of Person-Group Fit *(adapted from Badger & Behrend, 2013; Cable & DeRue, 2002, Piasentin & Chapman, 2007) – rated 0 (not at all important) to 4 (extremely important).*

1. It is important that I fit in well with my team.
2. It is important that my personality matches my team's culture.
3. It is important that my team fulfills what I need from a workgroup.
4. It is important that my abilities are a good fit with the requirements of my team.

Importance of Person-Supervisor Fit *(adapted from Badger & Behrend, 2013; Cable & DeRue, 2002, Piasentin & Chapman, 2007) – rated 0 (not at all important) to 4 (extremely important).*

1. It is important that I fit well with my supervisor.
2. It is important that my personality matches my supervisor's personality.
3. It is important that my supervisor fulfills what I need from a supervisor
4. It is important that my abilities are a good fit with the requirements of my supervisor.

Ipsative Measure of Self-Rated Importance
Think about what matters to you in a job setting. Specifically, consider what matters to you in an **ideal** situation not necessarily what you have right now.

Distribute 100-points among the different aspects of your workplace according to **what is important to you**. Higher points reflect greater importance. The five different aspects are defined below.

Vocation: your occupational profession. For example, your vocation could be a car salesperson no matter what specific company that you work for.

Organization: The specific company that you work for.

Job: The specific tasks and responsibilities that you do on a regular basis that are part of your job description.

Group: The specific individuals that you interact with on a regular basis at work.

Supervisor: The individual/manager that you report to. Your "boss"

Your responses below should total to 100 points.

___ vocation ____ organization _____ job _____ group _____ supervisor

Job Satisfaction *(Cammann, Fichman, Jenkins, and Klesh, 1979)*

1. All in all, I am satisfied with my job.
2. In general, I don't like my job.
3. In general, I like working here.

Turnover Intentions *(Cammann, Fichman, Jenkins, and Klesh, 1979; O'Reilly et al., 1991)*

1. I will probably look for a new job in the next year.
2. I often think about quitting
3. I would prefer another job to the one I have now
4. If I have my way, I won't be working for this company a year from now
5. I have seriously thought about leaving this company

Organizational Commitment *(Allen and Meyer, 1990)*

1. I would be very happy to spend the rest of my career with my organization.
2. I enjoy discussing my organization with people outside it.
3. I really feel as if my organization's problems are my own.
4. I think that I could easily become as attached to another organization as I am to my organization. (R)
5. I do not feel like 'part of the family' at my organization. (R)

6. I do not feel ‘emotionally attached’ to my organization. (R)
7. My organization has a great deal of personal meaning for me.
8. I do not feel a strong sense of belonging to my organization. (R)

Burnout Measure: Short Version *(Malach-Pines, 2005)*
When you think about your work overall, how often do you feel the following?
(1) Never (2) Almost Never (3) Rarely (4) Sometimes (5) Often (6) Very Often (7) Always

1. Tired
2. Disappointed with people
3. Hopeless
4. Trapped
5. Helpless
6. Depressed
7. Physically weak/Sickly
8. Worthless/Like a failure
9. Difficulties sleeping
10. “I’ve had it”

Job Involvement *(Reeve & Smith, 2001)*
1. I’ll stay overtime to finish a job, even if I’m not paid for it.
2. The major satisfaction in my life comes from my job.
3. The most important things that happen to me involve my work.
4. Sometimes I lie awake at night thinking ahead to the next day.
5. I have other activities more important than my work. (R)
6. I live, eat, and breathe my job.
7. To me my work is only a small part of who I am. (R)
8. I am very much involved personally in my work.
9. Most things in life are more important than work. (R)

Job Stress *(adapted from Parker & DeCotiis, 1983)*
1. I have felt fidgety or nervous as a result of my job
2. My job makes it hard to spend enough time with my family
3. My job gets to me more than it should
4. I spend so much time at work, I can't see the forest for the trees
5. There are lots of times when my job drives me right up the wall
6. Working here leaves little time for other activities
7. Sometimes when I think about my job, I get a tight feeling in my chest
8. I frequently get the feeling I am married to the company.
9. I have too much work and too little time to do it in.
10. I feel guilty when I take time off from job
11. I sometimes dread when my phone rings at home because the call might be job-related
12. I feel like I never have a day off
13. Too many people at my level in my company get burned out by job demands

Appendix B: Dissertation Proposal

Exploring Salience Weights with Person-Environment Fit

Human behavior is best understood as a function of both the person and the environment (Lewin, 1951; Muchinsky & Monahan, 1987; Terborg, 1981). Decades ago, this premise gave rise to the construct of person-environment fit (PE fit), the compatibility of an individual with their environment, which has been the focus of a great deal of research (Caldwell & O'Reilly, 1990; Chatman, 1989; Hoffman & Woehr, 2006; Kristof 1996, Kristof-Brown & Guay, 2011). Maximizing fit between the person and environment yields numerous benefits for individuals and organizations alike (Kristof-Brown, Zimmerman, & Johnson, 2005; Kristof-Brown & Guay, 2011; Verquer, Beehr, & Wagner, 2003). Research shows that having a high alignment between person and environment is related to increased tenure, increased job satisfaction, increased organizational commitment, reduced intentions to quit, improved health outcomes, and increased overall performance (Edwards, 1991; Kristof 1996; Kristof-Brown et al., 2005; Kristof-Brown & Guay, 2011; Verquer et al., 2003). Conversely, misfit yields counterproductive outcomes including burnout and turnover (Kristof-Brown & Guay, 2011). In fact, the value of PE fit has become so evident that job interviews have started to target not only job knowledge and relevant experience but also fit from both the perspective of both the applicant making a job choice and the organization selecting a new employee (Arthur, Bell, Villado, & Doverspike, 2006; Cable & Judge, 1996).

Perhaps because of the relationships between PE fit and these important outcomes, PE fit has garnered increased researcher attention since its earliest investigations in the 1980s (Chatman, 1989; Kristof-Guay, 2011). Despite the clear value of, and growing research interest in, the construct, it is not without its challenges (Edwards & Shipp, 2007; Kristof-Brown &

Guay, 2011). The influx of studies has been fragmented and disjointed, and existing studies have contradictory results (Kristof, 1996; Kristof-Brown et al., 2003; Kristof-Brown & Guay, 2011). PE fit has been considered an "elusive and ill-defined" construct (Judge & Ferris, 1992) that can be conceptualized differently, operationalized differently, and measured differently (Edwards & Shipp, 1997; Kristof 1996; Kristof-Brown et al., 2005; Kristof-Brown & Guay, 2011). The vast variability in how PE fit is defined and studied has led to a clear lack of integration in theory pertaining to this construct (Kristof-Brown & Guay, 2011; Kristof-Brown et al., 2005; Lauver & Kristof-Brown, 2001; Verquer et al., 2003). The disjointed research and mixed findings related to PE fit coupled with the high value of the construct in real-life decisions leads to a clear need for a consistent way to define and measure PE fit that is capable of integrating previous work. PE fit researchers have endorsed continued investigative efforts to this end (Edwards, 2008; Jansen & Kristof-Brown, 2006; Kristof, 1996; Kristof-Brown & Guay, 2011).

In response to the need for integrative models, researchers have explored multidimensional models of PE fit in which different types of PE fit are considered collectively (Edwards & Billsberry, 2010; Jansen & Kristof-Brown, 2006; Kristof, 1996; Seong & Kristof-Brown, 2012). Some of these efforts have conceptualized PE fit as a higher-order construct linked to more narrow types of PE fit on the lower levels (Darrow & Behrend, 2017; Edwards & Billsberry, 2010; Jansen & Kristof-Brown, 2006; Kristof-Brown, Jansen, & Colbert 2002). However, the relationship between the lower-level constructs and the overall PE fit construct is still the subject of investigation. Some research has supported the model of PE fit as a superordinate, higher-order reflective construct that yields more specific types of PE fit (Edwards & Billsberry, 2010; Jansen & Kristof-Brown, 2006; Kristof-Brown et al., 2002; Seong & Kristof-Brown, 2012), but some researchers have found that PE fit is more appropriately

defined as a formative construct created as a composite of different types of PE fit (Darrow & Behrend, 2017; Jansen & Kristof-Brown, 2006; Kristof-Brown & Guay, 2011).

Given the importance of PE fit and a strong theoretical rationale for why perceptions of fit should be modeled as a formative construct, it is important to further investigate the application of formative modeling to PE fit. To this end, the purpose of this study is to explore different weighting methods that can be used to create the optimal composite to represent PE fit.

Person-Environment Fit

PE fit, the compatibility that exists when the characteristics of the individual and the environment are well-aligned, has received attention for decades leading to different approaches to study the construct and a diverse and complex theoretical base for PE fit. (Kristof 1996, Kristof-Brown et al., 2005; Kristof-Brown & Guay, 2011, O'Reilly, Chatman, & Caldwell, 1991; van Vianen, 2018). In one study alone, over 40 different types of PE fit were identified such as supplementary person-vocation fit, needs-supplies person-organization fit, or demands-ability person-job fit (Edwards & Shipp, 2007). The term has been used to encompass many different conceptualizations, operationalizations, and measurement methods (Kristof, 1996, Kristof-Brown & Guay, 2011), which will be further described below.

Conceptualizations

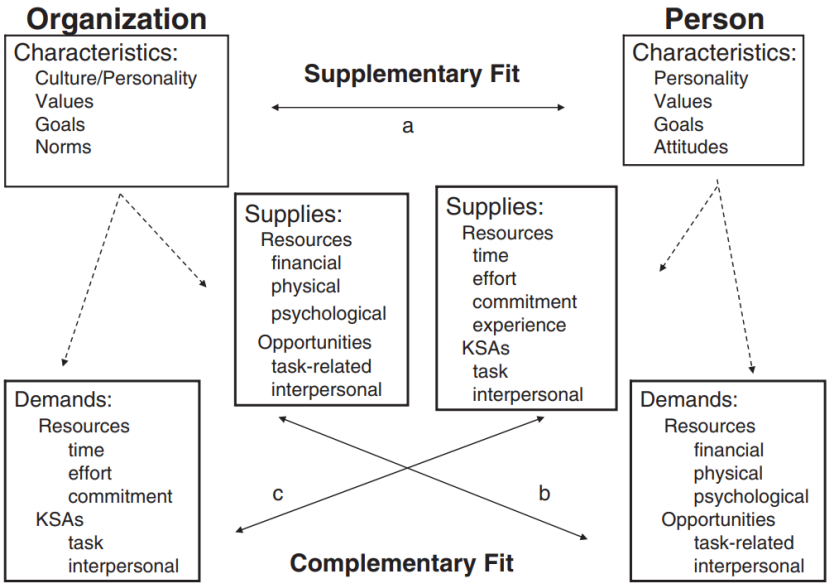
Different researchers have defined PE fit in different ways, but overall, a few main conceptualizations have garnered significant research attention (Kristof, 1996). First, there is a distinction between supplementary and complementary fit (Kristof, 1996; Kristof-Brown & Guay, 2011). Supplementary fit is defined as the fit that occurs when a person "supplements, embellishes, or possesses characteristics which are similar to other individuals" in an environment (Muchinsky & Monahan, 1987, p. 269). Said differently, the individual blends into

the in the environment. An example item measuring supplementary fit is “My personality matches my organization’s culture” (Badger & Behrend, 2013). This approach has been used widely in research (e.g., assessing the match between an individual’s values and the culture of their organization) and can be represented by an item like “My values ‘match’ or fit the values of this organization” (Cable & Judge, 1996). Complementary fit, on the other hand, is defined as the fit that exists when a person adds to the existing environment by contributing something that is otherwise missing (Muchinsky & Monahan, 1987, p. 271) or the environment provides something that is missing to the individual (Kristof & Guay, 2011). For example, “My organization fulfills what I need from an employer” (Badger & Behrend, 2013; Cable & DeRue, 2002).

Another conceptualization distinguishes between needs-supplies fit and demands-abilities fit (Kristof, 1996). Needs-supplies fit occurs when an environment *provides* aspects that address the *“needs, desires, or preferences”* of the individual (Kristof, 1996, p.3). From this perspective, the environment serves to satisfy the individual’s needs. On the other hand, demands-abilities fit occurs when the individual has the *abilities* to meet the *demands* of the environment. Efforts towards integration of PE fit have deemed needs-supplies fit and demands-abilities fit as types of complementary fit (Sekiguchi; 2004). Thus, supplementary fit, needs-supplies fit, and demands-abilities fit each reflect a different type of fit (Kristof, 1996; Sekiguchi; 2004). Rather than being redundant, all three can be assessed simultaneously to create a more holistic understanding of PE fit (Kristof, 1996). For illustration, Figure 1 presents an example of how the different conceptualizations applied to PO fit can interact (Kristof, 1996).

Figure 1

Integrative Model of Person-Organization Fit



Note. This figure shows how the different conceptualization of PE fit can interact in an integrative model of PE fit. KSA = knowledge, skills, and abilities.

Operationalizations

In addition to of the distinction between supplementary fit, needs-supplies fit, and complementary fit, different types of PE fit exist which vary based on how the "environment" is operationalized (Kristof, 1996; Kristof-Brown & Guay, 2011). Specifically, the person can fit, under all three conceptualizations, different aspects of the environment. The most common operationalizations of the environment include vocation, organization, job, group, and supervisor (Darrow & Behrend, 2017; Kristof, 1996; Kristof-Brown & Guay, 2011). Thus, PE fit can measure person-vocation (PV), person-organization (PO), person-job (PJ), person-group (PG), and person-supervisor (PS) fit (Kristof, 1996). Again, these types of fit are not redundant with the different conceptualizations of fit, but instead can be combined to offer unique information

about an individual's fit with their work environment (Kristof, 1996). For example, PV fit can be assessed as supplementary fit ("My values 'match' or fit this organization."; Badger & Behrend, 2013), needs-supplies fit ("My job fulfills what I need from a job."; Cable & DeRue, 2002), or demands-abilities fit ("I am able to meet the demands of my occupation."; Cable & DeRue, 2002).

At the broadest level, person-vocation fit is defined as an assessment of the compatibility of an individual with their occupation. It is most often measured with Holland's RIASEC typology (Holland 1985; Kristof, 1996; Kristof-Brown & Guay, 2011). Holland's vocational typology describes six different types of occupations: realistic, investigative, artistic, social, enterprising, and conventional. These different occupational types appeal differently to different people (Holland, 1985). PV fit level varies depending on how well and individual's personality matches their chosen occupation. Person-organization (PO) fit is another form of PE fit in which the environmental target is the organization. Often, measuring this form of PE fit includes the assessing the congruence between the values of the individual and the values of the organization.

Narrowing the environmental scope further focuses the lens on the job of the individual – specifically the day-to-day tasks and responsibilities. The abilities and needs of the individual are contrasted against the requirements of and opportunities provided by the job (i.e., person-job; PJ fit). Next, in considering the interpersonal aspects of the workspace, person-group (PG) fit assesses the match between an individual and those with whom he or she works in terms of team cohesiveness, similarity, or even shared goals. Finally, person-supervisor (PS) fit is the narrowest level of the common forms of PE fit in which satisfaction and suitability of the individual and his or her work supervisor is measured.

All five operationalizations of PE fit can be measured through supplementary, needs-supplies, or demands-abilities fit conceptualizations. As can be seen from these descriptions, while there may be some conceptual overlap between these different forms of PE fit, they each can be built to reflect unique aspects of the work environment making each important to consider in its own right (Kristof, 1996; Kristof-Brown & Guay, 2011; van Vianen, 2018).

Measurement Methods

PE fit and all its subtypes can be measured directly or indirectly. Direct measurement involves responding to questions that explicitly target fit (Kristof, 1996). For example, “I fit in well with my work group” is an example of an item that directly measures fit. Direct measurement is also known as “perceived fit" because the individuals' responses indicate the degree to which they *perceive* that fit exists. Indirect fit, on the other hand, involves measuring the individual and environmental aspects separately and empirically assessing differences between the two targets (Kristof 1996). Thereby, indirect measurements reflect mathematically derived “actual fit.” Most often, perceived fit is used in research (Kristof-Brown et al., 2005; Verquer et al., 2003), and research has shown that perceived fit is better at predicting outcomes than objective or subjective types of fit (Cable & Judge, 1995; Cable & Judge, 1997; Ferris & Judge, 1991; Kristof-Brown et al., 2005; Verquer et al., 2003).

Movement Towards Integration

Given the numerous non-redundant measurement methods, conceptualizations, and operationalizations of PE fit, contemporary researchers in this field have advocated for the development of integrative models of PE fit (Chuang, Shen, & Judge, 2016; Edwards & Billsberry, 2010; Jansen & Kristof-Brown, 2006; Kristof, 1996; Kristof-Brown & Guay, 2011; Kristof-Brown, Jansen, & Colbert 2002; Seong & Kristof-Brown, 2012). These efforts generally

result in studies assessing multiple kinds of PE fit simultaneously to better understand the antecedents and consequences of different kinds of fit and how they relate to each other.

In some studies, multiple types of fit are considered simultaneously to understand incremental and differential prediction. For example, PO fit and PJ fit are often considered together (Kristof-Brown, 2000; Lauver & Kristof-Brown, 2001; Vogel & Feldman, 2009), and their relationship to each other has been inconsistent. In some studies, the two are highly correlated (Kristof-Brown, 2000), while in other studies, they are only moderately or weakly correlated (Lauver & Kristof-Brown, 2001; O'Reilly et al, 1991). Further, they differentially predict outcomes. For instance, PO fit is more related to organizational commitment, while PJ fit is more related to job satisfaction (Lauver & Kristof-Brown, 2001).

Overall, investigations into the intercorrelations of PE fit types show a large range of results. For example, in one meta-analysis of PE fit correlations between the multiple types of fit ranged from .37 to .74 (Kristof-Brown et al., 2005). However, a good deal of research has shown that types of PE fit are distinct from each other and have unique relationships with antecedents and outcomes (Kristof, 1996; Kristof-Brown, 2000; Kristof-Brown, Jansen, & Colbert, 2001; Lauver & Kristof-Brown, 2001; Vogel & Feldman, 2009).

Further investigations have corroborated the unique roles of different types of fit and extended the argument for unique types of fit by showing interactive effects. For example, in one study that investigated the simultaneous effects of PJ fit, PO fit, and PG fit using a policy-capturing approach, it was discovered that individuals with a more diverse work history were more concerned with PO fit, while those with greater job tenure cared more about PJ fit (Kristof-Brown et al., 2002). These results suggest that different kinds of fit are differentially important to different individuals. Moreover, the different types of fit interacted with each other and were not

additive in nature but rather compensatory. The compensatory nature of the types of fit implies that a high level of one type of PE fit may overcome low levels on another. Further investigation of the salience of different types of PE fit and how they combine has been recommended (Jansen & Kristof-Brown, 2006; Kristof-Brown & Guay, 2011).

Other efforts towards integration have focused on modeling PE fit, and its subtypes, as a multidimensional variable (Chuang et al., 2016; Darrow & Behrend, 2017; Edwards & Billsberry, 2010; Jansen & Kristof-Brown, 2006; Li, Kristof-Brown, & Nielsen, 2018; Seong & Kristof-Brown, 2012). Multidimensional constructs are those that involve multiple, distinct dimensions that can be treated as a singular theoretical concept (Law et al., 1998; MacKenzie, Podsakoff, & Podsakoff, 2011). Eminent researchers in the PE fit arena Jansen and Kristof-Brown (2006) proposed a multidimensional theory of PE fit in which they suggested that an overall PE fit variable could be formulated by an algebraic combination of the multiple perceptions of different kinds of fit. Further, they hypothesized that individual differences, environmental differences, and stage of the hiring process would all impact the salience of the different kinds of fit. These propositions were extensions of their earlier work into the different types of PE fit and how they are combined (Kristof-Brown et al., 2002).

Edwards and Billsberry (2010) tested Jansen and Kristof's (2006) proposed multidimensional theory by comparing two competing models – one considering all subtypes separately and one considering a composite higher-order PE fit variable. However, their results suggested that there may be no overarching type of PE fit but rather the different types should be considered separately. These results were incongruent with the propositions of Jansen and Kristof-Brown (2006) suggesting a higher-order multidimensional PE fit construct.

Specific types of PE fit have also been investigated as multidimensional. For example, person-group fit has been studied as a multidimensional construct formulated by value-based fit, personality-based fit, and ability-based fit (Seong & Kristof-Brown, 2012). In this study, results supported the presence of a higher-order PG fit contrasting with the results of Edwards and Billsberry's work (2010).

Superordinate and Aggregate Constructs

The accumulation of these efforts towards developing a theory of multidimensionality has led to repeated inquiries into the appropriate model for a higher-order PE fit variable (Chuang et al., 2016; Darrow & Behrend, 2017; Edwards & Billsberry, 2010; Li et al., 2018; Kristof-Brown et al., 2002). Multidimensional constructs can appear in one of two forms: superordinate or aggregate (Edwards, 2001; MacKenzie et al., 2011). Superordinate constructs are produced by reflective models, which are based in classical test theory and are commonly used in industrial-organizational psychology for a variety of unobserved, latent variables (e.g., personality and attitudes, Diamantopoulos & Winklhofer, 2001). Aggregate constructs are produced by lesser known formative models and are based on completely different model assumptions. Socioeconomic status may be the most popularly known formative construct, which is measured as a composite of other variables like education, income, place of residence, parental education, etc. Formative variables are gaining popularity and are deemed to be a necessary and valid route to modeling many constructs in social sciences (Bollen & Diamantopoulos, 2017).

There are several important elements that differentiate reflective and formative models. First, the direction of causality is opposite (Bollen & Diamantopoulos, 2007; Edwards, 2011; Freeze & Raschke, 2007). Reflective variables are modeled as overarching variables that *cause*

responses on lower-level variables (i.e., reflective indicators). Many traditional constructs in psychology are considered reflective in nature. For example, personality is considered a reflective construct as it is assumed that responses to personality items originate from a construct within the person who is responding to the external stimuli of the scale items. Many individual difference variables (e.g., cognitive ability, personality, values, etc.) are considered reflective in nature. On the other hand, formative variables are ***caused by*** the amalgamation of the lower-level formative indicators. For example, socioeconomic status is not a unitary construct originating from within the individual and thus does not ***cause*** income or education level but rather income and education (along with the other formative indicators) combine to lead to a particular level of socioeconomic status. Thus, in reflective models, indicators are caused by the construct; in formative models, the construct is caused by the indicators (Edwards, 2011).

Moreover, with reflective variables, there is an assumption that reflective indicators related to the same superordinate variable are largely interchangeable (Edwards, 2011; MacKenzie et al., 2011). In fact, in a typical scale development for a reflective construct, efforts are made to retain highly intercorrelated items such that the removal of one item does not necessary change the underlying latent construct (Bollen & Diamantopoulos, 2017). By extension, when the items are highly correlated to each other, their levels are expected to increase or decrease collectively.

In contrast, formative models are built with unique formative indicators that are assumed to tap into separate portions of the construct and not overlap such that the removal of any formative indicator would render the construct changed or incomplete (MacKenzie et al., 2011). There is no expectation of uniformly positive or negative intercorrelations between formative indicators, and in fact, two indicators may be negatively related to each other and still be

necessary dimensions of the latent construct. As an outcome of these assumptions, reflective constructs are assumed to be unidimensional while formative constructs are not (Freeze & Raschke, 2007).

Person-Environment Fit as an Aggregate Construct

PE fit, or one of its subtypes, has been considered multiple times as a formative construct and is a viable candidate for such consideration for multiple reasons (Chuang et al., 2012; Darrow & Behrend, 2017; Edwards & Billsberry, 2010; Jansen & Kristof-Brown, 2006; Li et al, 2018). First, PE fit does not, by definition originate entirely within the individual. Instead, PE is an assessment of properties of both the individual and the environment. Second, PE fit can be measured by multiple different subtypes that have been demonstrated to be distinct and not redundant (Cable & Judge, 2005; Kristof & Guay, 2011; Lauver & Kristof-Brown, 2000). Third, the assumption that if one type of fit (e.g., PO fit) fit increases, the others will as well (e.g., PS fit) is highly suspect. There is rationally no reason to assume that a better fit with a job will *necessarily* yield a better fit with a particular supervisor, or that being in the ideal vocation means that you will necessarily get along with your work group. It is not difficult to imagine a high level of fit with your supervisor but a low level of fit with your occupation. Finally, the direction of causality in reflective models may not be appropriate to PE fit. A high PE fit is unlikely to uniformly increase all other subtypes of PE fit, but it is more logical to expect that an overall perception of PE fit will be formulated by aggregating perceptions of lower levels of PE fit as has been the case with other formative variables (e.g., job satisfaction can be measured as a composite of different types of satisfaction including pay, supervisor, etc.; cite). In summary, for the measurement model to accurately reflect theoretical assumptions, PE fit should be measured

as a formative construct (Li et al., 2018). Theory should always precede measurement rather than vice versa (MacKenzie et al., 2011).

Measuring PE fit with a formative model has been found in limited studies to date. Darrow and Behrend (2017) tested both forms of multidimensional constructs and found support for PE fit, and all five main subtypes, as a formative construct rather than a reflective one based on model fit. In 2018, Li and colleagues applied a formative model to an overall person-group fit comprised of subdimensions of PG fit and found that the aggregate construct (and formative model) was supported by the data.

Despite the logic of applying formative modeling to PE fit, and some empirical support, previous research has attempted to empirically justify using a reflective rather than formative model. When the formative model was assessed by Edwards and Billsberry in 2010 in comparison to a model with no over-arching higher-order construct, model fit suggested the aggregate construct was not supported by their data. In 2016, researchers explored the different models of a higher-order PE fit, and their suggested that the superordinate PE fit construct was more appropriate than the aggregate formative PE fit construct (Chuang et al., 2016). Explorations into PG fit, specifically, have also favored the superordinate construct (reflective model) over the aggregate construct (formative model; Seong & Kristof-Brown, 2012; Seong et al., 2015).

This evidence favoring the superordinate model should not dissuade from the use of the formative model outright because the studies investigating the superordinate model are not without weaknesses (Chuang et al., 2016; Edwards & Billsberry, 2010; Seong & Kristof-Brown, 2012). Notably, the lack of support for the formative model is often based on comparing model fit indices of competing models. Comparing non-nested models is difficult as statistical tests of

better/worse fit (via the likelihood ratio test) are not possible in non-nested models thus researchers are left to rely on other indices of fit that are based in part on the number of parameters estimated in the model. As reflective models of PE fit and formative models of PE fit are not nested, a clear preference of one over the other cannot be decided upon by model fit alone (Li et al., 2018; MacKenzie et al., 2011).

Moreover, often in prior work, the formative PE construct being examined was not modeled with consideration of best practices related to formative measurement (Edwards, 2011; Hardin et al., 2011). As formative models have gained in notoriety in recent years, their critics and supporters have debated their utility (Bollen & Bauldry, 2011; Bollen & Diamantopoulos, 2011; Edwards, 2011; Hardin & Marcoulides, 2011). Critics argue that because formative models are not identified, two reflective measures must be included in all modeling efforts. Resulting estimates may vary based on which reflective measures are used leading to a problem known as "interpretational confounding" (Edwards, 2011). Recent work in formative measures argues that the best practice for their use involve models with a higher-order formative measure built by lower order latent variables and the use of two single-item "direct, reflective measures" (Edwards, 2011, p. 383) of the formative construct (Edwards, 2011; Hardin et al., 2011; MacKenize et al., 2011). These best practices have not been adopted in all research where formative models of PE fit were not favored. Therefore, the lack of support for formative approaching to PE fit is not unassailable. Further, the theoretical appropriateness of the formative model should not be ignored in favor of empirical results.

Current Study

In line with choosing a model that most appropriately reflects theory, PE fit should be modeled as a formative construct. Formative constructs are mathematical composites of

formative indicators, and this framework allows for the subdimensions of the construct to be weighted independently of each other. Previous research has suggested that different types of PE fit would be differentially salient to different people, and this warrants further exploration (Jansen & Kristof-Brown, 2006; Kristof-Brown et al., 2002; Kristof-Brown & Guay, 2011). Measurement and prediction are improved when the appropriate model specification is used (Jarvis, MacKenzie, & Podsakoff, 2003), thus efforts to improve the measurement of PE fit is worthwhile. To this end, the purpose of this paper is to explore the aggregate PE fit construct by creating the higher-order variable through different methods of deriving weights for subdimensions.

To date, relative importance of the PE fit types has been determined in different ways. For example, when PO fit, PJ fit, and PG fit were studied collectively, relative importance of each was estimated using hierarchical linear modeling (Raudenbush & Bryk, 2002), with the beta weights reflecting the relative importance of each type of fit (Kristof-Brown et al., 2002). Edwards and Billsberry (2010) also used regression weights derived from structural equation models predicting outcomes of interest to reflect relative importance of different types of PE fit. Seong and Kristof-Brown (2012) arrived at a higher-order PE fit variable through structural equation modeling where the relative contribution of each lower-level variable was reflected in the factor loadings. Chuang and colleagues (2016) and Li and colleagues (2018) estimated the relative contribution of each type of PE fit through RWA. Finally, Jansen and Kristof-Brown (2006) suggested the overall PE fit variable could be constructed as an algebraic sum of weighted PE fit subdimensions though never gave specific on where the weights would originate. Though these different methods have been used to determine the relative importance, or contribution, of the subtypes of PE fit towards overall PE fit, they have not been directly used to

create PE fit composite scores. To this end, I will investigate both RWA and factor loading methods in creating PE fit composites that will then be used to predict outcomes. The predictability of outcomes depending on weighting method will then be compared.

Research Question 1: How does prediction of outcomes vary when salience weights are based on RWA versus factor loadings?

Though the aforementioned approaches have merit, they provide results in aggregate across the entire sample. While this information is useful for summarizing across persons, when forming factor scores, the same weights are applied to all individuals in the sample. This creates the dubious implicit assumption that all individuals in a sample will place the same importance on each of the different PE fit subdimensions. Relative weights of each type of PE fit are derived through sample-level data and applied to each individual rather than allowing for differences in weights across persons. It is highly unlikely that there is uniform salience of the different types of fits to each individual because individuals have different priorities. For some, serving in a specific vocation is of the utmost importance, while for others having a good fit to the supervisor may be the only thing determining overall PE fit. Failing to account for that difference may be degrading the value of the higher-order formative construct. Thus, in this paper I explore several different methods of generating salience weights (i.e., weights reflective the relative importance of each subdimension of PE fit) for the constituent types of PE fit.

To account for individual differences in salience weights, I will directly ask participants to rate the importance of the different kinds of fit to see if these ratings improve upon prediction of outcomes in comparison to extant methods. Specifically, I will create PE fit variables as an algebraic sum weighted by self-stated importance ratings. Specifically, respondents will be

directly asked how important each type of PE fit is, and those weightings will be applied to their raw data to see if prediction of outcomes is enhanced.

Research Question 2: Do PE fit estimates created through directly assessed salience weights predict outcomes better than PE fit estimates based on salience weights derived from the data – specifically (a) relative weights analysis or (b) factor loadings?

Further, early explorations into the types of PE fit have found that the types of fit have complicated interactions (Kristof-Brown & Colbert, 2002). Given that there are three conceptualizations of PE fit and each can be operationalized in five different ways, there are fifteen potential delineations of fit that could interact in complex ways. Examining so many potential interactions between variables is not feasible. Therefore, rather than using a variable-centered approach, a person-centered approach may be beneficial.

The person-centered approach is favorable over variable-centered approaches when seeking to account for differences within individuals by identifying subgroups that are similarity characterized rather than using the assumption that derived patterns apply to all in the full sample (Craig & Smith, 2000). When using a variable-centered approach, variables are assessed for all individuals in the sample and there is an assumption that identified relationships will hold across all the individuals within the sample. On the other hand, the person-centered approach identifies individuals that share particular traits and investigates differential outcomes for individuals in the different groups. Since 15-way interactions are not interpretable, using a person-centered approach to derive profiles may be a better way to see how the types of fit interact. Thus, if individuals do weight different aspects of PE fit differently, we should next explore if there are naturally occurring groups of people with similar weighting schemes. To test this, I propose the following research question.

Research Question 3: Are there naturally occurring groups of people who weight the aspects of PE fit similarly?

If there are naturally occurring groups, knowledge of these groups could assist organizations with planning interventions at a higher-level rather than trying to understand the needs of each individual, which may be impossible or far too time-consuming. Thus, the next extension is to see if group-based weights are notably better or worse at prediction than individual-weights or collective weights.

Research Question 4: If there are naturally occurring groups, does a salience weighting scheme based on group-level preference (i.e., latent profile mean scores) better predict than (a) relative weights analysis, (b) factor loadings, or (c) individually-stated salience weights?

Summary of Contributions

Overall, this research will contribute to extant literature and practice using PE fit by determining the best measurement method for the overall composite construct. The results will provide a solution for how to best form an overall composite of PE fit. Specifically, this paper will create a better understanding of overall PE fit by using best practices to create a formative model of PE fit and incorporating the individual differences in the salience and importance of different subtypes of fit. Further, the paper will determine whether a simplified person-centered approach to the salience weights can provide parsimony while providing incremental prediction beyond sample-based weights. This contributes to theory because theoretical base of PE fit is fragmented, and researchers are not able to test an integrative framework without an appropriate way to measure higher-order PE fit. These results will also benefit practitioners because PE fit is often used in selection, thus better measurement of PE fit will improve outcomes, which hinge

on it such as job choice and job offers. Organizations can better sell their jobs, and candidates can better focus on what really matters to them.

Methods

Participants

The desired sample size for this study is 1000. This sample size is being selected based on the anticipated statistical analyses including relative weights analysis, structural equation modeling, latent profile analysis, and correlations. Using G*Power for relative weights analysis for linear multiple regression with five predictors (one for each subtypes of PE fit), to detect effect sizes of 0.15 with 0.95 power, the minimum required sample size is 139. For the structural equation model, previous research into formative models of PE fit operated with less than 700 (Darrow & Behrend, 2017). For the latent profile analysis, reference to Tein, Coxe, and Cham's (2013) investigation of sample size requirements suggest that a sample size of at least 250 is adequate to find a Cohen's d of 1.5 between classes with at least six indicators in the analysis. I intended to use five indicators in my latent profile analysis. Finally, for the correlations, a sample of size of 571 is suggested by G*Power to find a correlation of 0.15 with 0.95 power. Accounting for data cleaning procedures to eliminate careless responders, I will use a sample size of 1,000 to be conservative in analyses.

Data will be gathered from Amazon's Mechanical Turk. Participants will be included in the study analyses if they are English-proficient, at least 18 years old, live in the United States, and work at least 30 hours per week. Participants will be compensated for completion of the survey. Multiple careless response indicators that aim to flag different types of carelessness will be used to ensure data quality including instructed-response items, consistency indices (e.g., even-odd consistency or psychometric synonyms), and Maximum LongString. Careless responders will be

removed from study analyses as per guidelines in Meade and Craig (2012) and Francavilla, Meade, and Young (2019).

Procedure

Participants will first complete demographic items, then they will complete the scales assessing the different types of PE fit, then they will complete items assessing the importance of each type of PE fit, and finally, they will complete scales for the outcome variables.

Demographics

Demographic variables will be collected from study participants including age, gender, race, and education. As well, relevant job-related variables will be collected including current work role, current job industry, job tenure, number of jobs held, and time in current position.

Study Variables

Three sets of variables will be collected for the study: the different types of PE fit and overall PE fit, items measuring the importance of the different types of PE fit, and outcome variables. Unless, otherwise specified, all items are assessed using a Likert scale ranging from 1 (*strongly disagree)* to 7 (*strongly agree)*.

Person-Environment Fit. Overall person-environment fit will be composite of the subtypes of PE fit; however, for identification of the formative model, two single-item reflective indicators of PE fit must be used. Two items were adapted from Piasentin and Chapman's (2007) overall PO fit scale. The two items selected are "I fit in well with other people in my overall work environment" and "My overall work environment is a good fit for me in terms of what I look for in my professional life."

Subtypes of Person-Environment Fit. To measure the subtypes of PE fit, nine items will be used for each subtype (i.e., PV, PO, PJ, PG, PS). The nine items will include three items

measuring overall fit (adapted from Piasentin & Chapman, 2007), and two items assessing supplementary fit (adapted from Badger & Behrend, 2013), needs-supplies fit (adapted from Cable & DeRue, 2002), and demands-abilities fit (adapted from Cable & DeRue, 2002) each. The same items will be used for each of the five subtypes, but items will be modified to reflect the different operationalizations of fit. Sample items include "I think other people would say that I fit into this occupation", "My organization fulfills what I need from an employer" and "I am able to meet the demands of my team" All items are presented in the appendix.

Importance Ratings. To assess the importance of the different subtypes of PE fit to individuals, four items will be used for each subtype of PE fit. These four items will include one item each for overall fit, supplementary fit, needs-supplies fit, and demands abilities fit. Again, the same items will be used for each subtype after appropriate modification. Items will be adapted from the PE fit items (see Appendix) but will be modified to include the phrase "It is important to me that…" Example items include "It is important to me that my job fulfills what I need from a job" and "It is important to me that I am able to meet the demands of my supervisor." These items will be rated on a scale from 0 (*not at all important*) to 4 (*very important*).

Outcome Variables. In line with previous studies and meta-analyses, three outcome variables will be studied assessing work attitudes: job satisfaction, organizational commitment, and turnover intentions. These three variables have been selected because they are most often studied in meta-analyses and have historically been found to have strong relationships with PE fit and its subtypes.

Job Satisfaction. Job satisfaction will be assessed with the three-item global job satisfaction scale from the Michigan Organizational Assessment Questionnaire (Cammann, Fichman, Jenkins, & Klesh, 1979). One sample item is: "All in all, I am satisfied with my job."

Organizational Commitment. Organizational commitment will be measured with an eight-item scale from Allen and Meyer (1990). An example item is "I would be very happy to spend the rest of my career with my organization."

Turnover Intentions. **T**urnover intentions will be measured with two items from the Michigan Organizational Assessment Questionnaire (Cammann et al., 1979), such as the item "I often think about quitting" and three items from O'Reilly et al (1991) such as the item "I would prefer another job to the one I have now."

Proposed Analyses

To test Research Questions 1 and 2, I will create overall PE fit values through three different approaches. First, using structural equation modeling, factor loadings for each subtype of PE fit will be estimated and then applied to the scale scores to create an overall PE fit score that is a sum of each weighted subtype. Similarly, relative weights analysis will be conducted to arrive at a different set of weights, which will also be applied to the scale scores to create the overall PE fit score. Third, I will multiply the individual importance of subtype scale scores by the PE fit subtype scale scores to get an overall PE fit composite with individualized weights. Then, all three PE fit scores will be correlated with the three outcome variables.

The resultant correlations will be compared to determine which weighting method best correlates with the outcomes of interest. Notably, since these correlations are based on data from the same sample, they are considered dependent correlations. To compare dependent correlations a statistical test can be used during which a test statistic is estimated based on the null hypothesis

that both correlations are equal. The test statistic most appropriate for comparing dependent correlations is calculated using William's formula and follows a *t* distribution with (Steiger, 1980). analyses will address RQ1 and RQ2.

To test, Research Question 3, I will conduct a latent profile analysis (LPA). I will calculate scale scores for the items measuring the importance of each subtype of PE fit, and input those scores into the LPA to see if there are naturally occurring groups of people who have stronger preferences for each subtype of fit. I will test different numbers of profiles (e.g., 1-profile, 2-profile, 3-profile, etc.) to determine how many latent profiles best suit the data. The number of profiles will be determined by considering Akaike's Information Criterion (AIC), Bayesian Information Criterion (BIC), Lo-Mendell-Rubin likelihood ratio test (LMRLRT), bootstrap likelihood ratio test (BLRT), entropy, and interpretability of classes (Nylund, Asparouhov, & Muthen, 2007).

Finally, to address Research Question 4, I will use the LPA results as weights, and use again compare dependent correlations to determine whether group weights explain additional variance beyond (1) factor loadings from the formative model, (2) relative weights analysis and (3) the individual preferences scores.

REFERENCES

Allen, N. J., & Meyer, J. P. (1990). Organizational socialization tactics: A longitudinal analysis of links to newcomers' commitment and role orientation. *Academy of Management Journal*, *33*(4), 847-858.

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

Badger, J. M., & Behrend, T. S. (2013, April). The measurement and dimensionality of perceived person-organization fit. In *28th annual conference of the Society for Industrial & Organizational Psychology, Houston, TX. Badger, JM, Kaminsky, S., & Behrend, TS (in press). Media richness and information acquisition in Internet recruitment. Journal of Managerial Psychology*.

Bollen, K. A., & Bauldry, S. (2011). Three Cs in measurement models: Causal indicators, composite indicators, and covariates. *Psychological Methods*, *16*(3), 265-284.

Bollen, K. A., & Diamantopoulos, A. (2017). In defense of causal-formative indicators: A minority report. *Psychological Methods*, *22*(3), 581-596.

Cable, D. M. & Judge, T. A. (1995). The role of person-organization fit in organizational selection decisions (CAHRS Working Paper #95-07). Ithaca, NY: Cornell University, School of Industrial and Labor Relations, Center for Advanced Human Resource Studies. http://digitalcommons.ilr.cornell.edu/cahrswp/197

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

Cable, D. M., & Judge, T. A. (1997). Interviewers' perceptions of person–organization fit and organizational selection decisions. *Journal of Applied Psychology*, *82*(4), 546-561.

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

Caldwell, D. F., & O'Reilly III, C. A. (1990). Measuring person-job fit with a profile-comparison process. *Journal of Applied Psychology*, *75*(6), 648-657.

Cammann, C., Fichman, M., Jenkins, D., & Klesh, J. (1979). The Michigan organizational assessment questionnaire. *Unpublished manuscript, University of Michigan, Ann Arbor*, 71-138.

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

Chuang, A., Shen, C. T., & Judge, T. A. (2016). Development of a Multidimensional Instrument of Person–Environment Fit: The Perceived Person–Environment Fit Scale (PPEFS). *Applied Psychology*, *65*(1), 66-98.

Craig, S. and Smith, J. (2000), “Integrity and personality: a person-oriented investigation”, paper presented at the 15th Annual Conference of the Society for Industrial Organizational Psychology, New Orleans, LA, April.

Darrow, J. B., & Behrend, T. S. (2017). Person-environment fit is a formative construct. *Journal of Vocational Behavior*, *103*, 117-131.

Diamantopoulos, A., & Winklhofer, H. M. (2001). Index construction with formative indicators: An alternative to scale development. *Journal of Marketing Research*, *38*(2), 269-277.

Edwards, J. A., & Billsberry, J. (2010). Testing a multidimensional theory of person-environment fit. *Journal of Managerial Issues*, 476-493.

Edwards, J. R. (1991). *Person-job fit: A conceptual integration, literature review, and methodological critique*. John Wiley & Sons.

Edwards, J. R. (2001). Multidimensional constructs in organizational behavior research: An integrative analytical framework. *Organizational Research Methods*, *4*(2), 144-192.

Edwards, J. R. (2008). 4 person–environment fit in organizations: An assessment of theoretical progress. *Academy of Management Annals*, *2*(1), 167-230.

Edwards, J. R. (2011). The fallacy of formative measurement. *Organizational Research Methods*, *14*(2), 370-388.

Edwards, J. R., & Shipp, A. J. (2007). The relationship between person-environment fit and outcomes: An integrative theoretical framework. In C. Ostroff & T. A. Judge (Eds.), *Perspectives on organizational fit* (pp. 209-258). San Francisco: Jossey-Bass, 2007.

Ferris, G. R., & Judge, T. A. (1991). Personnel/human resources management: A political influence perspective. *Journal of management*, *17*(2), 447-488.

Francavilla, N. M., Meade, A. W., & Young, A. L. (2019). Social Interaction and Internet-Based Surveys: Examining the Effects of Virtual and In-Person Proctors on Careless Response. *Applied Psychology*, *68*(2), 223-249.

Freeze, R., & Raschke, R. L. (2007). An assessment of formative and reflective constructs in IS research. *ECIS 2007 Proceedings*, 171.

Hardin, A. M., Chang, J. C. J., Fuller, M. A., & Torkzadeh, G. (2011). Formative measurement and academic research: In search of measurement theory. *Educational and Psychological Measurement*, *71*(2), 281-305.

Hardin, A., & Marcoulides, G. A. (2011). A commentary on the use of formative measurement. *Educational and Psychological Measurement*, *71*(5), 753-764.

Hoffman, B. J., & Woehr, D. J. (2006). A quantitative review of the relationship between person–organization fit and behavioral outcomes. *Journal of Vocational Behavior*, *68*(3), 389-399.

Holland, J. L. (1985). Making vocational choices: A theory of vocational personalities and work environments (2nd ed.). Englewood Cliffs, NJ: Prentice Hall.

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

Jarvis, C. B., MacKenzie, S. B., & Podsakoff, P. M. (2003). A critical review of construct indicators and measurement model misspecification in marketing and consumer research. *Journal of Consumer Research*, *30*(2), 199-218.

Judge, T. A., & Ferris, G. R. (1992). The Elusive Criterion of Fit in Human Resources Staffing Decisions. *Human Resource Planning*, *15*(4), 47-67.

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

Kristof-Brown, A. L. (2000). Perceived applicant fit: Distinguishing between recruiters' perceptions of person-job and person-organization fit. *Personnel Psychology*, *53*(3), 643-671.

Kristof-Brown, A., & Guay, R. P. (2011). Person–environment fit. In *APA handbook of industrial and organizational psychology, Vol 3: Maintaining, expanding, and contracting the organization.* (pp. 3-50). American Psychological Association.

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

Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta-analysis of person–job, person–organization, person–group, and person–supervisor fit. *Personnel Psychology*, *58*(2), 281-342.

Lauver, K. J., & Kristof-Brown, A. (2001). Distinguishing between employees' perceptions of person–job and person–organization fit. *Journal of Vocational Behavior*, *59*(3), 454-470.

Law, K. S., Wong, C. S., & Mobley, W. M. (1998). Toward a taxonomy of multidimensional constructs. *Academy of Management Review*, *23*(4), 741-755.

Lewin, K. (1951). Field theory in social science: selected theoretical papers (Edited by Dorwin Cartwright.).

Li, C. S., Kristof-Brown, A. L., & Nielsen, J. D. (2019). Fitting in a group: Theoretical development and validation of the Multidimensional Perceived Person–Group Fit scale. *Personnel Psychology*, *72*(1), 139-171.

MacKenzie, S. B., Podsakoff, P. M., & Podsakoff, N. P. (2011). Construct measurement and validation procedures in MIS and behavioral research: Integrating new and existing techniques. *MIS Quarterly*, *35*(2), 293-334.

Meade, A. W., & Craig, S. B. (2012). Identifying careless responses in survey data. *Psychological Methods*, *17*(3), 437-455.

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.

Nylund, K. L., Asparouhov, T., & Muthén, B. O. (2007). Deciding on the number of classes in latent class analysis and growth mixture modeling: A Monte Carlo simulation study. *Structural Equation Modeling: A Multidisciplinary Journal*, *14*(4), 535-569.

O'Reilly III, C. A., Chatman, J., & Caldwell, D. F. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit. *Academy of Management Journal*, *34*(3), 487-516.

Piasentin, K. A., & Chapman, D. S. (2007). Perceived similarity and complementarity as predictors of subjective person-organization fit. *Journal of Occupational and Organizational Psychology*, *80*(2), 341-354.

Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods* (Vol. 1). Sage.

Sekiguchi, T. (2004). Person-organization fit and person-job fit in employee selection: A review of the literature. *Osaka Keidai Ronshu*, *54*(6), 179-196.

Seong, J. Y., & Kristof-Brown, A. L. (2012). Testing multidimensional models of person-group fit. *Journal of Managerial Psychology*, *27(6)*, 536-556.

Seong, J. Y., Kristof-Brown, A. L., Park, W. W., Hong, D. S., & Shin, Y. (2015). Person-group fit: Diversity antecedents, proximal outcomes, and performance at the group level. *Journal of Management*, *41*(4), 1184-1213.

Steiger, J. H. (1980). Tests for comparing elements of a correlation matrix. *Psychological Bulletin*, *87*(2), 245-251.

Tein, J. Y., Coxe, S., & Cham, H. (2013). Statistical power to detect the correct number of classes in latent profile analysis. *Structural Equation Modeling: A Multidisciplinary Journal*, *20*(4), 640-657.

Terborg, J. R. (1981). Interactional psychology and research on human behavior in organizations. *Academy of Management Review*, *6*(4), 569-576.

van Vianen, A. E. (2018). Person–environment fit: A review of its basic tenets. *Annual Review of Organizational Psychology and Organizational Behavior*, *5*, 75-101.

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*(3), 473-489.

Vogel, R. M., & Feldman, D. C. (2009). Integrating the levels of person-environment fit: The roles of vocational fit and group fit. *Journal of Vocational Behavior*, *75*(1), 68-81.

APPENDIX

Person-Environment Fit *(adapted from Piasentin & Chapman, 2007)*

1. I fit in well with other people in my overall work environment.
2. My overall work environment is a good fit for me in terms of what I look for in my professional life.

Person-Vocation Fit *(adapted from Badger & Behrend, 2013; Cable & DeRue, 2002, Piasentin & Chapman, 2007)*

1. I fit in well with other people who work in my occupation.
2. This occupation is a good fit for me in terms of what I look for in an occupation.
3. I think other people would say that I fit into this occupation.
4. My values "match" or fit my occupation.
5. My personality matches my occupation's culture.
6. My occupation fulfills what I need from a profession.
7. There is a good fit between what my occupation offers me and what I am looking for from an occupation.
8. My abilities are a good fit with the requirements of my occupation.
9. I am able to meet the demands of my occupation.

Person-Organization Fit *(adapted from Badger & Behrend, 2013; Cable & DeRue, 2002, Piasentin & Chapman, 2007)*

1. I fit in well with other people who work for my organization.
2. This organization is a good fit for me in terms of what I look for in an employer.
3. I think other people would say that I fit into this organization.
4. My values "match" or fit this organization.
5. My personality matches my organization's culture.
6. My organization fulfills what I need from an employer.
7. There is a good fit between what my organization offers me and what I am looking for from an organization.
8. My abilities are a good fit with the requirements of my organization.
9. I am able to meet the demands of my organization.

Person-Group Fit *(adapted from Badger & Behrend, 2013; Cable & DeRue, 2002, Piasentin & Chapman, 2007)*

1. I fit in well with other people who work in my team.
2. This team is a good fit for me in terms of what I look for in a team.
3. I think other people would say that I fit into this team.
4. My values "match" or fit my team members' values.
5. My personality matches my team's culture.
6. My team fulfills what I need from a workgroup.
7. There is a good fit between what my team offers me and what I am looking for from a team.
8. My abilities are a good fit with the requirements of my team.
9. I am able to meet the demands of my team.

Person-Job Fit *(adapted from Badger & Behrend, 2013; Cable & DeRue, 2002, Piasentin & Chapman, 2007)*

1. I fit in well with other people who have the same job as me.
2. This job is a good fit for me in terms of what I look for in a job.
3. I think other people would say that I am a good fit for this job.
4. My values "match" or fit with other people who have my same job.
5. My personality matches the personalities of other people in my job.
6. My job fulfills what I need from a job.
7. There is a good fit between what my job offers me and what I am looking for in a job.
8. 5. My abilities are a good fit with the requirements of my job.
9. I am able to meet the demands of my job.

Person-Supervisor Fit *(adapted from Badger & Behrend, 2013; Cable & DeRue, 2002, Piasentin & Chapman, 2007)*

1. I fit well with my supervisor.
2. My supervisor is a good fit for me in terms of what I look for in a boss.
3. I think other people would say that I am a good fit with my supervisor.
4. My values "match" or fit my supervisor's values.
5. My personality matches my supervisor's personality.
6. There is a good fit between what my supervisor offers me and what I am looking for from a supervisor.
7. My supervisor fulfills what I need from a supervisor.
8. My abilities are a good fit with the requirements of my supervisor.
9. I am able to meet the demands of my supervisor.

Importance of Person-Vocation Fit *(adapted from Badger & Behrend, 2013; Cable & DeRue, 2002, Piasentin & Chapman, 2007)*

1. It is important that I fit in well with my occupation.
2. It is important that my personality matches my occupation's culture.
3. It is important that my occupation fulfills what I need from a profession.
4. It is important that my abilities are a good fit with the requirements of my occupation.

Importance of Person-Organization Fit *(adapted from Badger & Behrend, 2013; Cable & DeRue, 2002, Piasentin & Chapman, 2007)*

1. It is important that I fit in well with my organization.
2. It is important that my personality matches my organization's culture.
3. It is important my organization fulfills what I need from an employer.
4. It is important that my abilities are a good fit with the requirements of my organization.

Importance of Person-Job Fit *(adapted from Badger & Behrend, 2013; Cable & DeRue, 2002, Piasentin & Chapman, 2007)*

1. It is important that I fit in well with my job
2. It is important that my personality matches the personalities of other people in my job.
3. It is important that my job fulfills what I need from a job.
4. It is important that my abilities are a good fit with the requirements of my job.

Importance of Person-Group Fit *(adapted from Badger & Behrend, 2013; Cable & DeRue, 2002, Piasentin & Chapman, 2007)*

1. It is important that I fit in well with my team.
2. It is important that my personality matches my team's culture.
3. It is important that my team fulfills what I need from a workgroup.
4. It is important that my abilities are a good fit with the requirements of my team.

Importance of Person-Supervisor Fit *(adapted from Badger & Behrend, 2013; Cable & DeRue, 2002, Piasentin & Chapman, 2007)*

1. It is important that I fit well with my supervisor.
2. It is important that my personality matches my supervisor's personality.
3. It is important that my supervisor fulfills what I need from a supervisor
4. It is important that my abilities are a good fit with the requirements of my supervisor.

Job Satisfaction *(Cammann, Fichman, Jenkins, and Klesh, 1979)*

1. All in all, I am satisfied with my job.
2. In general, I don't like my job.
3. In general, I like working here.

Turnover Intentions *(Cammann, Fichman, Jenkins, and Klesh, 1979; O'Reilly et al., 1991)*

1. I will probably look for a new job in the next year.
2. I often think about quitting
3. I would prefer another job to the one I have now
4. If I have my way, I won't be working for this company a year from now
5. I have seriously thought about leaving this company

Organizational Commitment *(Allen and Meyer, 1990)*

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