PERSONNEL PSYCHOLOGY
2005, 58, 281–342

CONSEQUENCES OF INDIVIDUALS' FIT AT WORK: A META-ANALYSIS OF PERSON–JOB, PERSON–ORGANIZATION, PERSON–GROUP, AND PERSON–SUPERVISOR FIT

AMY L. KRISTOF-BROWN, RYAN D. ZIMMERMAN, ERIN C. JOHNSON
Henry B. Tippie College of Business
Department of Management & Organizations
University of Iowa

This meta-analysis investigated the relationships between person–job (PJ), person–organization (PO), person–group, and person–supervisor fit with preentry (applicant attraction, job acceptance, intent to hire, job offer) and postentry individual-level criteria (attitudes, performance, withdrawal behaviors, strain, tenure). A search of published articles, conference presentations, dissertations, and working papers yielded 172 usable studies with 836 effect sizes. Nearly all of the credibility intervals did not include 0, indicating the broad generalizability of the relationships across situations. Various ways in which fit was conceptualized and measured, as well as issues of study design, were examined as moderators to these relationships in studies of PJ and PO fit. Interrelationships between the various types of fit are also meta-analyzed. 25 studies using polynomial regression as an analytic technique are reviewed separately, because of their unique approach to assessing fit. Broad themes emerging from the results are discussed to generate the implications for future research on fit.

Theories of person-environment (PE) interaction have been prevalent in the management literature for almost 100 years (e.g., Ekehammer, 1974; Lewin, 1935; Murray, 1938; Parsons, 1909; Pervin, 1968), making it "one of the more venerable lines of psychological theorizing" (Dawis, 1992). It is against this interactionist backdrop that the concept of *PE fit* emerged. Described as a "syndrome with many manifestations" (Schneider, 2001, p. 142), PE fit is broadly defined as the compatibility between an individual and a work environment that occurs when their characteristics are well matched. Despite, or perhaps because of, the simplicity of this definition, several distinct types of fit have garnered attention. Much emphasis has

The authors are indebted to the encouragement & feedback provided by SAPS and Frank Schmidt.

Correspondence and requests for reprints should be addressed to Amy L. Kristof-Brown, University of Iowa, Henry B. Tippie College of Business, Department of Management & Organizations, 108 Pappajohn Business Building, Iowa City, IA 52242; amy-kristof-brown@uiowa.edu.

COPYRIGHT © 2005 BLACKWELL PUBLISHING, INC.

been placed on the match between peoples' interests and those of others in a vocation (e.g., Holland, 1985). However, other types of fit, such as an individual's compatibility with his or her job, organization, work group, and supervisors have also emerged as important research domains.

Although research on these other types of fit has been prolific, rarely has it been synthesized to draw conclusions about the true impact of fit on individual-level outcomes. Some progress toward integration has been made. However, most reviews have been nonquantitative, not differentiated between various types of fit, or focused solely on single types of PE fit. Edwards (1991) provided a comprehensive qualitative review of PE fit studies published between 1960 and 1989, but did not include a quantitative analysis of the strength of the reported relationships. Furthermore, his review did not distinguish between fit with the job, group, organization, or vocation, which have been shown to have unique relationships with attitudes and behaviors (Cable & DeRue, 2002). Another qualitative review conducted almost 10 years ago by Kristof (1996) focused exclusively on the person–organization fit literature. A portion of this literature was recently meta-analyzed but only for a limited range of criteria (job attitudes) and a small number of effect sizes ($k = 21$; Verquer, Beehr, & Wagner, 2003). Furthermore, little attention has been paid to the more nascent area of person–group fit or to related topics such as person–supervisor fit. Given the qualitative focus, limited scope, and somewhat dated nature of these past summaries, a quantitative analysis of various types of PE fit is warranted.

The biggest challenge to this type of analysis is the proliferation of conceptualizations, measures, and analytic approaches that make fit an "elusive" construct (Judge & Ferris, 1992). Fit has alternatively been conceptualized as similarity, need–satisfaction, and demand–ability match. Further, it has been operationalized using a variety of content dimensions, including skills, needs, preferences, values, personality traits, goals, and attitudes. Strategies for measuring fit also vary widely, from directly asking individuals to report their perceived fit to researchers indirectly assessing fit through explicit comparisons of separately rated P and E characteristics. When indirect assessments are used, E may be the subjective environment as assessed by the individual or the objective environment as determined by other sources. Moreover, the environment can be conceptualized as an entity with its own unique characteristics or as an aggregate of its members' characteristics. Sampling strategies and the potential for common method bias also vary widely across studies, rendering interpretation of some results problematic. Although this diversity poses a challenge to integration, it may also produce systematic variations in reported fit–outcome relationships. Much of this meta-analysis, therefore, is concerned with articulating theory-driven rationale for moderators of the

fit–outcome relationships and evaluating the empirical evidence regarding their impact.

Accordingly, the purpose of this study is to empirically summarize the existing literature in four critical domains of PE fit: person–job, person–organization, person–group, and person–supervisor fit. Specifically, we address the relationship between these types of fit and individual-level preentry outcomes (applicant attraction, job acceptance, intent to hire, job offer) and postentry consequences (attitudes, withdrawal behaviors, strain, performance, and tenure). Delving deeper into these meta-analytic findings, we examine multiple moderators of fit–outcome relationships including various conceptualizations, operationalizations, and measurement approaches, as well as study design. In addition, because of the recent growth in studies using a polynomial regression approach (Edwards, 1993, 1994) to study fit indirectly, we also review these studies. However, because the interpretation of the multiple correlations from polynomial regressions is ambiguous, we describe the general forms of the relationships depicted in these studies, rather than meta-analyze them. This allows us to comprehensively review the fit literature before drawing conclusions. In the discussion section we review the implications of our findings, propose a coherent agenda for future research, offer methodological guidance for future studies of fit, and present practical guidance for how to capitalize on the benefits of fit.

Types of Person–Environment Fit

Based in the tradition of interactional psychology, the notion of people being differentially compatible with jobs, groups, organizations, and vocations is almost axiomatic. The concept of PE fit has been described as, "so pervasive as to be one of, if not the dominant conceptual forces in the field" (Schneider, 2001, p. 142). It is not surprising, therefore, that management scholars have a sustained interest in the fit between individuals and their work environments. Perhaps in part because of this interest, research on fit continues to be one of the most eclectic domains in management. We briefly review the primary types of fit to establish and articulate the criteria used for inclusion and exclusion of studies in our analyses.

Person × Environment Interactions

Interactional psychology includes numerous studies that assess PE fit as a statistical interaction between the person and environment. Personality may be investigated as a moderator of environmental forces, as in the case of growth need strength moderating the job characteristics–job satisfaction relationship (e.g., Fried & Ferris, 1987; Loher, Noe, Moeller,

& Fitzgerald, 1985), or situations may be viewed as moderators of the personality–outcome relationships (e.g., Colbert, Mount, Harter, Witt, & Barrick, 2004; Turban, Lau, Ngo, Chow, & Si, 2001). Despite their conceptual appeal, moderator studies rarely conceptualize the person and environment on commensurate dimensions. Without this standard it is impossible to directly compare P and E values, a fundamental property of the PE fit theory (Edwards, Caplan, & Harrison, 1998; French, Rogers & Cobb, 1974). Thus, we address only studies that measure P and E on commensurate dimensions. Even when commensurate dimensions are used, there are additional complications with P × E interaction studies (e.g., Arnaud, Ambrose, & Schminke, 2002; Goodman & Syvantek, 1999; Judge & Bretz, 1992; Lievens, Decaesteker, & Coetsier, 2001). First, multiple correlations that are typically reported as effect sizes include main effects as well as interaction effects, rendering them inconsistent with other fit measures. Second, "the interaction between person and environment variables does not reflect their proximity to one another" (Edwards et al., 1998, p. 41), a necessary precondition for fit.

Person-Vocation Fit

PE fit research is generally characterized by matching individuals to various levels of their work environment (Judge & Ferris, 1992; Kristof, 1996). The broadest of these levels is the vocation or occupation. This research on *person–vocation* (P–V) fit includes vocational choice theories that propose matching people with careers that meet their interests (e.g., Holland, 1985; Parsons, 1909; Super, 1953), and the theory of work adjustment (Dawis & Lofquist, 1984; Lofquist & Dawis, 1969), which emphasizes that adjustment and satisfaction are the result of employees' needs being met by their occupational environment. Because this research has been extensively reviewed by others (Assouline & Meir, 1987; Spokane, 1985; Tranberg, Slane, & Ekeberg, 1993), we do not include it in our analyses.

Person–job Fit

Instead, we emphasize an area closely related to PV fit but defined more narrowly as the relationship between a person's characteristics and those of the job or tasks that are performed at work. This is the domain of *person–job* (PJ) fit (e.g., Edwards, 1991; Kristof, 1996). Edwards (1991) outlined two basic conceptualizations of the PJ fit. The first is the demands-abilities fit, in which employees' knowledge, skills, and abilities are commensurate with what the job requires. The second form of PJ fit occurs when

employees' needs, desires, or preferences are met by the jobs that they perform. This type of fit, often labeled needs–supplies or supplies–values fit, has been the emphasis of various theories of adjustment, well-being, and satisfaction (Caplan, 1983; French, Caplan, & Harrison, 1974; Harrison, 1978; Locke, 1969; Porter, 1961, 1962).

Having restricted our definition of fit to the compatibility that results from personal and environmental characteristics being well matched, it was necessary to exclude research on related but distinct topics. Studies of underemployment (e.g., Feldman, Leana, & Bolino, 2002), overqualification (e.g., Johnson & Johnson, 1999), role overload (e.g., Netemeyer, Burton, & Johnston, 1995), and relative deprivation (Feldman et al., 2002) were not included because measures of these concepts typically assess the degree to which there is "misfit" in only one direction. Studies of met expectations were also not included (e.g., Bunderson, 2001). This decision was based on Schneider's reasoning that "a person's expectations probably represent some modification of his preferences based on information" (1975, p. 460). Thus, they are likely to be tempered by reality or past experiences, rather than reflect the individuals' characteristics, which are the basis for fit.

Person–Organization Fit

Research on *person–organization* (PO) fit, which addresses the compatibility between people and entire organizations, is the second type of fit we review. Beginning with Tom's (1971) suggestion that individuals will be most successful in organizations that share their personalities, research has emphasized individual–organizational similarity as the crux of PO fit. Some research has followed Tom's (1971) operationalization of PO fit as personality–climate congruence (e.g., Christiansen, Villanova, & Mikulay, 1997; Ryan & Schmitt, 1996); however, Chatman's (1989) seminal theory of PO fit focused attention primarily on values. With the subsequent validation of the Organizational Culture Profile (O'Reilly, Chatman, & Caldwell, 1991), a values-based instrument, value congruence became widely accepted as the defining operationalization of PO fit (Kristof, 1996; Verquer et al., 2003). A lesser used but theoretically consistent operationalization is PO goal congruence (e.g., Vancouver & Schmitt, 1991; Witt & Nye, 1992). In all cases, the emphasis is on the compatibility between commensurate individual and organizational characteristics.

Excluded from our analysis are studies that assess agreement on organizational culture or climate. For example, studies of climate discrepancy (e.g., Joyce & Slocum, 1982) typically ask participants to describe the climate in their organizations. Thus, they typically do not assess how well the climate matches participants' personal characteristics or meets

their needs, as much as the extent to which an individual's perception concurs with other's. Similarly, climate strength studies (e.g., Schneider, Salvaggio, & Subirats, 2002) emphasize within-group consistency in climate perceptions, rather than individual's fit with the organizational characteristics. Therefore, studies in both of these areas were not deemed relevant to this analysis.

Person–Group Fit

The third category of research we review is *person–group* (PG) or person–team fit, which focuses on the interpersonal compatibility between individuals and their work groups (Judge & Ferris, 1992; Kristof, 1996; Werbel & Gilliland, 1999). Of all types of fit, PG fit research is the most nascent. Despite high levels of interest in coworker similarity on demographic variables (e.g., Riordan, 2000), little research has emphasized how the psychological compatibility between coworkers influences individual outcomes in group settings. Only a handful of published studies have examined the fit on characteristics such as goals (Kristof-Brown & Stevens, 2001; Witt, 1998) or values (Adkins, Ravlin, & Meglino, 1996; Becker, 1992; Good & Nelson, 1971). There are, however, several studies that have examined PG fit on personality traits (Barsade, Ward, Turner, & Sonnenfeld, 2000; Hobman, Bordia, & Gallois, 2003; Kristof-Brown, Barrick, & Stevens, in press; Slocombe & Bluedorn, 1999; Strauss, Barrick, & Connerley, 2001).

These studies are distinct from research on team similarity or homogeneity (e.g., Barry & Stewart, 1997; Jehn, Northcraft, & Neale, 1999) and studies that aggregate individuals' fit to the unit level (e.g., Harrison, Shaffer, & Bhaskar, 2002; Ostroff, 1993; Salvaggio, 2004). These aggregate-level studies predict unit-level outcomes, rather than individual-level criteria that we emphasize. Studies by Ostroff and Rothhausen (1997) and Vancouver, Millsap, and Peters (1994) demonstrate that fit–outcome relationships differ when they are assessed at higher levels of analysis, underscoring the need to differentiate aggregate-level fit studies from others.

Research on relational demography is also excluded from our review. Although demography assesses a person's similarity to group members to predict individual-level outcomes, the emphasis is exclusively on demographic variables (such as race, age, gender). Milliken and Martins (1996) and Harrison, Price, and Bell (1998) categorize demographic variables as surface-level or easily observable attributes and contrast them with other deep-level, underlying characteristics such as values or goals. Harrison et al. (1998) demonstrated that there are meaningful differences between

similarity on these types of characteristics, and that over time it is fit on deep-level characteristics that has the greatest impact on outcomes.

Person–Supervisor Fit

A final form of PE fit exists in the dyadic relationships between individuals and others in their work environments. Although dyadic fit may occur between coworkers (e.g., Antonioni & Park, 2001), applicants and recruiters (e.g., Graves & Powell, 1995), and mentors and protégés (e.g., Turban & Dougherty, 1994), by far the most well-researched area is the match between supervisors and subordinates (e.g., Adkins, Russel, & Werbel, 1994; Van Vianen, 2000). Given the limited number of studies on other types of dyadic fit and the importance of supervisor–subordinate relationships on work outcomes (Griffeth, Hom, & Gaertner, 2001), the final area we meta-analyze is *person–supervisor* (PS) fit. Studies of leader–follower value congruence (e.g., Colbert, 2004; Krishnan, 2002), supervisor–subordinate personality similarity (Schaubroeck & Lam, 2002), and manager–employee goal congruence (e.g., Witt, 1998) are included in this category. In each case, the supervisors' personal characteristics represented the environment. Studies in which supervisors reported work group or organizational characteristics (e.g., Becker, 1992; Becker, Billings, Eveleth, & Gilbert, 1996) were classified as either PG or PO fit, respectively.

Related to the PS fit domain is research on leader member exchange (LMX; e.g., Graen, 1976) and perceptual similarity (e.g., Wexley & Pulakos, 1983). Although each of these areas emphasizes the dyadic interactions between individuals, they are excluded from this review. In the case of LMX, the emphasis is on the nature of the relationship that develops between leaders and followers not the match of their underlying psychological characteristics. Therefore, only LMX studies that also examine PS fit are included in our analyses. Studies of perceptual similarity, that is, similarity between a subordinate's description of the manager and the manager's self-description were also excluded, because they assess accuracy of perceptions rather than fit.

Moderator Analyses

Even after these exclusions, there is still remarkable heterogeneity in the way that fit has been conceptualized and measured. A thorough understanding of fit's influence on individual-level outcomes must account for these differences. Next, we provide theory-driven rationale for conceptual and methodological issues that we expect to moderate fit–outcome

relationships, with an emphasis on PJ and PO fit because of the number of studies available on these topics.

Conceptualizations of Fit

Complementary versus supplementary. Muchinsky and Monahan (1987, pp. 268–269) highlighted a troubling oversight in the PE fit literature when they noted that although "'person–environment congruence' refers to the degree of fit or match between the two sets of variables . . . what exactly constitutes a fit or match is not totally clear." In response to this ambiguity, they proposed two distinct conceptualizations of PE fit: complementary and supplementary fit. For *complementary fit,* "the basis for a good fit is the mutually offsetting pattern of relevant characteristics between the person and the environment" (Muchinsky & Monahan, 1987, pp. 272). Although they operationalized this type of fit strictly as individuals' skills meeting environmental needs (*demands–abilities fit*), Kristof (1996) expanded the definition to include when individuals' needs are met by environmental supplies (*needs–supplies fit*). Thus, complementary fit occurs when individuals' characteristics fill a gap in the current environment, or vice versa. The second major conceptualization of fit, *supplementary fit,* exists when the individual and the environment are similar. Whereas complementary conceptualizations of fit have dominated the PJ fit literature, supplementary fit has been the focus of other types of fit.

Theories of need fulfillment (e.g., Locke, 1976; Rice, McFarlin, Hunt, & Near, 1985) explain the primary mechanism by which complementary needs–supplies fit influences attitudes. These theories share the common proposition that people will experience more positive job attitudes when their needs are satisfied. Recently, it has been argued that supplementary fit may also function through the process of need fulfillment (Van Vianen, 2000). Theories such as Festinger's theory of social comparison (1954), Heider's balanced state theory (Heider, 1958), and Byrne's similarity-attraction paradigm (1971) all suggest that people have a fundamental need for consensual validation of their perspectives, which can be met by interacting with similar others. Therefore, achieving supplementary fit is one way to have personal needs met, but obtaining needs–supplies fit is more direct. Therefore, we expect that supplementary fit will have a somewhat weaker relationship with job attitudes than does needs–supplies fit. Consistent with this logic, demands–abilities fit should have the smallest relationship with job attitudes because it emphasizes meeting environmental, rather than individual needs.

We expect a different pattern of relationships for nonattitudinal criteria, such as performance, strain, or turnover. If a person does not have the requisite abilities to meet situational demands, overall and task performance are likely to suffer. Even contextual performance may

decline, if employees do not have adequate attentional resources (Kanfer & Ackerman, 1989) to engage in organizational citizenship behaviors because they are being stretched by task demands. Strain should be high under such conditions, and turnover may result because of consistent underperformance. This implies a stronger effect for demands–abilities fit on the aforementioned criteria. However, needs–supplies and supplementary fit are also likely to affect these outcomes. The theory of reasoned action suggests that attitudes toward a given object will generally result in behaviors that are consistent with those attitudes (Ajzen & Fishbein, 1977; Fishbein & Ajzen, 1975). Thus, if individuals' needs are being met at work, resulting positive attitudes may mitigate strain, facilitate higher performance, and reduce turnover. Nonetheless, because proficiency matters to outcomes of strain, performance, and turnover, we expect that the impact of demands–abilities fit will be greater than the other conceptualizations of fit. Studies that include multiple conceptualizations of fit (i.e., assess needs–supplies and demands–abilities fit) should produce stronger effects than those using single conceptualizations because they tap into multiple mechanisms by which fit has an impact.

Content dimensions of PE fit. Further complicating research on PE fit is the variety of content dimensions used to operationalize fit. The decision on what dimensions or characteristics to use is somewhat determined by the broader conceptualization of fit being explored. For example, a demands–abilities fit is almost exclusively based on the content dimensions of individuals' KSAs and job or organizational demands. However, with growing recognition of the importance of personality on work performance (Barrick & Mount, 1991), a few studies have expanded the demands-abilities fit to include personality traits and values (e.g., Edwards, 1996; Lauver & Kristof-Brown, 2001). Similarly, a needs–supplies fit, which has traditionally emphasized individuals' needs and preferences, can also be considered to include value preferences, or what types of values a person wants in an organization. For example, the wording of the original Organizational Culture Profile (OCP; O'Reilly, Chatman, & Caldwell, 1991) requests that respondents indicate what values they *prefer* or want in an organization, rather than what their personal values actually are. These scores are then compared to what they receive from the organization. Worded in such a way, studies using the original OCP assess value-fulfillment which corresponds more directly to needs–supplies complementary fit.

Studies of supplementary fit have traditionally used the broadest array of content dimensions. With roots in theories of interpersonal attraction (Byrne, 1971) and the attraction–selection–attrition framework (Schneider, 1987), supplementary fit requires that P and E are at similar levels on commensurate dimensions. These dimensions may include values, goals, personality traits, or attitudes. For example, Cable and Judge (1996) shortened the OCP and revised it to be more clearly a measure of

supplementary fit, by rephrasing the questions to "What values are most *indicative of you*? [emphasis added]" and "What values are most indicative of the organization?" Personality and goals have also been used to assess supplementary fit in the domains of PO, PG, and PS fit (e.g., Adkins et al., 1994; Kristof-Brown & Stevens, 2001; Ryan & Schmit, 1996; Witt & Nye, 1992).

Reviews of fit often contain heated debates about the relative merits of these dimensions and how they should be measured (e.g., Edwards, 1994; Kristof, 1996; Meglino, Ravlin, & Adkins, 1991). This has been particularly true in the domain of PO fit. Chatman (1991) argued for values as the basis of PO fit because values are enduring characteristics of individuals and organizations. Yet, Ryan and Kristof-Brown (2003) suggested that personality traits are more stable, proximal to behavior, and visible in others' behavior than are values. They conclude, therefore, that "personality-based PO fit should have at least as strong as, if not a stronger, influence on individuals' attitudes and behaviors than would values-based fit" (p. 266). An important consideration, however, is that although similarity on values is believed to be universally desirable (Meglino & Ravlin, 1998), sometimes personality *dis*similarity may be preferable (Carson, 1969). For example, Kristof-Brown et al. (in press) demonstrate that people high on extraversion feel more attraction to their teams if the other members are more introverted, and vice versa. If similarity on some traits, but not others, is desirable, then overall personality congruence should have weaker relationships with outcomes than does value congruence. Alternatively, for goals, PO congruence should always be preferable. Sharing goals makes it more likely that individuals will receive support and reinforcement for goal attainment. However, goals are less stable than values. Therefore, compared to other supplementary fit dimensions, we expect that goals will result in effect sizes greater than personality-based measures, but less than values-based measures. KSA-based studies of PO fit are rare, although some authors have included requisite KSAs into measures that combine multiple content dimensions to assess fit. For example, Bretz and Judge (1994) assessed fit along the dimensions of values, personality, needs, and KSAs. By including each of these dimensions, such combined measures are likely to capture a more holistic assessment of fit. Therefore, it is expected that studies using combined measures will report stronger effect sizes than studies assessing just value congruence.

Measurement of Fit

Direct versus indirect measures. A potentially meaningful distinction between types of fit studies is whether they assess fit directly or indirectly

(Kristof, 1996). Most scholars agree that *perceived fit*[1] is defined by a *direct assessment* of compatibility (French et al., 1974; Kristof, 1996). Kristof (1996) distinguished this from actual fit, an inclusive term used to describe measures in which researchers *indirectly assess* fit through explicit comparisons of separately rated P and E variables. French et al. (1974) further differentiated such explicit comparisons into *subjective* fit, defined as the match between the person and environment as they are perceived and reported by the person, and *objective* fit as the match between the person as he or she really is and the environment as it exists "independently" of the person's perception of it (French et al., 1974, p. 316). Over the years, the terms perceived and subjective fit have often been used interchangeably (e.g., Cable & DeRue, 2002; Judge & Cable, 1997; Kristof, 1996). However, because the cognitive processes underlying each may differ, we believe it is important to distinguish between these types of fit. Thus, we use the terms as follows: (a) *perceived fit*, when an individual makes a direct assessment of the compatibility between P and E; (b) *subjective fit*, when fit is assessed indirectly through the comparison of P and E variables reported by the same person; and (c) *objective fit*, when fit is calculated indirectly through the comparison of P and E variables as reported by different sources.

When an individual has a high degree of contact with reality (i.e., assesses the environment accurately) and an accurate self-assessment, these three types of fit should have similar relationships with criteria (French et al., 1974). In practice, however, they are often only weakly related (Cable & Judge, 1997; Kristof-Brown & Stevens, 2001). This may be due to individuals' propensity to interpret environmental cues in ways that allow them to maintain a positive self-concept (Endler & Magnussen, 1976; French et al., 1974). Both self-perception theory (Bem, 1967) and cognitive dissonance theory (Festinger, 1957) suggest that individuals are driven to maintain internally consistent perceptions. It would produce cognitive dissonance for an individual to appraise a work environment as providing a poor fit but still report a high level of satisfaction with that environment. Therefore, it is likely that perceived, subjective, and objective fit differ not only in how they are measured but also in what they represent conceptually.

Perceived fit allows the greatest level of cognitive manipulation because the assessment is all done in the head of the respondents, allowing them to apply their own weighting scheme to various aspects of the environment. This permits individual differences in importance or salience of

[1]Note that we define perceived and subjective fit to be consistent with French et al.'s (1974) original use of the terms, but these labels are reversed in Verquer et al. (2003).

various dimensions to be captured in their ratings. Alternatively, indirect measures require separate ratings across specific P and E dimensions, and each dimension is weighted equally. Indirect measures of subjective fit still have P and E variables assessed by the same source, which does not fully negate consistency biases. Because both perceived and subjective fit are assessed by a single source, we expect that they will have similar effects on outcomes, particularly attitudes, with perceived fit having slightly stronger effects because it allows a single individual to report a holistic assessment of fit and is more prone to consistency effects.

Compared to perceived and subjective fit, objective fit is a less proximal determinant of attitudes and behavior (Cable & DeRue, 2002). Yet, unless people are completely removed from reality, the objective environment should have some influence on their perceptions of E. The objective environment may be made quite clear in experimental studies that use descriptions of the environment (e.g., Dineen, Ash, & Noe, 2002; Judge & Bretz, 1992; Kristof-Brown, Jansen, & Colbert, 2002). In addition, strong organizational cultures and the shared perceptions of coworkers constitute socially derived environments that have been found to have a meaningful impact on how people react to their work situations (e.g., Kozlowski & Klein, 2000; Salancik & Pfeffer, 1978). However, because this objective reality must be filtered through individuals' perceptions, we expect that objective fit will have the weakest relationships with most criteria. However, this decrease should be less pronounced for performance criteria than for attitudes because maximum performance should be limited by an objective demand–ability mismatch.

Study Design

Assessing the environment. In cases of objective fit, Van Vianen (2000) implied another potential moderator when she differentiated between the fit of a person with an organization and the fit of a person with the people in the organization. Although Schneider's (1987) ASA framework purports that "the people make the place," group effects theory (e.g., Blau, 1960; Merton & Kitt, 1950) and theories of organizational culture (e.g., Levinthal & March, 1993; Schein, 1992) suggest that higher-level units are more than the aggregate of attributes of their members. Thus, it may be overly simplistic to assume that the arithmetic mean of the people in a unit can capture the extent of culture or climate. Because aggregate personal characteristics reflect current members only, whereas culture and climate reflect the totality of a unit's history, we expect weaker relationships between fit and criteria in studies using aggregate members' personal characteristics, rather than perceptions of the overall unit.

Sampling strategy. Recent results have demonstrated that meta-analytic estimates are not stable when single-unit (e.g., job, group, organization) samples and multi-unit samples are combined (Gully, Incalcaterra, Joshi, & Beaubien, 2002; Ostroff & Harrison, 1999; Roth, Bevier, Bobko, Switzer, & Tyler, 2001). Although PG and PS studies necessitate multi-unit samples to obtain adequate sample size, PJ and PO studies are often conducted for one job or within one organization. Therefore, single- versus multi-unit samples are a potential moderator for these types of fit. Because multi-unit samples permit a broader range of environments to be represented, there is reason to expect that fit relationships will be stronger in multi-unit samples. However, Chatman (1989) noted that fit will be most influential in strong situations. Therefore, when a single-unit environment is strong, relationships should be greater than in multi-unit samples, but the reverse is true for single-unit samples with weak environments. Because of these competing rationales, we are unable to predict the direction that this moderator will take.

Common method bias. Finally, it is important to address concerns that have been raised regarding the heavy reliance on single-source reporting of fit–outcome relationships (Edwards, 1993; Van Vianen, in press). Despite general awareness that common rater bias can inflate reported effect sizes, particularly for attitude–attitude relationships (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), PE fit studies often include predictor and outcome variables reported by the same person. This is particularly problematic for studies that examine the relationship between perceived or subjective fit and attitudes. Because common rater bias can produce artifactual covariance due to consistency biases and illusory correlations (Podsakoff et al., 2003), we anticipate that the strongest effect sizes will be reported for studies in which fit and the criteria are rated by the same individual, followed by those using a rater for two of the three potential variables (P, E, and criteria), and finally by those using separate ratings of everything.

One approach to reducing the impact of common rater bias, which is primarily a concern in fit–attitude studies, is to temporally separate the measurement of the predictor and criterion. Because a time delay should reduce consistency and illusory correlations between constructs (Podsakoff et al., 2003), we expect larger effect sizes between fit and attitudes measured concurrently versus at different points in time.

Comparing Types of Fit

It is worth mentioning why we do not treat type of fit (PJ, PO, PG, PS) as a moderator. Because each type of fit represents compatibility with different aspects of the environment, and has been shown to have unique

impacts on outcomes (Cable & DeRue, 2002; Kristof-Brown, 2000), we analyze each separately. However, we do anticipate differences in the relative magnitude of each type with various criteria. Research has shown that job-related constructs are most strongly associated with attitudes about the job, whereas organization-related constructs are more closely related to organizational attitudes (Shore & Martin, 1989). In the domain of fit, job satisfaction should be most strongly associated with PJ fit, organizational commitment with PO fit, satisfaction with coworkers with PG fit, and satisfaction with supervisor with PS fit. Other criteria, such as intent to quit, tenure, and turnover are likely to be influenced by multiple types of fit because they represent attitudes or behaviors relevant to the total work experience (Barber, 1998; Mitchell, Holtom, Lee, Sablynski, & Erez, 2001). The same is expected for organizational attraction because applicants generally get recruited based on elements of the job and organization simultaneously. However, intent to hire is expected to be more related to PJ than PO fit because the emphasis of most selection techniques is to assess whether the applicant has the requisite job-related skills (Bowen, Ledford, & Nathan, 1991).

Whereas task performance is highly dependent on skill-based job proficiency, contextual performance has volition and predisposition as its major source of variation and is not likely to be role-prescribed (Borman & Motowidlo, 1997). It is more directed toward helping and cooperating with others, supporting the organization's mission, and putting in extra effort when necessary. Therefore, PJ fit should have the greatest impact on task performance, whereas contextual performance is more likely to be influenced by PO or PG fit. Because overall performance contains both task and contextual elements, all types of fit should be relevant.

Although we treat the various types of fit separately, it is informative to examine the relationships between them. Kristof (1996) called for an increase in research that simultaneously examines multiple types of fit, and recent studies show a trend in this direction (e.g., Cable & Derue, 2002; Saks & Ashforth, 2002). Because of their emphasis on the people in the environment, and on need–supplies and supplementary fit conceptualizations, we expect that PO, PG, and PS fit will be more strongly related to each other than to PJ fit. This should particularly be true for cases of PJ fit that reflect a demands–abilities perspective, rather than a needs–supplies perspective. Moreover, because relationships with coworkers and supervisors are involved in everyday work experiences, we anticipated that PS and PG fit would be more strongly related than either one with PO fit, which may be tempered by the closer relationships with colleagues. Finally, we expect that all relationships between types of fit will be ameliorated when a direct versus indirect measurement strategy is used because of the increased likelihood of consistency effects in measures of perceived fit.

Polynomial Regression

One of the most dramatic changes to studies of PE fit in recent years was the introduction of polynomial regression as an alternative to Profile Similarity Indices (PSIs) for assessing fit indirectly. PSIs include difference scores, a category of indices including (D, |D|, D^1, D^2, and Mahalanobis' D), base fit measures on the sum of differences between P and E profile elements (Edwards, 1993). They also include profile correlations, which assess similarity in the rank ordering of elements within P and E profiles (Edwards, 1993). Despite the prevalence of these approaches and their ability to capture the "holistic" nature of fit, they engendered criticism around issues of conceptual ambiguity, discarded information, insensitivity to the source of differences, and overly restrictive constraints (Cronbach, 1958; Edwards, 1993; Nunally, 1962).

In response to these concerns, Edwards (1993, 1994, 1996) suggested using polynomial regression to assess PE fit. Fundamentally, this approach avoids collapsing person and environment measures into a single score that captures "fit." Instead, both P and E, and associated higher-order terms (P^2, $P \times E$, and E^2) are included as predictors. Because the P and E and the dependent variables are all unique, fit relationships are depicted in three-dimensional surface plots. Although effect sizes can be calculated from the multiple correlations of these studies, these include main and quadratic effects not present in direct or PSI measures of fit, rendering a meta-analysis of their results ambiguous. To determine whether a fit relationship is supported, characteristics of the surface plot must be examined. Results often depict more complicated relationships than are determinable with PSIs (e.g., Edwards, 1993, 1996). Because of their increased usage, as well as the potentially useful insights that they provide regarding the nature of fit, we include a qualitative summary of their findings in our review.

Method

Data Collection

To identify studies for inclusion in the meta-analyses, we searched several social science databases and national conference programs using the following key words: fit, congruence, similarity, interaction, person–environment, person–organization, person–job, person–culture, person–group, person–team, person–supervisor, and supervisor–subordinate. Specifically, we searched the American Psychological Association's PsycINFO (1887–2003), ABI Inform (1971–2003), and Dissertation Abstracts International (1861–2003) databases for relevant studies. To obtain unpublished or in-press research we searched the Society for

Industrial and Organizational Psychology (1995–2004) and Academy of Management (1994–2004) annual conference programs using the search terms. We also conducted a manual search of our files and reviewed the reference lists of other summaries (Edwards, 1991; Kristof, 1996; Verquer et al., 2003) to identify relevant articles missed in the computerized search. Finally, we contacted 24 prominent fit researchers and asked them to share their emerging or unpublished research relating to fit.

Using these search procedures, we identified over 750 total studies, which we then screened to determine their relevance. We excluded nonempirical studies (e.g., review articles, conceptual articles) and articles on topics previously described as outside the purview of this review. Additional exclusions were studies conducted in nonwork contexts (e.g., Burnett, Vaughan, & Moody, 1997; Luke, Roberts, & Rappaport, 1993; O'Reilly & Chatman, 1986) and those examining fit between people and national cultures (e.g., Harrison, Shaffer, & Bhaskar, 2002; Van Vianen, De Pater, Kristof-Brown, & Johnson, 2004).

All work-related outcomes were considered for inclusion, but in general, only those having five or more total correlations or a total sample size of over 1,000 are reported here. A few exceptions are made for moderator analyses or criteria that are conceptually relevant to PG and PS fit, which have a small number of total studies. Preentry criteria included organizational attraction and job acceptance reported by applicants, and intent to hire and job offers from the organization. Postentry outcome variables included job satisfaction, organizational satisfaction, coworker satisfaction, cohesion, supervisor satisfaction, LMX, organizational commitment, organizational identification, intentions to quit, trust in manager, politics, task performance, contextual performance, overall performance, withdrawal behaviors, strain, turnover, and concurrent tenure. Not all dependent variables were available for all types of fit.

For studies that assessed perceived fit, the correlations of these direct measures with the criteria were used to represent the effect size. For studies assessing subjective or objective fit using a PSI, correlations of the calculated fit term and the criteria were generally reported. In a small number of studies, an F-statistic or t-statistic was converted to a correlation (Cohen & Cohen, 1983). After evaluating the studies based on the inclusion criteria, 172 codable studies, producing 836 unique effect sizes, were available for our meta-analyses. Sixty-two studies with 225 effect sizes were included in the PJ fit meta-analyses; 110 studies with 450 effect sizes were included in the PO fit meta-analyses; 20 studies with 104 effect sizes were included in the PG fit meta-analyses; and 17 studies with 57 effect sizes were

included in the PS fit meta-analyses.[2] Twenty-seven studies provided 34 correlations between various types of fit. Twenty-five additional studies reported polynomial regression results, which are qualitatively reviewed. All studies included in the meta-analyses are indicated in the reference section, as are the polynomial regression studies.

Data Coding

We coded the characteristics of each study on multiple dimensions. Specifically, we coded the following: type of fit (PJ, PG, PO, and PS), context (preentry vs. postentry), sample size, effect size, and reliability of measures. We also coded for potential moderators. First, we coded the conceptualization of fit: supplementary, complementary needs–supplies, complementary demands–abilities or combined (any combination of the previous three types). Second, we coded for the content dimension on which fit was assessed: values, personality, needs, goals, KSAs, combined measures (i.e., including multiple content dimensions), or other (e.g., strategy). Third, we coded whether direct measures of perceived fit or indirect measures of objective or subjective fit were used. Within the subgroup of studies that used objective measures, we coded whether the environment was assessed as an independent entity or as the aggregation of members' characteristics. We coded all PJ and PO studies for whether the sampling strategy was single unit or multi unit. Finally, to assess the impact of common method bias we coded studies with performance criteria as using all common raters (ACR), partially common raters (PCR), or no common rater (NCR), and studies with attitudinal criteria as collecting predictors and criteria concurrently or separated in time.

Each article was coded independently by at least two of the authors. Coding discrepancies were resolved through discussion and by referring to the information provided in the original article and in the coding definitions. Given the ambiguities inherent in many of these studies, we found the use of multiple raters per article to be beneficial. After a preliminary discussion of sample articles, average agreement calculated across all codes for a random subsample of 15% of the studies was 97%.

Meta-Analytic Procedures

We conducted the meta-analyses using the formulas from Hunter and Schmidt (2004), with the aid of the meta-analytic software program

[2]If fit was assessed on multiple facets of a content dimension (e.g., fit on four separate values), the correlations were averaged to create one effect size.

developed by Schmidt and Le (2004). The means and variances of the meta-analytic estimates were corrected for artifactual variance due to sampling error and attenuation due to measurement error in the predictor and the criterion. Because the purpose of this study was to provide a meaningful estimate of the relationship between fit and various criteria, correcting for attenuation in both the predictor and the criterion was necessary. Reliabilities for the predictor and criterion were not available in each study; therefore, we used artifact distributions to correct for measurement error in both (Hunter & Schmidt, 2004). This was done by utilizing the information contained in all studies that did report reliability estimates for either the predictor or criteria variables in question. A single distribution of reliabilities was then created for each variable based on these estimates, and this distribution was used to correct the appropriate variable for unreliability. Note that in order to best estimate the artifact distribution for a given variable, the same distribution was used for that variable across all meta-analyses. This was done to better reflect the true distribution of reliabilities in the population, rather than just in the subset of studies for a given meta-analysis.

Because reliabilities are not available for objective criteria (tenure, turnover, withdrawal, job offer, and job acceptance), no correction for measurement error was made for these variables. In addition, no correction was made for dichotomization in turnover because almost none of the studies provided turnover rates, and this type of correction is not without controversy (Hunter & Schmidt, 2004; Williams, 1990). For studies that used a difference score to calculate fit, the reliability of the difference score was calculated when enough information was provided in the study (i.e., the reliability of the person scale and the environment scale, and the correlation between the two scales; Hunter & Cohen, 1974). Finally, the population of interest and the population examined in each study were the same and therefore no correction for range restriction was needed. This was true even when fit was examined in a preentry setting, as the criteria of interest in those settings were either job acceptance or job offer.

It is important to note that several of the studies measured fit in multiple ways for the same sample and criteria. To ensure that the assumption of independent samples was not violated (Hunter & Schmidt, 2004), no more than one effect size from a study was included in each meta-analysis. If there were multiple effect sizes from a single study (e.g., correlations from a perceived PJ measure and a subjective PJ fit measure with job satisfaction), then the average of these two unique effect sizes was used in the analysis of the overall relationship (i.e., PJ fit – job satisfaction). However, when specific effect sizes pertaining to the various moderators were available, these, rather than the aggregate correlations, were used in the moderator analyses.

Moderator analyses were conducted to test the theoretically derived propositions articulated earlier, when there was a large enough k and N to merit discussion. Given the small number of studies on PG and PS fit with the same criteria, no moderator analyses were possible for these types of fit. A moderator would be indicated when two conditions are met. First, there would be a large difference in the effect sizes between the compared groups of studies. Second, the average variance in effect sizes within each of these groups should decrease (Hunter & Schmidt, 2004). The 80% credibility intervals reported in each meta-analysis table indicate the generalizability of the relationship across situations (Hunter & Schmidt, 2004). If the credibility interval does not include zero, the relationship is said to be generalizable. If the interval does not include zero, yet there is still considerable variance unaccounted for, the direction of the relationship may still generalize (i.e., still be positive or negative across situations), but its strength may vary depending on additional moderators.

Results

Tables 1–4 present the meta-analyses for the four types of fit, the criteria, and the moderator analyses. The first column indicates the fit–criterion relationship examined, and any relevant subsamples due to moderators. The second and third columns provide the number of effect sizes (k) and total sample size (N), respectively, included in the meta-analytic estimate. In the fourth column, the sample size weighted mean observed correlation is presented. The lower and upper bounds of the 95% confidence interval of the observed correlations are shown in the fifth and sixth columns, respectively. The seventh column contains the estimated true score correlation (ρ), followed by the standard deviation of this estimate in the eighth column ($SD\ \rho$). The lower and upper bound of the 80% credibility interval are presented in the ninth and tenth columns, respectively. Finally, the percentage of variance accounted for by the artifacts is contained in the last column. Table 5 reports the meta-analytic results of the interrelationships between types of fit, as well as moderator analyses for direct versus indirect measures.

Person–Job Fit

As shown in Table 1, the first set of meta-analyses includes the correlations between PJ fit and outcomes. PJ fit has strong correlations with the three primary attitudes studied in the fit literature: .56 with job satisfaction, .47 with organizational commitment, and −.46 with intent to quit. PJ fit has a moderate relationship with the attitudes of coworker

TABLE 1

Meta-Analysis Results of Person–Job Fit

				95% CI				80% CV		
	k	N	Avg r	Lower	Upper	ρ	$SD\rho$	Lower	Upper	% var explained
Job satisfaction	47	12,960	.44	.20	.68	.56	.138	.38	.73	22.21
Complementary: D–A	12	3,735	.32	.14	.50	.41	.085	.30	.52	40.87
Complementary: N–S	32	8,726	.48	.19	.77	.61	.172	.39	.83	15.56
Combined [D–A & N–S]	6	1,036	.49	.20	.78	.62	.159	.41	.82	22.65
Direct: Perceived	23	7,205	.45	.23	.67	.58	.112	.43	.72	28.34
Indirect	24	4,908	.44	.13	.75	.56	.186	.32	.79	16.42
Subjective	18	4,377	.46	.19	.73	.59	.163	.38	.80	18.13
Objective	6	531	.22	−.05	.49	.28	.118	.13	.43	54.67
Single job	10	2,546	.47	.20	.74	.59	.154	.39	.79	19.47
Multiple jobs	37	10,414	.43	.19	.67	.55	.132	.38	.72	23.45
Same time	36	9,704	.44	.19	.69	.56	.141	.38	.74	21.67
Different times	10	2,742	.45	.20	.70	.57	.142	.39	.76	21.29
Organizational commitment	18	4,073	.39	.10	.68	.47	.170	.26	.69	16.76
Complementary: D–A	4	873	.25	.01	.49	.31	.120	.15	.46	30.69
Complementary: N–S	9	1,833	.31	.06	.56	.37	.139	.20	.55	25.73
Combined [D–A & N–S]	5	861	.42	.05	.79	.51	.215	.24	.79	13.32
Direct: Perceived	11	2,154	.36	.03	.69	.44	.187	.21	.68	16.05
Indirect	8	2,011	.40	.13	.67	.50	.156	.30	.69	18.00
Subjective	3	216	.17	.01	.33	.21	0	.21	.21	100.00
Objective	5	1,795	.43	.19	.67	.53	.132	.36	.70	19.15
Single job	7	1,987	.43	.19	.67	.53	.134	.36	.70	21.28
Multiple jobs	11	2,086	.35	.02	.68	.43	.186	.19	.66	16.71
Same time	10	2,438	.44	.19	.69	.54	.140	.36	.72	21.46
Different times	8	1,635	.31	.02	.60	.38	.167	.17	.59	19.25

Intent to quit	16	3,849	−.37	−.59	−.15	−.46	.118	−.61	−.30	29.09
Complementary: D–A	6	982	−.18	−.42	.06	−.23	.107	−.36	−.09	43.69
Complementary: N–S	8	2,816	−.40	−.64	−.16	−.50	.126	−.66	−.34	20.98
Combined [D–A & N–S]	5	783	−.46	−.75	−.17	−.57	.167	−.78	−.35	21.45
Direct: Perceived	11	2,065	−.40	−.65	−.15	−.49	.132	−.66	−.32	28.25
Indirect	6	1,866	−.33	−.57	−.09	−.40	.134	−.57	−.23	20.74
Subjective	3	267	−.15	−.50	.20	−.18	.182	−.41	.05	33.46
Objective	3	1,599	−.36	−.52	−.20	−.44	.076	−.54	−.34	34.92
Single job	4	1,770	−.35	−.51	−.19	−.43	.077	−.53	−.33	37.27
Multiple jobs	12	2,059	−.39	−.64	−.14	−.48	.140	−.66	−.30	27.63
Same time	7	2,387	−.38	−.50	−.26	−.47	.044	−.52	−.41	69.26
Different times	8	1,131	−.38	−.73	−.03	−.47	.195	−.72	−.22	18.99
Coworker satisfaction	6	2,280	.25	.13	.37	.32	.039	.27	.37	75.98
Supervisor satisfaction	4	1,987	.28	.12	.44	.33	.078	.23	.43	32.46
Organizational identification	8	1,619	.29	.11	.47	.36	.063	.28	.44	65.83
Overall performance	19	1,938	.16	−.19	.51	.20	.186	−.04	.44	29.95
Complementary: D–A	8	547	.10	−.33	.53	.12	.228	−.17	.41	30.63
Complementary: N–S	8	1,558	.16	.00	.32	.20	.041	.14	.25	81.92
Direct: Perceived	3	552	.18	−.25	.61	.22	.249	−.10	.54	11.47
Indirect	16	1,386	.16	−.17	.49	.19	.153	.00	.39	42.78
Subjective	10	295	.13	−.48	.74	.16	.304	−.23	.55	36.17
Objective	6	1,091	.17	−.01	.35	.20	.064	.12	.29	66.59
Single Job	8	801	.08	−.17	.33	.10	.100	−.03	.23	60.30
Multiple Jobs	15	1,441	.22	−.11	.55	.27	.172	.05	.49	32.25
Strain	10	3,505	−.23	−.39	−.07	−.28	.078	−.38	−.18	40.82
Complementary: D–A	4	2,025	−.25	−.43	−.07	−.30	.091	−.42	−.19	26.64
Complementary: N–S	6	1,642	−.25	−.43	−.07	−.31	.081	−.41	−.20	43.98
Tenure	5	1,484	.16	−.08	.40	.18	.115	.03	.32	23.42
Turnover	8	1,496	−.07	−.25	.11	−.08	.059	−.16	−.01	64.95
Organizational attraction	4	8,131	.40	.09	.71	.48	.183	.25	.72	4.46
Intent to hire	4	1,132	.59	.30	.88	.67	.156	.47	.87	12.67

D–A = demands–abilities fit.
N–S = needs–supplies fit.

TABLE 2

Meta-Analysis Results of Person–Organization Fit

				95% CI				80% CV		
	k	N	Avg r	Lower	Upper	ρ	$SD\rho$	Lower	Upper	% var explained
Job satisfaction	65	42,922	.35	.08	.62	.44	.167	.23	.65	9.42
w/o Vancouver and Schmitt (1991)	64	29,534	.40	.13	.67	.50	.168	.29	.72	11.84
Supplementary	41	33,767	.34	.07	.61	.43	.167	.22	.64	8.27
w/o Vancouver and Schmitt (1991)	40	20,379	.41	.14	.68	.52	.169	.30	.73	11.18
Complementary: N–S	30	9,284	.37	.06	.68	.46	.186	.22	.70	12.38
Values	45	23,211	.41	.16	.66	.51	.157	.31	.71	12.62
Personality	5	548	.07	.01	.13	.08	0	.08	.08	100.00
Goals	3	14,367	.24	.20	.28	.31	0	.31	.31	100.00
Multidimensional	10	3,524	.44	.19	.69	.55	.152	.35	.74	16.35
Direct: Perceived	30	19,534	.45	.23	.67	.56	.124	.41	.72	17.70
Indirect:	39	24,339	.28	.04	.52	.35	.142	.17	.53	12.12
w/o Vancouver and Schmitt (1991)	38	10,951	.32	−.01	.65	.40	.197	.15	.65	11.65
Subjective	24	8,187	.37	.04	.70	.46	.198	.21	.71	10.50
Objective	19	16,706	.23	.11	.35	.29	.056	.22	.36	39.33
w/o Vancouver and Schmitt (1991)	18	3,318	.19	−.05	.43	.24	.121	.08	.39	34.69
Ratings of organization as E	13	1,780	.17	−.10	.44	.22	.132	.05	.39	38.32
Aggregate member profiles as E	6	14,750	.24	.18	.30	.30	0	.30	.30	100.00
w/o Vancouver and Schmitt (1991)	5	1,362	.24	.08	.40	.30	.075	.20	.39	49.43
Single organization	28	9,446	.34	.01	.67	.42	.198	.17	.67	10.45
Multiple organization	37	34,106	.36	.11	.61	.44	.155	.25	.64	9.05
w/o Vancouver and Schmitt (1991)	36	20,718	.43	.19	.67	.54	.135	.36	.71	15.66
Same time	49	39,012	.36	.09	.63	.45	.165	.24	.66	8.74
w/o Vancouver and Schmitt (1991)	48	25,624	.42	.15	.69	.52	.159	.32	.73	12.23
Different times	11	3,084	.31	.02	.60	.39	.172	.17	.61	15.31

Organizational commitment	44	36,093	.42	−.01	.85	.51	.260	.18	.85	3.55
w/o Vancouver and Schmitt (1991)	43	22,705	.54	.13	.95	.65	.239	.34	.95	6.30
Supplementary	27	30,357	.44	−.01	.89	.53	.270	.19	.88	2.99
w/o Vancouver and Schmitt (1991)	26	16,969	.61	.28	.94	.74	.202	.48	.99	8.03
Complementary: N–S	22	6,402	.32	.03	.61	.39	.161	.19	.60	15.49
Values	28	18,589	.56	.19	.93	.68	.227	.39	.98	6.04
Multidimensional	10	2,581	.49	.08	.90	.59	.248	.27	.91	7.47
Direct: Perceived	20	15,275	.64	.35	.93	.77	.172	.55	.99	10.89
Indirect:	26	20,965	.27	.07	.47	.32	.109	.18	.46	14.72
w/o Vancouver and Schmitt (1991)	25	7,577	.33	.06	.60	.40	.158	.19	.60	15.77
Subjective	16	5,886	.37	.12	.62	.44	.143	.26	.62	16.15
Objective	12	15,316	.23	.15	.31	.27	.039	.22	.32	47.20
w/o Vancouver and Schmitt (1991)	11	1,928	.19	−.05	.43	.23	.115	.08	.38	37.43
Ratings of organization as E	8	806	.13	−.05	.31	.16	0	.16	.16	100.00
Aggregate member profiles as E	5	14,573	.23	.13	.33	.28	.055	.21	.35	21.22
w/o Vancouver and Schmitt (1991)	4	1,185	.20	−.15	.55	.24	.204	−.02	.50	10.35
Single organization	20	5,886	.52	.11	.93	.63	.249	.31	.95	6.86
Multiple organization	24	30,207	.40	−.03	.83	.49	.255	.16	.82	2.95
w/o Vancouver and Schmitt (1991)	23	16,819	.54	.15	.93	.66	.236	.35	.96	5.28
Same time	30	32,426	.42	−.01	.85	.51	.259	.18	.85	3.18
w/o Vancouver and Schmitt (1991)	29	19,038	.56	.19	.93	.68	.223	.39	.97	6.26
Different times	14	3,710	.36	−.09	.81	.43	.268	.09	.77	6.62
Intent to quit	43	34,276	−.29	−.56	−.02	−.35	.167	−.57	−.14	7.24
w/o Vancouver and Schmitt (1991)	42	20,888	−.38	−.60	−.16	−.47	.128	−.64	−.31	17.93
Supplementary	29	28,846	−.29	−.58	.00	−.36	.182	−.59	−.12	5.35
w/o Vancouver and Schmitt (1991)	28	15,458	−.42	−.64	−.20	−.51	.122	−.66	−.35	17.46
Complementary: N–S	23	6,802	−.28	−.52	−.04	−.34	.128	−.50	−.18	22.55
Values	32	18,222	−.38	−.60	−.16	−.46	.126	−.62	−.30	15.84
Multidimensional	10	2,606	−.39	−.70	−.08	−.48	.185	−.72	−.24	13.19
Direct: Perceived	24	15,400	−.43	−.61	−.25	−.52	.094	−.64	−.40	24.58

TABLE 2 (continued)

				95% CI				80% CV		
	k	N	Avg r	Lower	Upper	ρ	$SD\rho$	Lower	Upper	% var explained
Indirect:	23	19,497	−.18	−.34	−.02	−.22	.084	−.33	−.11	20.77
w/o Vancouver and Schmitt (1991)	22	6,109	−.25	−.47	−.03	−.31	.120	−.46	−.15	27.15
Subjective	15	5,036	−.26	−.48	−.04	−.32	.112	−.46	−.18	25.62
Objective	11	14,835	−.15	−.25	−.05	−.19	.050	−.25	−.12	32.66
w/o Vancouver and Schmitt (1991)	10	1,447	−.18	−.49	.13	−.23	.167	−.44	−.01	26.64
Single organization	20	4,564	−.38	−.69	−.07	−.46	.185	−.70	−.23	14.48
Multiple organization	24	29,860	−.28	−.55	−.01	−.34	.159	−.54	−.13	5.85
w/o Vancouver and Schmitt (1991)	23	16,472	−.38	−.58	−.18	−.46	.114	−.61	−.31	16.67
Same Time	36	32,729	−.29	−.56	−.02	−.35	.167	−.56	−.13	6.66
w/o Vancouver and Schmitt (1991)	35	19,341	−.38	−.60	−.16	−.46	.127	−.62	−.30	15.92
Different times	7	1,547	−.39	−.64	−.14	−.47	.133	−.64	−.30	25.15
Organizational satisfaction	4	997	.52	.23	.81	.65	.168	.44	.87	18.46
Coworker satisfaction	10	2,509	.31	.09	.53	.39	.111	.25	.53	35.83
Direct: Perceived	5	2,063	.34	.18	.50	.43	.069	.35	.52	51.50
Indirect	7	696	.15	−.03	.33	.19	0	.19	.19	100.00
Supervisor satisfaction	9	2,446	.28	.04	.52	.33	.121	.18	.49	24.67
Direct: Perceived	5	1,988	.32	.12	.52	.38	.100	.25	.51	25.56
Indirect	4	458	.12	.10	.14	.14	0	.14	.14	100.00
Trust in manager	5	1,010	.36	.26	.46	.43	0	.43	.43	100.00
Overall performance	22	5,827	.05	−.24	.34	.07	.162	−.14	.27	17.52
Direct: Perceived	7	2,386	.10	−.10	.30	.12	.095	.00	.24	32.13
Indirect:	15	3,441	.02	−.31	.35	.03	.186	−.21	.26	15.78
All common rater (ACR)	4	1,274	.18	.02	.34	.22	.071	.13	.31	47.91
Partially common rater (PCR)	9	3,700	−.01	−.25	.23	−.02	.145	−.20	.17	14.50
No common rater (NCR)	9	853	.15	−.16	.46	.18	.025	−.02	.38	38.40
Task performance	17	2,860	.11	−.11	.33	.13	.100	.01	.26	45.87
Direct: Perceived	5	1,108	.18	.02	.34	.22	.061	.14	.30	63.23
Indirect:	12	1,660	.04	−.14	.22	.05	.022	.02	.07	95.42

All common rater (ACR)	3	389	.15	−.09	.39	.18	.106	.04	.31	48.96
Partially common rater (PCR)	8	1,577	.12	−.06	.30	.14	.069	.06	.23	60.30
No common rater (NCR)	9	1,078	.03	−.15	.21	.04	.027	.00	.07	94.26
Contextual performance	13	2,122	.21	−.04	.46	.27	.135	.09	.44	33.42
Direct: Perceived	9	1,210	.26	.16	.36	.32	0	.32	.32	100.00
Indirect	5	994	.16	−.19	.51	.20	.207	−.06	.46	15.20
All common rater (ACR)	5	746	.36	.20	.52	.45	0	.45	.45	100.00
Partially common rater (PCR)	6	830	.21	.15	.27	.27	0	.27	.27	100.00
No common rater (NCR)	3	629	.04	.02	.06	.06	0	.06	.06	100.00
Tenure	28	6,036	.02	−.18	.22	.03	.082	−.08	.13	45.75
Direct: Perceived	10	2,283	.02	−.14	.18	.03	.046	−.03	.08	71.28
Indirect	22	4,484	.02	−.22	.26	.02	.101	−.11	.15	36.84
Subjective	11	2,882	.01	−.23	.25	.01	.108	−.13	.150	28.42
Objective	12	1,744	.05	−.17	.27	.06	.080	−.05	.16	55.91
Turnover	10	2,157	−.13	−.38	.12	−.14	.123	−.30	.01	26.82
Direct: Perceived	5	1,153	−.15	−.35	.05	−.16	.076	−.26	−.06	47.15
Indirect	5	1,004	−.11	−.42	.20	−.12	.158	−.33	.08	19.30
Withdrawal (Absenteeism)	7	1,370	−.05	−.23	.13	−.05	.060	−.13	.02	63.57
Strain	8	3,605	−.22	−.47	.03	−.27	.145	−.46	−.08	13.27
Direct: Perceived	6	2,184	−.28	−.55	−.01	−.34	.154	−.54	−.14	14.10
Indirect	2	1,421	−.14	−.20	−.08	−.17	0	−.17	−.17	100.00
Organizational attraction	11	9,001	.38	.18	.58	.46	.104	.33	.59	17.32
Direct: Perceived	10	8,797	.52	.42	.62	.62	.041	.57	.67	61.95
Indirect	4	7,525	.18	.16	.20	.22	0	.22	.22	100.00
Job acceptance	4	1,829	.22	.04	.40	.24	.089	.13	.36	24.91
Intent to hire	9	2,518	.53	.31	.75	.61	.116	.47	.76	23.89
Direct: Perceived	8	2,402	.61	.34	.88	.70	.146	.52	.89	16.01
Indirect	3	562	.16	−.13	.45	.18	.153	−.02	.38	22.58
Job offer	8	1,556	.29	−.14	.72	.32	.235	.02	.63	9.16
Direct: Perceived	6	1,178	.45	.16	.74	.50	.147	.31	.69	18.29
Indirect	6	918	.03	−.19	.25	.03	.075	−.06	.13	58.33

TABLE 3
Meta-Analysis Results of Person–Group Fit

	k	N	Avg r	95% CI Lower	95% CI Upper	ρ	$SD\rho$	80% CV Lower	80% CV Upper	% var explained
Job satisfaction	9	1822	.24	.12	.36	.31	0	.31	.31	100.00
Organizational commitment	12	2306	.15	−.05	.35	.19	.084	.08	.30	52.28
Intent to quit	6	943	−.17	−.33	−.01	−.22	.028	−.25	−.18	92.31
Coworker satisfaction	5	1210	.32	.16	.48	.42	.057	.34	.49	70.16
Supervisor satisfaction	4	1545	.23	.05	.41	.28	.091	.16	.39	31.28
Overall performance	9	1946	.15	.03	.27	.19	0	.19	.19	100.00
Contextual performance	4	1015	.18	.00	.36	.23	.089	.12	.35	44.72
Political perceptions	5	979	−.13	−.23	−.03	−.17	0	−.17	−.17	100.00
Tenure	10	1429	.05	−.13	.23	.06	.032	.02	.10	89.85
Group cohesion	4	889	.22	−.03	.47	.27	.140	.09	.45	24.60

satisfaction (.32), supervisor satisfaction (.33), and organizational identification (.36). It has a modest correlation with overall performance (.20) and is correlated somewhat more strongly (−.28) with indicators of strain. Among the criteria of organizational longevity, tenure, and turnover, PJ fit had correlations of .18 and −.08, respectively. In the preentry context, PJ fit had strong correlations of .48 with organizational attraction and .67 with an organization's intent to hire. Almost all of the 80% credibility intervals for PJ fit did not include zero, with the exception of PJ fit and overall job performance (80% CV: −.04 −.44). Therefore, the generalizability of this relationship is less definite than the others.

Based on the number of studies of each criterion available for moderator analysis, four moderators could be reliably examined. The first was the conceptualization of fit. Only five studies included a supplementary conceptualization of PJ fit, and no more than three of these addressed the same criterion. Therefore, a reliable comparison of supplementary and complementary conceptualizations could not be conducted for PJ fit. Within the complementary category, however, separating the studies by demands–abilities, needs–supplies, or a combination of the two conceptualizations explained more of the variance in the correlations in four of the five cases where there were enough studies to perform moderator

TABLE 4

Meta-Analysis Results of Person–Supervisor Fit

				95% CI				80% CV		
	k	N	Avg r	Lower	Upper	ρ	$SD\rho$	Lower	Upper	% var explained
Job satisfaction	5	1,199	.35	.11	.59	.44	.112	.30	.59	30.06
Organizational commitment	7	1,346	.07	−.15	.29	.09	.100	−.04	.21	42.54
Perceptions of politics	5	853	−.09	−.21	.03	−.12	0	−.12	−.12	100.00
Supervisor satisfaction	5	918	.39	−.02	.80	.46	.228	.17	.75	9.94
Leader–member exchange	3	628	.37	.19	.55	.43	.076	.34	.53	47.35
Tenure	6	1,191	.08	−.10	.26	.09	.062	.01	.17	60.43
Overall Performance	14	3,461	.15	−.12	.42	.18	.153	−.01	.38	19.89
Direct: Perceived	8	1,179	.25	.01	.49	.31	.114	.16	.45	41.36
Indirect	7	2,307	.09	−.09	.27	.11	.094	−.01	.23	33.12

TABLE 5

Meta-Analysis Results of the Interrelationships Between Types of Fit

				95% CI				80% CV		
	k	N	Avg r	Lower	Upper	ρ	$SD\rho$	Lower	Upper	% var explained
PO–PJ	16	10,239	.58	.38	.78	.72	.106	.58	.85	30.05
Direct: Perceived	14	9,997	.59	.43	.75	.74	.071	.65	.83	49.53
PJ: Complementary: D–A	7	1,303	.37	.02	.72	.45	.200	.20	.71	16.08
PJ: Complementary: N–S	6	2,282	.59	.47	.71	.73	.025	.70	.76	89.87
Indirect: Objective	4	440	.19	−.12	.50	.24	.154	.04	.43	35.70
PO–PG	8	1,607	.43	.10	.76	.54	.198	.28	.79	16.07
Direct: Perceived	5	1,321	.39	.25	.53	.48	.050	.42	.55	70.93
Indirect: Objective	5	512	.48	−.13	1.00	.60	.371	.12	1.00	8.02
PO–PS	4	976	.38	.03	.73	.46	.206	.20	.72	11.36
PJ–PG	3	775	.38	.14	.62	.49	.133	.32	.66	26.55
PG–PS	3	713	.30	.06	.54	.37	.132	.20	.54	26.01

D–A = Demands–Abilities fit.
N–S = Needs–Skills fit.

analyses.[3] It should be noted that for PJ fit, conceptualization (demands–abilities vs. needs–supplies) and content dimensions (KSAs vs. needs) are virtually identical. Therefore, the analyses are relevant to both types of moderators.

Conceptualization of fit (or content dimension) acted as a moderator for job satisfaction, organizational commitment, intent to quit, and overall performance but not for indicators of strain. As expected, the combined measure of PJ fit had a stronger correlation with attitudinal criteria, followed by needs–supplies fit, and then demands–abilities fit. The differences in the relationships for each were job satisfaction (combined: .62; needs–supplies: .61, demands–abilities: .41), organizational commitment (.51, .37, .31), and intent to quit (−.57, −.50, −.23). For overall performance only needs–supplies and demands–abilities conceptualizations could be compared, with the former being the stronger predictor (.20, .12). Although this does not support our prediction that demands–abilities fit would have a greater impact on performance, the effect sizes are more similar than for the attitudinal criteria. In contrast to the results before the moderator analysis, the 80% credibility interval for the PJ needs–supplies—overall performance relationship did not include zero, supporting the generalizability of this particular relationship.

The second moderator examined was measurement strategy—direct measures of perceived fit, indirect measures of subjective and objective fit. Due to sample size constraints, the moderator analysis was conducted only for the criteria of job satisfaction, organizational commitment, intent to quit, and overall performance. Like fit conceptualization, this analysis explained more of the variance among the PJ fit correlations. We expected that the effects would be largest for direct measures of perceived fit, followed by indirect measures of subjective fit, and then objective fit. This prediction was supported for intent to quit (perceived: −.49, subjective: −.44, objective: −.18) and overall performance (.22; .20; .16). Although the small difference in effect sizes across these measurement strategies for the performance criterion is notable, partial support for our prediction was found for job satisfaction, in which direct perceived (.58) and indirect subjective (.59) effects were virtually identical, with indirect objective fit a distant third (.28), and for organizational commitment in which objective fit was lowest (.21), but subjective fit (.53) was greater than perceived fit (.44).

[3]Because studies using a demands–abilities conceptualization of fit used KSAs as the exclusive content dimension, and those investigating needs–supplies conceptualizations used predominantly needs, we did not conduct a separate moderator analysis for content dimensions.

The third moderator we examined was whether the sample contained only one type of job (single-unit) or multiple jobs (multi-unit). We did not make a prediction about the direction of this moderator, and the results were mixed. The single-job studies produced higher correlations for job satisfaction (single: .59, multiple: .55) and organizational commitment (single: .53, multiple: .43); whereas the multiple-job studies had larger effect sizes for intent to quit (single: −.43, multiple: −.48) and overall performance (single: .10, multiple: .27).

Fourth, to examine the impact of common method bias on fit–attitude relationships, we examined whether timing of the predictor and criterion measures as concurrent versus temporally separate moderated effect sizes. We expected that the effect sizes would be greater when fit and attitudes were measured at the same point in time, versus when the measures were temporally separated. However, for both job satisfaction (same time: .56, different times: .57) and intent to quit (same time: −.47, different times: −.47), we found little to no difference in the corrected correlations. Only for organizational commitment did the timing of the measures act as expected (same time: .54, different times: .38).

Studies examining the PJ fit using a polynomial regression analysis produced effect sizes generally in the range of the meta-analytic estimates in Table 1. However, visual inspection of the surface plots often revealed more complicated relationships (Edwards, 1993, 1994; Edwards & Harrison, 1993; Edwards & Rothbard, 1999; Livingston, Nelson, & Barr, 1997; Shaw & Gupta, 2004). Rather, they suggest that fit at high levels of P and E is generally better than fit at low levels and that main effects of E often outweigh those of P, making inadequate supplies (P > E) more detrimental than excess supplies (P < E) for attitudes.

Person–Organization Fit

Table 2 presents the correlations from the meta-analyses of PO fit and outcomes. PO fit had strong correlations with job satisfaction (.44) and organizational commitment (.51), and more moderate for intent to quit (−.35). Although the sample sizes for these analyses were large (N = 42,922 for job satisfaction, N = 36,093 for organizational commitment, N = 34,276 for intent to quit), one study may have overly influenced these results. To investigate the impact of Vancouver and Schmitt[4] (1991; n = 13,388), analyses were conducted both with and without this study. Without Vancouver and Schmitt (1991), the relationships between

[4]Because Vancouver, Millsap, and Peters (1994) used the same data set as Vancouver and Schmitt (1991), we only included the earlier study in our analysis.

PO fit and all three criteria increased (job satisfaction, .50; organizational commitment, .65; intent to quit, −.47).

The relationships between PO fit and most other attitudes were moderate: .39 with coworker satisfaction, .33 with supervisor satisfaction, .43 with the employees' trust in their managers. The correlation with organizational satisfaction was substantially higher, .65. With measures of performance, PO fit had low correlations with overall job performance (.07) and task performance (.13), but moderate correlations with contextual performance (.27). PO fit also had weak relationships with tenure (.03), turnover (−.14), and organizational withdrawal (−.05), but more moderate relationships with indicators of strain (−.27). With preentry criteria, PO fit had a correlation of .46 with organizational attraction, .24 with applicant job acceptance, .61 with intent to hire, and .32 with job offers. Most of the 80% credibility intervals for PO fit did not include zero, with the exceptions of overall performance, tenure, and withdrawal.

To test for moderators, we first examined the conceptualization of fit (supplementary vs. complementary needs–supplies). Only Hutcheson (1999) examined the demands–abilities PO fit, so that category was not included in the moderator analyses. In contrast to our prediction that needs–supplies fit effects would be stronger than supplementary fit, the correlations with organizational commitment for supplementary fit were higher, .53 (.74 without Vancouver & Schmitt, 1991) than needs–supplies fit (.39), as was the case with intent to quit, −.36 (−.51); −.34. For job satisfaction supplementary fit was correlated slightly lower (.43) than needs–supplies fit (.46); however, this pattern reversed when Vancouver and Schmitt (1991) was excluded (supplementary: .52).

The second moderator examined was the content dimensions on which fit was assessed. The majority of the studies examined values exclusively or used a combined measure that included multiple content dimensions. As predicted, multidimensional measures had stronger relationships than values-only measures with job satisfaction (multidimensional: .55, values: .51), and intent to quit (multidimension: −.48, values: −.46), although these differences were small. Alternatively, for organization commitment, values-based fit yielded a stronger relationship than multidimensional measures (.68 and .59). Only for job satisfaction were we able to reliably compare these effects with personality-based and goal-based PO fit. Consistent with our prediction, goal-based PO fit had a weaker effect (.31) than value-based fit (.51) but stronger than personality-based fit (.08).

The third moderator examined was measurement strategy. Results were generally consistent with our prediction that direct measures of perceived fit would have the strongest relationship with criteria, followed by indirect subjective, and then indirect objective measures: job satisfaction (direct perceived, .56; indirect subjective, .46; indirect objective: .29),

organizational commitment (.77, .44, .27), and intent to quit (−.52, −.32, −.19). Only for the tenure criterion did the direction of the effects differ (.03, .01, .06). For all other criteria it was only possible to compare direct perceived measures with studies using indirect measures (i.e., both subjective and objective fit studies are included). In each of these cases, direct measures had stronger effects than did indirect measures: coworker satisfaction (direct perceived: .43, indirect: .19), supervisor satisfaction (.38, .14), overall performance (.12, .03), task performance (.22, .05), contextual performance (.32, .20), turnover (−.16, −.12), and strain (−.34, −.17). Differences in the effect sizes were particularly large in the preentry context: organizational attraction (.62, .22), intent to hire (.70, .18), and job offer (.50, .03). Excluding Vancouver and Schmitt (1991) did not change the measurement strategy moderator results substantially.

The fourth moderator analysis examined whether it made a difference if the objective environment was measured as the aggregate of employees' personal characteristics or their perceptions of the organizational culture or climate. Due to sample size limitations, this analysis could only be conducted for job satisfaction and organizational commitment. In contrast to our prediction, for both criteria the effect size was slightly larger when the environment was an aggregation of personal characteristics (job satisfaction: .30, organizational commitment: .28) than when their aggregate of ratings of the organization were used (.22, .16). These results remained mostly stable when Vancouver and Schmitt (1991) was excluded.

The fifth moderator analysis focused on whether the sampling strategy created differences in the size of the relationships. We made no predictions about the direction of this moderator. For two of the three analyses, the effect sizes for the single organization studies were higher than the multiple organization studies: organizational commitment (single organization: .63, multiple organizations: .49) and intent to quit (−.46, −.34). For the criterion of job satisfaction the effect sizes were comparable for single (.42) and multiorganization studies (.44). However, when Vancouver and Schmitt (1991) was excluded, the effect sizes for single and multiple organization studies became virtually identical.

We examined the PO fit data in two ways to determine if common method bias was influencing effect sizes. First, we assessed whether the timing (concurrent vs. separate) of predictor and criterion measures acted as a moderator for the attitudes of job satisfaction, organizational commitment, and intent to quit. For job satisfaction (same time: .45, different times: .39) and organizational commitment (same time: .51, different times: .43), the expected smaller effect size for measures taken at different points in time was obtained. However, this did not hold for intent to quit (same time: −.35, different times: −.47). Without Vancouver and Schmitt the effects were comparable (same time w/o Vancouver & Schmitt: −.46). Second, for the performance criteria, we examined whether common rater

bias influenced the reported effect sizes.[5] We predicted that the effects would be largest when fit and performance were reported by a common rater (ACR), followed by partially common raters (PCR), and then by no common raters (NCR). Effects were consistent with this prediction for task (ACR: .18, PCR: .14, NCR: .04) and contextual (ACR: .45, PCR: .27, NCR: .06) performance. However, for overall performance the magnitude of the last two relationships was reversed (ACR: .22, PCR: −.02, NCR: .18).

Studies of PO fit using polynomial regression generally produced larger effect sizes than the meta-analytic estimates for other types of measures (e.g., Cable & Edwards, 2004; Finegan, 2000; Kalliath, Bluedorn, & Strube, 1999; Lutrick, 2003; Van Vianen, 2000). However, examining the surface graphs in these studies suggested relationships that generally diverged from traditional notions of symmetrical fit. Instead, these studies demonstrate that attitudes are most positive when both P and E are high versus when they are both low. In addition, most suggest nonsymmetrical effects of misfit, such that excess E conditions have little negative impact on attitudes, whereas excess P conditions accompany dramatic decreases in attitudes.

Person–Group Fit

The third set of meta-analyses provides estimates of the relationship between PG fit and the criteria. As can been seen in Table 3, PG fit has a moderate true score correlation with the three most commonly studied criteria, job satisfaction, organizational commitment, and intent to quit. The true score correlations with those criteria are .31, .19, and −.22, respectively. For the two most commonly assessed subfacets of job satisfaction, PG fit correlates .42 with coworker satisfaction and .28 with supervisor satisfaction. PG fit also has a strong relationship (.47) with group cohesion. The correlation with overall performance is .19, whereas the correlation with contextual performance is slightly higher at .23. PG fit has a moderate negative relationship with how employees view the political environment of their organization (−.17). The correlation with tenure is the weakest of all of the criteria, at .06.

For PG fit, none of the 80% credibility intervals include zero, indicating the broad generalizability of PG fit across situations. Although the

[5]We did not conduct the common rater analysis for the attitudinal criteria because the results would be isomorphic with the comparison between perceived and subjective fit (both ACR with attitudes as the criteria) and objective fit (PCR), which have already been discussed. All studies examining objective criteria (turnover, tenure, job offer, withdrawal, and job acceptance) were also excluded, because the results would be identical to the comparison of subjective fit (PCR) with objective criteria with perceived and objective fit (NCR).

theoretical justifications for moderators discussed previously would apply to PG fit studies, because of the small number of studies in this category a reliable moderator analysis was not possible.

Only a small number of studies have used a polynomial regression approach to examine PG fit (e.g., Kristof-Brown & Stevens, 2001; Slocombe & Bluedorn, 1999; Strauss et al., 2001). As with other polynomial regression studies, the multiple correlations are generally larger than for other types of fit measures. When these relationships are graphed, the results present mixed support for fit relationships. Symmetrical, supplementary fit relationships were supported for performance goals (Kristof-Brown & Stevens, 2001), polychronicity (Slocombe & Bluedorn, 1999) and hurriedness (Jansen & Kristof-Brown, in press), and a symmetrical, complementary fit relationship for extraversion and attraction to team members (Kristof-Brown, Barrick, & Stevens, in press). However, in most of these studies there were also results demonstrating that excesses of E are generally not as detrimental as excesses of P and that fit at high levels (i.e., high P and high E) is generally better than fit at low levels (i.e., low P and low E).

Person–Supervisor Fit

The meta-analysis results for PS fit are presented in Table 4. All of the 80% credibility intervals did not include zero with the exceptions of organizational commitment and overall performance. PS fit had a stronger relationship with job satisfaction (.44) than organizational commitment (.09). The relationship with political perceptions was −.12. The relationships with supervisor-focused criteria were strong, with a correlation of .46 with supervisor satisfaction and .43 with LMX. PS fit had a correlation of .09 with tenure and .18 with overall performance. However, the relationship with overall performance was moderated by the conceptualization of fit. Consistent with the predictions, the direct measures of perceived PS fit had a stronger relationship with performance (.31) than did indirect measures of subjective and objective fit (.11).

Only a handful of studies have taken a polynomial regression approach to PS fit (Antonioni & Park, 2001; Smith, 2002; Van Vianen, 2000). These studies generally show little support for supplementary fit on personality or values being related to employee attitudes or contextual performance, and the effects differ dramatically for various personality traits.

Comparing Types of Fit

Consistent with our predictions, attitudes referencing particular aspects of the environment were most strongly associated with corresponding types of fit. Job satisfaction was more strongly related to PJ fit (.56) than

to PO (.44), PG (.31), or PS fit (.44). Organizational commitment was most strongly related to PO fit (.51), followed closely by PJ fit (.47), and then weakly related to PG fit (.19) and PS fit (.09). Alternatively, satisfaction with coworkers was highest for PG fit (.42) compared to PJ (.32) and PO fit (.39), and satisfaction with supervisor was highest for PS fit (.46) compared to PJ (.33), PO (.33), and PG fit (.28). Also consistent with expectations, organizational attraction was influenced comparably by PJ fit (.48) and PO fit (.46), and intent to hire was somewhat more strongly related to PJ fit (.67) than PO fit (.61). In contrast to our predictions, intent to quit, tenure, and turnover were differentially influenced by various types of fit: intent to quit (PJ: −.46, PO: −.35, PG: −.22) tenure (PJ: .18, PO: .03, PG: .06, PS: .09) turnover (PJ: −.08, PO: −.14). Relationships with overall performance were comparable for PJ (.20), PG (.19), and PS fit (.18); the relationship with PO fit was substantially smaller (.07). Contextual performance had comparable relationships with PO (.27) and PG fit (.23); reliable estimates for PJ and PS fit could not be determined because of sample-size constraints.

Table 5 reports the meta-analysis results for the comparisons between types of fit. All of the 80% credibility intervals did not include zero, indicating that the types of fit are positively related across settings. In the overall meta-analyses, the low percentage of variance accounted for by artifacts suggests that moderator effects are likely present. Contrary to our expectation, the strongest relationship was between PJ and PO fit (.72), followed by PO and PG (.54) fit, and then PJ and PG fit (.49). The weakest relationships were with PS fit, having a corrected correlation of .46 with PO fit and .37 with PG fit. As expected, however, differentiating the PJ studies into needs–supplies or demands–abilities conceptualizations showed a weaker relationship between PO fit and demands–abilities PJ fit (.45) than with needs–supplies PJ fit (.73). Measurement strategy served as a moderator for all conditions in which it could be reliably examined. Direct measures of PO–PJ relationships reported a substantially stronger correlation (.74) versus indirect objective measures (.24); however, for PO and PG fit, the effect was in the opposite direction (direct: .48, indirect objective: .60).

Discussion

"Of all the issues in psychology that have fascinated scholars and practitioners alike, none has been more pervasive than the one concerning the fit of person and environment" (Schneider, 2001, p. 141). The basic demarcation between PJ, PG, PO, and PS fit provides a meaningful way of assessing how fit with various aspects of the work environment influences individuals' attitudes and behaviors. The four types of fit were only moderately related to each other, and even less so when assessed with indirect

measures. These results underscore the uniqueness of each type of fit and the ability of individuals to discern among aspects of their work environment when assessing fit. In particular, the relationships between PS fit and the other types were small, suggesting that employees do not view superiors as isomorphic representations of the organization. It is worth noting also that in studies that assessed multiple types of fit, most report a unique prediction attributable to each type of fit (e.g., Kristof-Brown et al., 2002; O'Reilly et al., 1991). Taken together, these results suggest that overall PE fit is a multidimensional concept consisting of multiple subtypes of fit (Law, Wong, & Mobley, 1998).

It is clear from these results that fit matters. Even during relatively brief preentry encounters, attitudes and decisions are strongly influenced by various types of fit. As anticipated, attitudes about various aspects of the environment were most strongly related to the corresponding type of fit. Job satisfaction was most strongly influenced by PJ fit, organizational commitment by PO fit, satisfaction with coworkers by PG fit, and satisfaction with supervisor with PS fit. These results provides additional support for the capability of individuals to, at least partially, compartmentalize their reactions to various aspects of their work environment.

Although we anticipated some compartmentalization, the weak results for PG fit on the more general attitudes of job satisfaction, organizational commitment, and intent to quit surprised us. Emerging theories that emphasize fit and composition effects for groups (e.g., Arrow, McGrath, & Berdahl, 2000; Beersma et al., 2003) would suggest that PG fit should be more influential. One potential explanation for the weak findings is the heavy reliance on objective, personality-based measures of PG fit. The current paucity of PG fit studies does not allow us to explore moderators; however, the results from PO fit studies suggest that these types of measures represent the weakest types of fit effects. Researchers of PG fit must also grapple with the difficult question of how to best assess group psychological characteristics. Studies suggesting that the simple average of a group is not the best indicator of its properties (e.g., Barrick, Stewart, Neubert, & Mount, 1998) raise questions about how best to assess the values or personality of a group. Recent work focused on assessing traditionally individual-level constructs, such as personality, across levels of analysis appears promising (e.g., Hofmann & Jones, 2003; Morgeson & Hofmann, 1999). These issues become particularly problematic when faultlines (Lau & Murnighan, 1998) sharply divide members. Shaw (2004) provides some direction for assessing faultlines in groups, but the implications for studies of fit are not yet clear.

In both preentry and postentry contexts stronger relationships were reported for attitudinal criteria than for behaviors. This may be due, in part, to common method bias inflating self-reported fit–attitude relationships.

A second explanation is that there are considerable barriers to acting on experiences of fit or misfit at work (Griffeth et al., 2001; Mitchell et al., 2001). The consequences of withdrawing from work, performing poorly, or leaving the organization can be severe, making it likely that attitudes will be influenced by fit well before behaviors are changed. Despite these barriers, these results provide evidence that various types of fit do influence behavioral outcomes including performance and turnover. Overall performance was only weakly associated with PO fit but more strongly with the other three types of fit. This is understandable for PJ fit because of the emphasis on job proficiency; however, the association with PG and PS fit was unexpected. This may reflect the growing importance of teams as the fundamental work unit in organizations (Lawler, Mohrman, & Ledford, 1995) and the impact of supervisors' input on overall performance assessments. PG fit also emerges as a relevant predictor of contextual performance, as does PO fit. As organizations continue to ask employees to do more with less, using PG and PO fit to hire and retain individuals who contribute beyond job requirements may provide a competitive advantage.

The results for tenure and turnover seem to tell conflicting stories. PJ fit had the strongest association with tenure, and even that was a modest relationship. However, PO fit had a slightly stronger impact on turnover than did PJ fit. One possible explanation for these results is the timing of the measures and Schneider's (1987) ASA model. Tenure was measured concurrently in all studies, whereas turnover was collected anywhere from 3 months to 2 years after the fit assessments. Although the ASA model suggests that attraction and selection will help screen out people who do not have a good PO fit, organizations are required to hire based on job-relevant qualifications. This implies that the PJ fit of employees at any given time should be high but that some people with low or modest PO fit will likely be hired. If employees have poor PJ fit, they may try to develop their skills, change jobs internally, or even be demoted. However, if they have a poor PO fit, the ASA model implies that they will eventually leave the company, making PO fit a better predictor of eventual turnover. In a marketplace where human talent is becoming increasingly viewed as a key competitive advantage (Reichheld, 1996), organizations may find PO fit a useful tool for reducing turnover.

Moderators

For PJ and PO fit there were sufficient studies to examine several potential moderators. One of these, conceptualization of fit, was found to influence most fit–outcome relationships. In almost every case the complementary form of needs–supplies fit has the greatest impact on

individual attitudes and behavior. This was followed closely by supplementary fit. These results are consistent with recent research by Cable and Edwards (2004), which demonstrates that psychological need fulfillment and value congruence play unique and relatively equal roles in affecting work attitudes. Alternatively, demands–abilities fit had a substantially weaker effect on attitudes. It did, however, show relatively equal effects on strain and performance as the other forms of fit. This contradicts Muchinsky and Monahan's (1987) notion that complementary demands–abilities fit is only relevant to organizational outcomes. Taken together, these results reinforce the importance of considering multiple conceptualizations, as well as multiple types of fit, when predicting individual outcomes at work.

Consistent with the results for fit conceptualization, the various content dimensions on which fit can be assessed also proved to be important moderators. For both PJ and PO fit, studies that assessed fit across a variety of content dimensions (e.g., values, personality, needs, KSAs) reported stronger relationships with criteria. However, in the case of PO fit, values-only measures produced only slightly weaker effects. This finding lends credence to Chatman's (1989) emphasis on values as the crux of person–culture fit. Goals also appear to hold some promise as measures of PO fit, although their relationship with job satisfaction was less than values-based measures. The results for job satisfaction also strongly call into question the use of overall personality similarity as an indicator of PO fit. Although there were not enough studies to conduct a reliable moderator analysis, studies of PS fit based on personality similarity also reported lower-than-average effect sizes (e.g., Schaubroeck & Lam, 2002; Smith, 2002). As previously articulated, this may reflect the notion that complementarity, rather than similarity, may be desirable on some traits (e.g., Kristof-Brown et al., in press; Smith, 2002). Future studies of personality-based fit are advised to use measures that are capable of assessing various conceptualizations of fit at the trait level, rather than overall personality profiles.

Measurement strategy was found to be one of the most important moderators of PJ and PO fit effects. In almost all cases, direct measures generated stronger results than indirect measures. This is consistent with Verquer et al.'s (2003) finding that individuals' overall assessment of fit is the best predictor of outcomes. Although stronger effects may be found by assessing perceived fit, this does not necessarily imply that direct measurement is optimal. Direct assessments of perceived fit are more susceptible to a common method bias than other measures and shed little light on the characteristics that underlie fit perceptions. It is worth noting that the differences in direct and indirect measures of fit are greatest in the preentry context. The mean difference between direct and indirect measures of PO fit in this context is .45. This suggests that although applicants and

recruiters are strongly influenced by perceptions of PO fit during recruitment and selection, these perceptions have little, if any, connection with reality. Whether fit perceptions are generated based on organization-controlled recruitment materials (e.g., Cable et al., 2000; Dineen, working paper; Dineen et al., 2002; Saks & Ashforth, 1997) or a short interview (Cable & Judge, 1997; Higgins, 2000; Kristof-Brown, 2000), they are based on very limited information. Indeed, there is some evidence to suggest that recruiters' perceptions of applicant PO fit are more likely to reflect the "similar-to-me" bias than true fit with the organization's culture (Adkins et al., 1994; Howard & Ferris, 1996).

With regard to the common method bias, our comparisons consistently demonstrated that studies using all common raters had higher effect sizes than those using partially common raters. These, in turn, generally reported stronger effects than those with no common source reporting. In addition, in studies of fit–attitude relationships, there appears to be a modest bias created by measuring fit and the criteria at the same point in time. Taken together, this evidence suggests that common-method bias is likely augmenting most reported fit relationships. How influential this bias is, however, we cannot definitively say because it is confounded with differences between perceived, subjective, and objective fit. These concepts differ dramatically in terms of *what* environment is assessed, not just how it is measured. A compelling question for fit researchers is whether using common raters or concurrent measurement compromises the integrity of the reported relationships, or whether it reflects the reality of how people's attitudes are influenced by fit as they experience it. There is a strong historical argument in interactional psychology that people can only be influenced by fit with the environment as they perceive it (e.g., Caplan, 1987; Endler & Magnussen, 1976; French et al., 1982). Therefore, although using a common source may increase the relationship between fit and outcomes, this may reflect reality rather than artifactual bias. There is no simple answer to what approach is best. However, using indirect subjective measures and collecting fit and criteria data at different points in time should reduce the impact of artifactual biases, while still having the benefit of assessing fit with the experienced environment.

Finally, the moderator results also shed some light on the role that sampling plays in reported fit–outcome relationships. Despite some higher effect sizes for single-unit studies of organizational commitment, effect sizes were generally comparable with multi-unit studies (particularly when Vancouver and Schmitt [1991] was excluded). These equivocal results may reflect variability in culture strength across single-organization samples, something that would also be captured in multi-unit samples. Alternatively, they may reflect the strongly personal nature of fit assessments, which vary as widely within as between organizations. In either case, the

use of single-organization or job samples does not appear to have significantly reduced the strength of reported relationships. In contrast, how the environment is assessed in studies of objective fit does appear to make a difference. Specifically, the aggregation of employee characteristics produced stronger fit effects than treating the organization as a unique entity. In virtually every case both types of measures were aggregates (i.e., the composite of multiple-members' ratings of the environment or of themselves). Therefore, these results cannot be attributed to the greater reliability of aggregated measures. It is more likely that they reflect the high degree of inaccuracy in people's perceptions of organizational characteristics (Cable, Aiman-Smith, Mulvey, & Edwards, 2000) or, that they truly reflect Schneider's proposition that "the people make the place."

Although the credibility intervals around the effect size estimates suggested that most were generalizable, a separate discussion of Vancouver and Schmitt's (1991) results is warranted. Vancouver and Schmitt (1991) examined the fit between the goals of secondary school teachers and their school's goals, as reported by their principals and coworkers. Contributing 13,388 to the overall N, this study reported effect sizes substantially lower than the overall mean effects. Therefore, when all analyses were run excluding this study, the average effects sizes increased .06−.12. This is less than the impact reported by Verquer et al. (2003), due in part to the larger k and N in this study, but is still noteworthy. This may be attributable to the smaller impact of goal-based fit versus values-based fit, or the use of indirect objective measures. Another possibility is that the sample was in some way unique. One other study examining secondary school teachers (Erdogan, Kraimer, & Liden, 2004) also presented lower-than-average effect sizes for PO fit, this time assessed using a value similarity index. A final possibility is that because teachers were asked to report "the importance of the same 14 goals for the school" (Vancouver & Schmitt, p. 342), rather than how important the goals were to them personally, the goal congruence index may reflect agreement more than fit. Continued research exploring these alternative explanations is encouraged to better interpret Vancouver and Schmitt's results.

Future Research

While conducting this meta-analysis, we became aware of several noticeable gaps in the fit literature. First, despite the acknowledgement that multiple conceptualizations of fit exist, there has been surprisingly little research focused on validating multidimensional approaches. The three-dimensional model (PO value congruence, PJ needs–supplies fit, PJ demands–abilities fit) proposed by Cable and DeRue (2002) is a step toward this type of theory. However, by not incorporating PG or PS fit, as

well as other types of PO fit such as personality and goal similarity, their model leaves room for expansion. Now that more is known about various types of fit, perhaps it is time to revisit the field's earlier notion of an overall assessment of PE fit, whether it be formative (i.e., composed by various independent types of fit) or reflective (i.e., one overarching construct that influences perceptions of various types of fit; Diamantopoulos & Winklhofer, 2001). To move in this direction, however, more attention must be paid to underexplored areas of fit, including all forms of PG and PS fit, as well as complementary forms of PO fit and supplementary forms of PJ fit. Moreover, exploration of how various types of fit influence each other over time and how fit is influenced by family issues (e.g., Edwards & Rothbard, 1999) will be important for establishing a more complete model of PE fit.

A second area requiring attention is fit as a dependent variable. Specifically, a better understanding of what it means to people to "fit" and the mechanisms that stimulate fit are long overdue. Edwards (1993, 1994) fundamentally altered fit research with the introduction of polynomial regression analysis as a more precise way to assess the impact of fit and misfit. Results of these studies suggest that criteria are often predicted by relationships that do not adhere to symmetrical notions of fit. Most suggest that fit at higher levels of a characteristic is generally superior to fit at lower levels and that misfit effects are asymmetrical (e.g., Edwards & Harrison, 1993; Livingstone et al., 1997; Slocombe & Bluedorn, 1999). It is interesting to note that some of the earliest theorizing on PE fit (e.g., Caplan, 1983; Kulka, 1979) suggested asymmetrical effects of misfit and fit that are actually consistent with recent polynomial regression findings. There is a clear need to revisit this research and explore the social comparison process underlying people's perceptions of fit. Polynomial regression studies that use perceived PE fit as the dependent variable are one viable approach, as are qualitative explorations of individuals' cognitive schemas regarding fit.

Regarding mechanisms that facilitate fit, most authors continue to rely on Schneider's ASA model to explain how high levels of fit are generated in organizations, despite the fact that this model was developed to explain organizational homogeneity (Schneider et al., 1995). Longitudinal investigations of what prompts changes in individuals' levels of fit over time, from preentry to turnover, are needed to take Schneider's theory to the individual level. One set of studies that does address fit as an outcome are those that examine how socialization practices influence subsequent levels of fit (e.g, Cable & Parsons, 2001; Chatman, 1991; Grant & Bush, 1996). What is lacking, however, is a comprehensive theory of how individual actions and organizational practices during and immediately following entry impact both perceived and actual levels of fit. Without a good theory to

explain this process, it is difficult to predict when individuals will become more like their coworkers and organizations, when jobs will change to reflect individuals' characteristics, when cognitive distortion will be used to change perceived but not actual fit, or when attrition with be the primary means by which greater levels of fit will be achieved. Kraimer (1997) proposed a framework of responses to socialization that included value belief strength and initial values congruence as determinants of value change. Similarly, the concept of job-role differentiation (Ilgen & Hollenbeck, 1990), which addresses when individuals alter the tasks they are expected to perform through role-making, may have implications for when individuals will proactively address situations of misfit.

There is also need for future research on personal and situational characteristics that moderate fit–outcome relationships. Current results suggest that fit is most influential if the dimensions measured are important to the individual (similar to the concept of facet importance in job satisfaction research; Edwards, 1996; McFarlin & Rice, 1992) and if the individual has high self-esteem (Dineen et al., 2002; Orpen, 1974). A few studies have examined personality traits (Miles & Perrewe, 1999; Shantz, 2003) and demographic variables (Lovelace & Rosen, 1996) but have found little support for their role as moderators. Even fewer studies have examined the impact of situational moderators on fit effects; however, there is preliminary evidence that relationships with managers and coworkers (Erdogan et al., 2004; Morris, 1995; Strauss et al., 2001) and even job performance (Shaw & Gupta, 2004) may influence the nature of the fit's relationship with outcome variables. This area seems particularly in need of research, as many managers face the challenge of minimizing the effects of poor fit for their employees.

Perhaps because of its complexities, fit also tends to be examined independently, rather than within the context of other meaningful predictors of work outcomes. Mitchell's work (Mitchell et al., 2001; Mitchell & Lee, 2001), which incorporates fit into a broader model of turnover, and Masterson and Stamper's (2003) theory of perceived organizational membership are noteworthy examples of a fourth direction for fit research. Masterson and Stamper classify both PO fit and psychological contracts as measures of the "fulfillment of needs" between employees and organizations in social exchange relationships. However, little research has examined the relationship between these concepts, or how the study of one might inform the other. One related concept is that of perceived organizational support (POS), defined as global beliefs about how much an organization values its employees and their contributions (Eisenberger, Huntington, Hutchinson, & Sowa, 1986). A small number of studies have examined the relationship between PO fit and POS with the results ranging anywhere from −.03 (Erdogan et al., 2004) to .53 (Cable & DeRue,

2002). More research investigating the similarities and differences in these concepts is necessary.

Methodologically too, there are areas that warrant additional research. First, research that assesses objective fit is needed to better understand how levels of analysis issues affect studies of fit. In particular, comparing individual-level (i.e., when P and E are both reported by individuals) versus cross-level (i.e., when P is reported by an individual, but E is an aggregate of others' ratings) is merited. Although common in studies of PS fit, rarely have individual-level reports been used in PG or PO fit studies (exceptions are Becker, 1992; Tikanmaki, 2001; Vancouver & Schmitt, 1991). Rather than dismissing this approach, comparative research is called for. Second, research comparing the effects of simultaneous assessments of multiple kinds of fit is needed. Most studies have assumed that various types of fit have additive effects (i.e., good fit on one dimension can compensate for poor fit on another). However, poor fit with one aspect of the environment may spill over into other areas, or that they may otherwise interact (Jansen & Kristof-Brown, 2002). Only by examining multiple types of fit longitudinally and within the same investigation can these types of spillover relationships be discerned.

Limitations and Strengths

Due to the fact that studies using objective criteria, including tenure, turnover, withdrawal, job offer, and job acceptance, did not report reliabilities for the variables, analyses that include them are not fully corrected for measurement error. Although the reliabilities for such criteria are typically high and as such would not have a large impact on the true score correlations, the meta-analytic estimates of fit relationships with these dependent variables are slightly conservative. In addition, because corrections for dichotomization were not able to be performed when turnover was the criterion, the meta-analyses for PJ fit and PO fit with turnover are also slightly attenuated. A limitation of this meta-analysis is also the number of studies available for moderator analyses. Although every effort was made to collect all relevant studies, there simply are not enough yet to examine moderators of PG and PS fit relationships.

Perhaps, most importantly, we acknowledge that our results reflect the strengths and weaknesses of every study in our sample. In his qualitative review of the PJ and PV fit literature, Edwards concluded that "nearly every study reviewed contained methodological flaws that seriously threaten the interpretability of the results obtained." (Edwards, 1991, p. 290). Specifically, studies using PSIs often suggest fit relationships that are not fully supported when polynomial regression is used to reanalyze them (e.g.,

Edwards, 1996; Kalliath et al., 1999). Although we acknowledge the validity of this concern, there are several reasons we do not believe that it is compelling enough to dismiss a tradition of research that continues to stimulate interest more than half a century since its inception. First, in most cases the polynomial regression results expand upon, but do not nullify, the fundamental notion that the fit between P and E is beneficial to individuals. We now know that fit at high levels of a characteristic is generally better than fit at low levels and that certain types of misfit are worse than others. However, these results have not negated the conclusion that fit is typically preferable to misfit. Second, meta-analysis allows measurement error due to unreliability in direct and indirect measures of fit, as well as in the criteria of interest, to be statistically corrected. This strengthens the conclusions that can be drawn from these studies, versus the uncorrected results reported in single studies. Finally, progress in any field can only be made by recognizing limitations in past research, correcting them when feasible, and comparing the results with those generated by new advances. Even if our research only serves as a baseline against which future studies of fit are compared, it is an important part of the generation and dissemination of knowledge regarding fit phenomena.

These limitations are countered by some important strengths. This meta-analysis calculated empirical estimates on four major conceptualizations of fit and a wide range of attitudinal and behavioral criteria. We provide an updated and comprehensive review of the literature (Edwards, 1991; Kristof, 1996; Verquer et al., 2003). Compared to the meta-analysis of PO fit by Verquer et al. (2003), which included approximately 60 effect sizes across three criteria, we analyzed 450 effect sizes across 18 outcome variables for PO fit alone. This large jump was due, in part, to the extensive array of sources utilized. In addition to searching the available databases, nearly a decade of conference programs was searched and two dozen prominent fit researchers were contacted for additional studies. Finally, the "snowballing" technique was used by searching through the references of primary fit studies and fit reviews to find additional sources of data. We also corrected for unreliability in the predictors, which Verquer et al. (2003) did not do, which allowed us to examine relationships at the construct level. In addition, in line with recent trends in fit research, we summarize studies using the polynomial regression technique that were not discussed by Verquer et al.

Implications

Although there appears to be no perfect way to assess fit, there are lessons to be learned from past approaches. First, scholars should consider

both the criteria (attitudes vs. behaviors), the context (preentry vs. postentry), and the underlying mechanisms by which they believe fit is operating when selecting a measurement approach. There may be times when direct assessment of fit is preferable. For example, if fit is being examined as an endogenous variable, such as a mediator of another relationship, it may be beneficial to assess the concept directly to capture the cognitive compatibility assessment at its broadest level. Under other conditions it might be more meaningful to assess fit indirectly to allow comparisons on particular values or goals, such as when a culture change program has been implemented. In these cases the polynomial regression approach is well advised. Second, it is important to recognize that all measures are not created equal. Our results suggest that when possible, multiple conceptualizations and content dimensions should be specified in the measures, regardless of whether they are direct or indirect. Rather than asking for a global assessment of "How well do you fit?" scales should provide guidance on the dimensions along which fit is to be assessed. Finally, researchers must ask themselves how important it is to understand the exact form of the relationship underlying fit perceptions. When more precision is necessary, as in cases where excess versus deficiency are expected to have distinct results, the polynomial approach is recommended. When a more holistic assessment of similarity is sufficient, PSIs may provide adequate information. When deciding upon a measurement strategy, no one approach can meet all needs. Researchers must consider their research question, sample characteristics, and prior evidence regarding the specific fit relationship before determining how to assess fit in a particular investigation.

These results also have implications for management practices. First, we present conclusive evidence that fit matters to applicants, recruiters, and employees. It influences their attitudes, decisions, and behaviors in the work domain. Yet, our results also suggest that fit is a complicated concept, with multiple types of fit influencing all outcomes. Therefore, managers wishing to maximize the benefits of fit are encouraged to attend to the various aspects of the environment with which fit may occur. It is not enough to increasingly refine a job description or indoctrinate employees into a company's culture. Instead, a multifaceted approach that involves the demands and supplies of jobs, coworker characteristics, and organizational elements is needed. Broad frameworks such as the proposed content and consequences of organizational socialization practices proposed by Chao, O'Leary-Kelly, Wolf, Klein, and Gardner (1994) may be used to guide managers to specific techniques aimed at increasing the levels of actual and perceived fit on particular dimensions. Managers should also attend to the relative impact of various types of fit on outcomes. For example, a tremendous amount of time is spent articulating the job requirements for

positions, but the demands–abilities fit has a minor impact on attitudes and even performance when compared with the needs–supplies fit. Recruiters and managers would be wise to highlight what jobs and organizations provide to maximize fit perceptions. Similarly, pairing individuals up with similar others is advisable for enhancing fit assessments.

More than 10 years ago, Bowen, Ledford, and Nathan (1991) encouraged managers to consider both PO and PJ fit during organizational entry because each may be related to different outcomes. Our results reinforce the utility of such an approach. As the business world continues to require managers to do more with less, criteria such as turnover and contextual performance become important criteria. Selection techniques that assess multiple types of fit need to be developed and validated against the criterion they are most likely to affect.

Yet, there is little evidence that perceived fit during preentry periods is an accurate reflection of objective fit relationships. This implies that decisions by both applicants and recruiters are being made based on flawed (or at least uninformed) information. To improve decision making during preentry periods, fit-based instruments with demonstrated criterion-related validity must be developed. Recently, commercial instruments have been developed and are being offered to managers as ways to assess PO fit, but little research has been done on these measures (for an exception see Hambleton, Kallieth, & Taylor, 2000). Most also are limited by a unidimensional perspective, focusing solely on one type of fit and/or one content dimension. Research will be needed on the consequences of testing for fit during hiring. Negative applicant reactions, faking, and adverse impact are all issues that need to be better researched before managers whole-heartedly embrace a "hire for the company" attitude.

A final implication stems from the relative inaccuracy of perceived fit assessments. This is particularly true for the PO fit, which an employee may not be able to assess simply because organizational characteristics may be difficult to identify. For example, perceived fit and actual fit on ethical values may be distally related because managers spend little time explicitly discussing their moral principles (Trevino, Hartman, & Brown, 2000). From the beginning of the recruitment process through long-term employment, managers should pay attention to how clearly they are communicating work unit and organizational values. This should aid in the attraction, hiring, and retention of individuals who share those values and are inspired by an organization that reinforces them. This approach may lead people who do not fit to leave the organization, so special attention should be paid to maintaining a healthy level of diversity in order to avoid the drawbacks associated with excessive homogeneity (Schneider et al., 1995).

Conclusion

In sum, research on PE fit spans more than 100 years, and interest in the field continues to grow. The number of dissertations conducted recently in the specific domains of PJ, PG, and PO fit suggests an upward trajectory for such research. We hope that this study, while raising new questions, also provides some answers for those interested in what we already know about how PE fit influences work-related outcomes. Results provide strong evidence for the importance of multiple types of fit for work-related attitudes and behaviors.

REFERENCES

*References included in the reported meta-analyses results.
**References included in the qualitative summary of polynomial regression studies.

Adkins CL. (1995). Previous work experience and organizational socialization: A longitudinal examination. *Academy of Management Journal, 38*, 839–862.

*Adkins B. (2000). *Value congruence in groups and organizations: Examining consultants' connections to their organization and work groups*. Unpublished doctoral dissertation, George Washington University.

*Adkins CL, Ravlin EC, Meglino BM. (1996). Value congruence between co-workers and its relationship to work outcomes. *Group and Organization Management, 21*(4), 439–460.

*Adkins CL, Russell CJ, Werbel JD. (1994). Judgments of fit in the selection process: The role of work value congruence. PERSONNEL PSYCHOLOGY, *47*(3), 605–623.

Ajzen I, Fishbein M. (1977). Attitude–behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin, 84*, 888–891.

**Antonioni D, Park H. (2001). The effects of personality similarity on peer ratings of contextual work behaviors. PERSONNEL PSYCHOLOGY, *54*, 331–360.

Arnaud A, Ambrose M, Schminke M. (2002, August). Individual moral development and ethical climate: The influence of PO fit on job attitudes. Paper presented at the Academy of Management Annual Meeting, Denver, CO.

Arrow H, McGrath JE, Berdahl JL. (2000). *Small groups as complex systems: Formation, coordination, development, and adaptation*. Thousand Oaks, CA: Sage.

*Aryee S, Chay UW, Tan HH. (1994). An examination of the antecedents of subjective career success among a managerial sample in Singapore. *Human Relations, 47*(5), 487–509.

Assouline M, Meir EI. (1987). Meta-analysis of the relationship between congruence and well-being measures. *Journal of Vocational Behavior, 31*, 319–332.

Barber AE. (1998). *Recruiting employees: Individual and organizational perspectives*. Thousand Oaks, CA: Sage.

Barrick MR, Mount MK. (1991). The Big Five personality dimensions and job performance: A meta-analysis. PERSONNEL PSYCHOLOGY, *44*, 1–26.

Barrick MR, Stewart GL, Neubert MJ, Mount MK. (1998). Relating member ability and personality to work-team processes and team effectiveness. *Journal of Applied Psychology, 83*, 377–391.

Barry B, Stewart GL. (1997). Composition, process, and performance and in self-managed groups: The role of personality. *Journal of Applied Psychology, 82*, 62–78.

*Barsade SG, Ward AJ, Turner JDF, Sonnenfeld JA. (2000). To your heart's content: A model of affective diversity in top management teams. *Administrative Science Quarterly, 45*(4), 802–837.

*Bauer TN, Green SG. (1996). Development of leader–member exchange: A longitudinal test. *Academy of Management Journal, 39*, 1538–1568.

*Becker TE. (1992). Foci and bases of commitment: Are they distinctions worth making? *Academy of Management Journal, 35*(1), 232–244.

*Becker TE, Billings RS, Eveleth DM, Gilbert NL. (1996). Foci and bases of employee commitment: Implications for job performance. *Academy of Management Journal, 39*(2), 464–482.

Bedeian AG, Day DV. (1994). Concluding statement. *Journal of Management, 20*, 695–698.

Beersma B, Hollenbeck JR, Humphrey SE, Moon H, Conlon DE, Ilgen DR. (2003). Cooperation, competition, and team performance: Toward a contingency approach. *Academy of Management Journal, 46*, 572–590.

Bem DJ. (1967). Self-perception: An alternative interpretation of cognitive dissonance phenomena. *Psychological Review, 74*, 183–200.

*Billsberry J. (1997, August). The development and initial trial of a Likert-scale questionnaire for the indirect assessment of person–organisation value congruence. Paper presented at the Academy of Management Annual Meeting, Boston, MA.

Blau PM. (1960). Structural effects. *American Sociological Review, 25*, 178–193.

*Bodenman JR. (1996). *Person–organization fit: How the communication of values is related to perception of "fit" during the screening interview*. Unpublished Dissertation, Pennsylvania State University.

Borman WC, Motowidlo SJ. (1997). Task performance and contextual performance: The meaning for personnel selection research. *Human Performance, 10*, 99–109.

*Boswell WR. (2001). Aligning employees with the organization's strategic objectives: Out of "line of sight" out of mind. Paper presented at the Academy of Management Annual Meeting, Washington, DC.

*Boudreau JW, Boswell WR, Judge TA, Bretz RD. (1998, August). Effects of personality, cognitive ability, and fit on job search and separation among employed managers. Paper presented at the Academy of Management Annual Meeting, San Diego.

Bowen DE, Ledford GE Jr, Nathan BR. (1991). Hiring for the organization, not the job. *Academy of Management Executive, 5*(4), 35–52.

*Boxx WR, Odom RY, Dunn MG. (1991). Organizational values and value congruency and their impact on satisfaction, commitment, and cohesion: An empirical examination within the public sector. *Public Personnel Management, 20*(2), 195–205.

*Bretz RD, Judge TA. (1994). Person–organization fit and the theory of work adjustment: Implications for satisfaction, tenure, and career success. *Journal of Vocational Behavior, 44*(1), 32–54.

*Brkich M, Jeffs D, Carless SA. (2002). A global self-report measure of person–job fit. *European Journal of Psychological Assessment, 18*(1), 43–51.

Bunderson JS. (2001). How work ideologies shape the psychological contracts of professional employees: Doctors' responses to perceived breach. *Journal of Organizational Behavior, 22*, 717–741.

Burnett JR, Vaughan MJ, Moody D. (1997). The importance of person–organization value congruence for female students joining college sororities. *Journal of College Student Development, 38*, 297–300.

*Bushe GR, Tikanmaki A. (2003, August). PO fit and organizational justice in predicting post-acquisition attitudes. Paper presented at Academy of Management Annual Meeting, Seattle WA.

Byrne D. (1971). *The attraction paradigm*. New York: Academic Press.

Cable DM, Aiman-Smith L, Mulvey PW, Edwards JR. (2000). The sources and accuracy of job applicants' beliefs about organizational culture. *Academy of Management Journal, 43*, 1076–1085.

*Cable DM, DeRue DS. (2002). The convergent and discriminant validity of subjective fit perceptions. *Journal of Applied Psychology, 87*(5), 875–884.

**Cable DM, Edwards JR. (2004). Complementary and plementary fit: A theoretical and empirical integration. *Journal of Applied Psychology, 89*, 822–834.

*Cable DM, Judge TA. (1996). person–organization fit, job choice decisions, and organizational entry. *Organizational Behavior & Human Decision Processes, 67*(3), 294–311.

*Cable DM, Judge TA. (1997). Interviewers' perceptions of person–organization fit and organizational selection decisions. *Journal of Applied Psychology, 82*(4), 546–561.

*Cable DM, Parsons CK. (2001). Socialization tactics and person–organization fit. PERSONNEL PSYCHOLOGY, *54*, 1–23.

*Caldwell DF, O'Reilly CA III. (1990). Measuring person–job fit with a profile comparison process. *Journal of Applied Psychology, 75*, 648–657.

*Canger JM, Smith MA, Lutrick EC, Herst DEL. (2002, April). Supervisor "Big Five" personality and subordinate attitudes. Paper presented at the 17th Annual Meeting of the Society for Industrial and Organizational Psychology, Toronto, Canada.

Caplan RD. (1983). Person–environment fit: Past, present, and future. In Cooper CL (Ed.), *Stress research* (pp. 35–78). New York: Wiley.

Caplan RD. (1987). Person–environment fit theory: Commensurate dimensions, time perspectives, and mechanisms. *Journal of Vocational Behavior, 31*, 248–267.

*Carless SA. (2002, April). Recruitment and job choice: How important are fit perceptions? Paper presented at the 17th Annual Conference of the Society for Industrial and Organizational Psychology, Toronto, Canada.

Carson RC. (1969). *Interaction concepts of personality*. Chicago: Aldine.

*Caverhill KM. (1994). *The fit between person and organization in the context of worker co-operatives: Exploring some major components*. Unpublished doctoral dissertation. University of Toronto.

Chao GT, O'Leary-Kelly AM, Wolf S, Klein HJ, Gardner PD. (1994). Organizational socialization: Its content and consequences. *Journal of Applied Psychology, 79*, 730–743.

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

*Chatman JA. (1991). Matching people and organizations: Selection and socialization in public accounting firms. *Administrative Science Quarterly, 36*(3), 459–484.

*Chaves WV, Levine EL. (2002, April). Testing the limits of person–organization fit: Effects of value congruence in a sales organization. Paper presented at the 17th Annual Conference of the Society for Industrial and Organizational Psychology, Toronto, Canada.

*Christiansen N, Villanova P, Mikulay S. (1997). Political influence compatibility: Fitting the person to the climate. *Journal of Organizational Behavior, 18*, 709–730.

Cohen J, Cohen P. (1983). *Applied multiple regression/correlation analysis for the behavior sciences* (2nd edition). Hillsdale, NJ: Lawrence Erlbaum.

Colbert AE. (2004). Understanding the effects of transformational leadership: The mediating role of leader-follower value congruence. Unpublished doctoral dissertation, University of Iowa.

Colbert AE, Mount MK, Harter JK, Witt LA, Barrick MR. (2004). Interactive effects of personality and perceptions of the work situation on workplace deviance. *Journal of Applied Psychology, 89*, 599–609.

*Cook J, Wall T. (1980). New work attitude measures of trust, organizational commitment and personal need non-fulfillment. *Journal of Occupational Psychology, 53*, 39–52.

Cronbach LJ. (1958). Proposals leading to analytic treatment of social perception scores. In Tagiuri R, Petrullo L (Eds.), *Person perception and interpersonal behavior* (pp. 353–379). Stanford, CA: Stanford University Press.

*Da Silva N, Thomas A, Mayoral L, Yoshihara M, Hutcheson J. (2002, April). Organizational strategy and employee outcomes: A person–organization fit perspective. Paper presented at the 17th Annual Conference of the Society for Industrial and Organizational Psychology.

Dawis RV. (1992). Person–environment fit and job satisfaction. In Cranny CJ, Smith PC, Stone EF (Eds.), *Job satisfaction: How people feel about their jobs and how it affects their performance*. New York: Lexington Books.

Dawis, Lofquist (1984). *A psychological theory of work adjustment*. Minneapolis: University of Minnesota Press.

*Day DV, Bedeian AG. (1995). Personality similarity and work-related outcomes among African-American nursing personnel: A test of the supplementary model of person-environment congruence. *Journal of Vocational Behavior, 46*(1), 55–70.

*Delobbe N, Vandenberghe C. (2000). A four-dimensional model of organizational commitment among Belgian employees. *European Journal of Psychological Assessment, 16*, 125–138.

Diamantopoulos A, Winklhofer HM. (2001). Index construction with formative indicators: An alternative to scale development. *Journal of Marketing Research, 38*, 269–277.

*Dickinson JM, Horvath M. (2004, April). P-O fit and specific values in community service organizations. Paper presented at the 19th Annual Meeting of the Society for Industrial and Organizational Psychology, Chicago, IL.

*Dineen BR. (working paper). Customization of fit information in a web-based recruitment context: Effects on fit perceptions, application decisions and applicant pool characteristics.

*Dineen BR, Ash SR, Noe RA. (2002). A web of applicant attraction: Person–organization fit in the context of web-based recruitment. *Journal of Applied Psychology, 87*(4), 723–734.

*Dorr D, Honea S, Posner R. (1980). Ward atmosphere and psychiatric nurses' job satisfaction. *American Journal of Community Psychology, 8*, 455–461.

Edwards JR. (1991). Person–job fit: A conceptual integration, literature review, and methodological critique. In Cooper CLRIT (Ed.), *International review of industrial and organizational psychology* (Vol. 6, pp. 283–357). Chichester, UK: Wiley.

***Edwards JR. (1993). Problems with the use of profile similarity indices in the study of congruence in organizational research. PERSONNEL PSYCHOLOGY, *46*, 641–665.

Edwards JR. (1994). Alternatives to difference scores as dependent variables in the study of congruence in organizational research. *Organizational Behavior and Human Decision Processes, 64*, 307–324.

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

Edwards JR, Caplan RD, Harrison RV. (1998). Person–environment fit theory: Conceptual foundations, empirical evidence, and directions for future research. In Cooper CL (Ed.), *Theories of organizational stress*. Oxford: Oxford University Press.

***Edwards JR, Harrison RV. (1993). Job demands and worker health: Three-dimensional reexamination of the relationship between person–environment fit and strain. *Journal of Applied Psychology, 78*(4), 628–648.

**Edwards JR, Parry ME. (1993). On the use of polynomial regression equations as an alternative to difference scores in organizational research. *Academy of Management Journal, 36*(6), 1577–1613.

**Edwards JR, Rothbard NP. (1999). Work and family stress and well-being: An examination of person–environment fit in the work and family domains. *Organizational Behavior & Human Decision Processes, 77*(2), 85–129.

Ekehammer B. (1974). Interactionism in personality from a historical perspective. *Psychological Bulletin, 81*, 1026–1048.

*Elfenbein HA, O'Reilly CA III. (2001, August). Fitting in: The effects of relational demography and person–organization fit on group process and performance. Paper presented at the Annual Academy of Management Meeting, Washington, DC.

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

*Erdogan B, Bauer TN. (2004, August). Examining boundary conditions of LMX to satisfaction relationship: Person–job fit and management style. Paper presented at the Annual Academy of Management Meeting, New Orleans, LA.

*Erdogan B, Kraimer ML, Liden RC. (2004). Person–organization fit and work attitudes: The moderating role of leader–member exchange. PERSONNEL PSYCHOLOGY, *57*, 305–332.

*Ehrhart KMH. (2001). *The role of job characteristic beliefs and personality in understanding person–job fit*. Unpublished doctoral dissertation, University of Maryland, College Park.

Eisenberger R, Huntington R, Hutchinson S, Sowa D. (1986). Perceived organizational support. *Journal of Applied Psychology, 71*, 500–507.

Feldman DC, Leana CR, Bolino MC. (2002). Underemployment and relative deprivation among re-employed executives. *Journal of Occupational and Organizational Psychology, 75*, 453–471.

*Ferris GR, Youngblood SA, Yates VL. (1985). Personality, training performance, and withdrawal: A test of the person–group fit hypothesis for organizational newcomers. *Journal of Vocational Behavior, 27*, 377–388.

Festinger L. (1954). A theory of social comparison processes. *Human Relations, 7*, 117–140.

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

*Finegan JE. (2000). The impact of person and organizational values on organizational commitment. *Journal of Occupational and Organizational Psychology, 73*, 149–169.

Finegan JE, Chong A. (1996, April). The relationship between organizational values, individual values and job-related attitudes. Paper presented at the 11th Annual Conference of the Society for Industrial and Organizational Psychology, San Diego, CA.

Fishbein M, Ajzen I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.

**Fletcher TD, Major DA, Davis DD. (2004, August). Congruence in personality and perceptions of climate competitiveness in the workplace: A three-dimensional look at the effects on job initiative and perceived stress. Paper presented at Academy of Management Annual Meeting, New Orleans, LA.

**Fox S, Spector PE. (2000). Relations of emotional intelligence, practical intelligence, general intelligence, and trait affectivity with interview outcomes: It's not all just G. *Journal of Organizational Behavior, 21*, 203–220.

*French JRP Jr, Caplan RD, Harrison RV. (1982). *The mechanisms of job stress and strain*. London: Wiley.

French JRP Jr, Rogers W, Cobb S. (1974). Adjustment as person–environment fit. In Coelho DAHGV, Adams JE (Ed.), *Coping and adaptation*. New York: Basic Books.

Fried YC, Ferris GR. (1987). The validity of the job characteristics model: A review and meta-analysis. PERSONNEL PSYCHOLOGY, *40*, 287–322.

*Garcia MF. (2004, August). An interviewer's fit perceptions of an applicant: The role of actual and perceived similarity. Paper presented at Academy of Management Annual Meeting, New Orleans, LA.

*Gelfand MJ, Kuhn M, Radhakrishnan P. (1996). The effects of value differences on social interaction processes and job outcomes in organizations: Implications for managing diversity. In Ruderman M, Hughes-James M, Jackson SE (Eds.), *Selected research on team diversity* (pp. 53–71).

*George JM, Jones GR. (1996). The experience of work and turnover intentions: Interactive effects of value attainment, job satisfaction, and positive mood. *Journal of Applied Psychology, 81*, 318–325.

**Gill H, Finegan JE. (2000, April). The relation between person–organization fit and organizational commitment. Paper presented at the 15th Annual Conference of the Society for Industrial and Organizational Psychology, New Orleans, LA.

*Glomb TM, Kammeyer-Mueller JD, Wanberg CR, Ahlburg D, Chuanhg A. (2003, April). Longitudinal examination of multiple dimensions of person–environment fit. Paper presented at the 18th Annual Conference of the Society for Industrial and Organizational Psychology. Orlando, FL.

*Good LR, Nelson DA. (1971). Effects of person–group and intragroup attitude similarity on perceived group attractiveness and cohesiveness. *Psychonomic Science, 25*(4), 215–217.

Goodman SA, Svyantek DJ. (1999). Person–organization fit and contextual performance: Do shared values matter? *Journal of Vocational Behavior, 55*, 254–275.

Graen GB. (1976). Role-making processes within complex organizations. In Dunnette MD (Ed.), *Handbook of industrial and organizational psychology* (pp. 1201–1245). Chicago: Rand McNally.

Grant ES, Bush AJ. (1996). Salesforce socialization tactics: Building organizational value congruence. *Journal of Personal Selling and Sales Management, 16*(3), 17–32.

Graves LM, Powell GN. (1995). The effect of sex similarity on recruiters' evaluations of actual applicants: A test of the similarity–attraction paradigm. PERSONNEL PSYCHOLOGY, *48*, 85–98.

*Graves LM, Powell GN. (1998). An investigation of sex discrimination in recruiters' evaluations of actual applicants. *Journal of Applied Psychology, 73*, 20–29.

*Greenhaus JH, Seidel C, Marinis M. (1983). The impact of expectations and values on job attitudes. *Organizational Behavior and Human Performance, 31*, 394–417.

Griffeth RW, Hom PW, Gaertner S. (2001). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. *Journal of Management, 26*, 463–488.

Gully SM, Incalcaterra KA, Joshi A, Beaubien JM. (2002). A meta-analysis of team-efficacy, potency, and performance: Interdependence and level of analysis as moderators of observed relationships. *Journal of Applied Psychology, 87*, 819–832.

*Hall DT, Schneider B, Nygren HT. (1975). Personal factors in organizational identification. *Administrative Science Quarterly, 15*, 176–190.

*Hambleton AJ, Kalliath T, Taylor P. (2000). Criterion-related validity of a measure of person–job and person–organization fit. *New Zealand Journal of Psychology, 29*(2), 80–85.

*Harris SG, Mossholder KW. (1996). The affective implications of perceived congruence with culture dimensions during organizational transformation. *Journal of Management, 22*(4), 527–547.

Harrison RV. (1978). Person-environment fit and job stress. In Cooper CL, Payne R (Eds.), *Stress at work* (pp. 175–205). New York: Wiley.

Harrison DA, Price KH, Bell MP. (1998). Beyond relational demography: Time and the effects of surface- and deep-level diversity on work group cohesion. *Academy of Management Journal, 41*, 96–107.

Harrison DA, Shaffer MA, Bhaskar P. (2002, August). Moving outward from organizations: Person-culture fit in the experiences of expatriates. Paper presented at the Academy of Management Annual Meeting, Denver, CO.

Heider F. (1958). *The psychology of interpersonal relations*. Chichester, UK: Wiley.

*Helford MC. (1995). *Psychological climate and organizational commitment*. Unpublished doctoral dissertation, Loyola University of Chicago.

*Herman JB, Hulin CL. (1973). Managerial satisfactions and organizational roles: An investigation of Porter's need deficiency scales. *Journal of Applied Psychology, 57*, 118–124.

*Higgins CA. (2000). *The effect of applicant influence tactics on recruiter perceptions of fit*. Unpublished doctoral dissertation. University of Iowa.

*Higgins CA, Judge TA. (2003, April). Effect of applicant influence tactics on recruiter perceptions of fit. Paper presented at the 18th Annual Conference of the Society for Industrial and Organizational Psychology, Orlando, FL.

*Hobman EV, Bordia P, Gallois C. (2003). Consequences of feeling dissimilar from others in a work team. *Journal of Business and Psychology, 17*, 301–325.

Hofmann DA, Jones LM. (2003, April). Personality, normative behavior, and organizational performance. Paper presented at the 18th Annual Conference of the Society for Industrial and Organizational Psychology, Orlando, FL.

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

*Hollenbeck JR. (1989). Control theory and the perception of work environments: The effects of focus of attention on affective and behaviors reactions to work. *Organizational Behavior and Human Decision Process, 43*, 406–430.

Howard JL, Ferris GR. (1996). The employment interview context: Social and situational influences on interviewer decisions. *Journal of Applied Social Psychology, 26*, 112–136.

*Hrebiniak LG. (1974). Effects of job level and participation on employee attitudes and perceptions of influence. *Academy of Management Journal, 17*, 649–662.

Hunter JE, Cohen SH. (1974). Correcting for unreliability in nonlinear models of attitude change. *Psychometrika, 39*, 445–468.

Hunter JE, Schmidt FL. (2004). *Methods of meta-analysis: Correcting error and bias in research findings* (2nd edition). Thousand Oaks, CA: Sage.

*Hutcheson JM, (1999). *An examination of three levels of person–environment fit*. Unpublished Dissertation, University of Houston.

Ilgen DR, Hollenbeck JR. (1990). The structure of work: Job design and roles. In Dunnette MD, Hough LM (Eds.), *Handbook of industrial and organizational psychology* (Vol. 2, pp. 165–207). Palo Alto, CA: Consulting Psychologists Press.

**James I. (2003). *Employees as stakeholders: An examination of person–organization fit and corporate social performance*. Unpublished doctoral dissertation, Claremont Graduate University.

Jansen KJ, Kristof-Brown AL. (2002, August). Beyond "fit happens": A temporal theory of fitting at work. Paper presented at the Academy of Management Annual Meeting, Denver, CO.

**Jansen KJ, Kristof-Brown AL. (in press). Marching to the beat of a different drummer: Examining the impact of congruent pace. *Organizational Behavior and Human Decision Processes*.

*Jansen KJ, Kristof-Brown A, Michael JH. (2004, April). The role of enabling environments for person–group fit. Paper presented at 19th Annual Conference of the Society for Industrial and Organizational Psychology, Chicago, IL.

Jehn KA, Northcraft GB, Neale MA. (1999). Why differences make a difference: A field study of diversity, conflict, and performance in workgroups. *Administrative Science Quarterly, 44*, 741–763.

Johnson GJ, Johnson WR. (1999). Perceived overqualification and health: A longitudinal analysis. *Journal of Social Psychology, 139*, 14–28.

Joyce WF, Slocum JW. (1982). Climate discrepancy: Refining the concepts of psychological and organizational climate. *Human Relations, 35*, 951–972.

Judge TA, Bretz RD. (1992). Effects of work values on job choice decisions. *Journal of Applied Psychology, 77*(3), 261–271.

*Judge TA, Cable DM. (1997). Applicant personality, organizational culture, and organization attraction. PERSONNEL PSYCHOLOGY, *50*(2), 359–394.

Judge TA, Ferris GR. (1992). The elusive criterion of fit in human resource staffing decisions. *Human Resource Planning, 15*(4), 47–67.

*Judge TA, Kristof-Brown A, Darnold T. (2005, April). Person–organization goal fit and job satisfaction: Role of motives underlying goal pursuit. Paper presented at the 20th Annual Conference of the Society for Industrial and Organizational Psychology, Los Angeles, CA.

***Kalliath TJ, Bluedorn AC, Strube MJ. (1999). A test of value congruence effects. *Journal of Organizational Behavior, 20*(7), 1175–1198.

Kanfer R, Ackerman PL. (1998). Motivation and cognitive abilities: An integrative aptitude-treatment interaction approach to skill acquisition. *Journal of Applied Psychology, 74*, 657–690.

*Kennedy M, Huff J. (2004). PO and PJ fit: Testing a three-factor model of subjective fit perceptions. Paper presented at AOM, New Orleans, LA.

*Kolenko TA, (1986). *The effects of individual-task congruence on employee performance, satisfaction, and tenure (person–job fit)*. Unpublished doctoral disseration. University of Wisconsin–Madison.

Kozlowski SWJ, Klein KJ. (2000). A multilevel approach to theory and research in organizations: Contextual, temporal, and emergent processes. In Klein K, Kozlowski S (Eds.), *Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions* (pp. 3–90). San Francisco, CA: Jossey-Bass.

Kraimer ML. (1997). Organization goals and values: A socialization model. *Human Resource Management Review, 7*, 425–448.

**Kreiner G. (2002, August). Domain segmentation and work-family conflict: A person–environment fit perspective. Paper presented at the Academy of Management Annual Meeting, Denver, CO.

*Krishnan VR. (2002). Transformational leadership and value system congruence. *International Journal of Value-Based Management, 15*(1), 19–33.

Kristof AL. (1996). Person–organization fit: An integrative review of its conceptualizations, measurement, and implications. PERSONNEL PSYCHOLOGY, *49*(1), 1–49.

*Kristof-Brown AL. (2000). Perceived applicant fit: Distinguishing between recruiters' perceptions of person–job and person–organization fit. PERSONNEL PSYCHOLOGY, *53*, 643–671.

**Kristof-Brown A, Barrick M, Stevens CK. (In press). When opposites attract: A multi-sample demonstration of complementary person-team fit on extraversion. *Journal of Personality*.

*Kristof-Brown AL, Jansen KJ, Colbert AE. (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, Stevens CK. (2001). Goal congruence in project teams: Does the fit between members' personal mastery and performance goals matter? *Journal of Applied Psychology, 86*, 1083–1095.

Kulka RA. (1979). Interaction as person-environment fit. In Kahle LR (Ed.), *New directions for methodology of behavioral science* (pp. 55–71). San Francisco: Jossey-Bass.

*Lachman R, Aranya N. (1986). Evaluation of alternative models of commitments and job attitudes of professionals. *Journal of Occupational Behavior, 7*, 227–243.

*LaPolice CC, Sharpe JP. (2004, April). P-O fit and work attitudes: Examining multiple value dimensions. Paper presented at the 19th Annual Conference of the Society for Industrial and Organizational Psychology, Chicago, IL.

Lau DC, Murnighan JK. (1998). Demographic diversity and faultlines: The compositional dynamics of organizational groups. *Academy of Management Review, 23*, 325–341.

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

Law KS, Wong C, Mobley WH. (1998). Toward a taxonomy of multidimensional constructs. *Academy of Management Review, 23*, 741–755.

*Lawler EE III, Hall DT. (1970). Relationship of job characteristics to job involvement, satisfaction, and intrinsic motivation. *Journal of Applied Psychology, 54*, 305–312.

Lawler EE III, Mohrman SA, Ledford GE Jr. (1995). *Creating high performance organizations: Practices and results of employee involvement and total quality management in Fortune 1000 companies*. San Francisco: Jossey-Bass.

*Lee TW, Mowday RT. (1987). Voluntarily leaving an organization: An empirical investigation of Steers and Mowday's model of turnover. *Academy of Management Journal, 30*, 721–743.

Levinthal D, March JG. (1993). The myopia of learning. *Strategic Management Journal, 14*, 95–112.

Lewin K. (1935). *Dynamic theory of personality*. New York: McGraw-Hill.

*Liden RC, Wayne SJ, Stilwell D. (1993). A longitudinal study on the early development of leader-member exchanges. *Journal of Applied Psychology, 78*, 662–674.

Lievens F, Decaesteker C, Coetsier P. (2001). Organizational attractiveness for prospective applicants: A person–organization fit perceptive. *Applied Psychology, 50*(1), 30–51.

**Livingstone LP, Nelson DL, Barr SH. (1997). Person–environment fit and creativity: An examination of supply–value and demand–ability versions of fit. *Journal of Management, 23*(2), 119–146.

*Locke EA. (1969). What is job satisfaction? *Organizational Behavior and Human Performance, 4*, 309–336.

Locke EA. (1976). The nature and causes of job satisfaction. In Dunnette M (Ed.), *Handbook of industrial and organizational psychology* (pp. 1297–1350). Chicago: Rand McNally.

Lofquist LH, Dawis RV. (1969). *Adjustments to work*. New York: Appleton-Century-Crofts.

Loher BT, Noe RA, Moeller NL, Fitzgerald MP. (1985). A meta-analysis of the relation of job characteristics to job satisfaction. *Journal of Applied Psychology, 70*, 280–289.

*Lopez EM, Greenhaus JH. (1978). Self-esteem, race, and job satisfaction. *Journal of Vocational Behavior, 13*, 75–83.

*Lovelace K, Rosen B. (1996). Differences in achieving person–organization fit among diverse groups of managers. *Journal of Management, 22*(5), 703–722.

Luke DA, Roberts L, Rappaport J. (1993). Individual, group context, and individual-group fit predictors of self-help group attendance. *The Journal of Applied Behavioral Science, 29*, 216–239.

**Lutrick EC. (2003). *Person–organization fit: Does it matter who describes the "actual" organization's culture?* Unpublished doctoral dissertation. University of South Florida.

*Lutrick EC, Moriarty KO. (2002, April). Measuring perceived P-O fit directly and indirectly: Does method matter? Paper presented at the 17th Annual Meeting of the Society for Industrial and Organizational Psychology, Toronto, Canada.

*Lyness KS, Thompson DE. (1997). Above the glass ceiling? A comparison of matched samples of female and male executives. *Journal of Applied Psychology, 82*, 359–375.

*Mastaler SE. (1999). *A study to explore the role of executive search consultants in assessing person–organization fit at organizational entry*. Unpublished doctoral dissertation. California School of Professional Psychology–Los Angeles.

Masterson SS, Stamper CL. (2003). Perceived organizational membership: An aggregate framework representing the employee–organization relationship. *Journal of Organizational Behavior, 24*, 473–490.

*McCulloch MC, Turban DB. (2001, April). Using person–organization fit to predict job departure in call centers. Paper presented at the 16th Annual Conference of the Society for Industrial and Organizational Psychology, San Diego, CA.

*McCulloch MC, Turban DB. (2002, April). Comparing person–organization fit and cognitive ability in a selection battery. Paper presented at the 17th Annual Conference of the Society for Industrial and Organizational Psychology, Toronto, Canada.

*McFarlin DB, Rice RW. (1992). The role of facet importance as a moderator in job satisfaction processes. *Journal of Organizational Behavior, 13*, 41–55.

Meglino BM, Ravlin EC. (1998). Individual values in organizations: Concepts, controversies, and research. *Journal of Management, 24*, 351–389.

*Meglino BM, Ravlin EC, Adkins CL. (1989). A work values approach to corporate culture: A field test of the value congruence process and its relationship to individual outcomes. *Journal of Applied Psychology, 74*(3), 424–432.

*Meglino BM, Ravlin EC, Adkins CL. (1991). Value congruence and satisfaction with a leader: An examination of the role of interaction. *Human Relations, 44*(5), 481–495.

Merton RK, Kitt A. (1950). *Contributions to the theory of reference group behavior*. In Merton RK, Lazarfeld P (Eds.), *Studies in the scope and method of "The American soldier*." Glencoe, IL: Free Press.

*Mickel AE. (2000). *The role of money in person–environment fit*. Unpublished doctoral dissertation. University of Washington.

*Miles AK, Perrewe PL. (1999, August). An examination of ergonomic training on organizational strain: A person-environment fit perspective. Paper presented at the Academy of Management Annual Meeting, Chicago, IL.

*Miles AK, Perrewe PL. (2001, August). Can I get a chair that fits? An examination of the orgonimic design and training influence of person-environment fit, control and strain. Paper presented at the Academy of Management Annual Meeting, Washington, DC.

Milliken FJ, Martins LL. (1996). Searching for common threads: Understanding the multiple effects of diversity in organizational groups. *Academy of Management Journal, 25*, 402–433.

Mitchell TR, Holtom BC, Lee TW, Sablynski CJ, Erez M. (2001). Why people stay: Using job embeddedness to predict voluntary turnover. *Academy of Management Journal, 44*, 1102–1122.

Mitchell TR, Lee TW. (2001). The unfolding model of voluntary turnover and job embeddedness: Foundations for a comprehensive theory of attachment. *Research in Organizational Behavior, 23*, 189–248.

Morgeson FP, Hofmann DA. (1999). The structure and function of collective constructs: Implications for multilevel research and theory development. *Academy of Management Review, 24*, 249–265.

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

Muchinsky PM, Monahan CJ. (1987). What is person-environment congruence? Supplementary versus complementary models of fit. *Journal of Vocational Behavior, 31*(3), 268–277.

Murray HA. (1938). *Explorations in personality*. New York: Oxford University Press.

*Netemeyer RG, Boles JS, McKee DO, McMurrian R. (1997). An investigation into the antecedents of organizational citizenship behaviors in a personal selling context. *Journal of Marketing, 61*(3), 85–98.

Netemeyer RG, Burton S, Johnston MW. (1995). A nested comparison of four models of the consequences of role perception variables. *Organizational Behavior and Human Decision Process, 61*, 77–93.

Nunally JC. (1962). The analysis of profile data. *Psychological Bulletin, 59*, 311–319.

**Nyambegera SM, Daniels K, Sparrow P. (2001). Why fit doesn't always matter: The impact of HRM and cultural fit on job involvement of Kenyan employees. *Applied Psychology: An International Review, 50*, 109–140.

*O'Reilly CA, Chatman J. (1986). Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behavior. *Journal of Applied Psychology, 71*(3), 492–499.

*O'Reilly CA, Chatman J, Caldwell DF. (1991). People and organizational culture: A profile comparison approach to assessing person–organization fit. *Academy of Management Journal, 34*(3), 487–516.

*Orpen C. (1974). A cognitive consistency approach to job satisfaction. *Psychological Reports, 35*, 239–245.

Ostroff C. (1993). Relationships between person-environment congruence and organizational effectiveness. *Group and Organization Management, 18*(1), 103–122.

Ostroff C, Harrison DA. (1999). Meta-analysis, level of analysis, and best estimates of population correlations: Cautions for interpreting meta-analytic results in organizational behavior. *Journal of Applied Psychology, 84*, 260–270.

Ostroff C, Rothausen TJ. (1997). The moderating effect of tenure in person-environment fit: A field study in educational organizations. *Journal of Occupational and Organizational Psychology, 70*, 173–188.

*Parrott K. (2004). *Colored perceptions in employee recruitment: What do your policies imply about your organization?* Unpublished master's thesis, Clarkson University.

Parsons F. (1909). *Choosing a vocation*. Boston: Houghton-Mifflin.

*Payne R. (1970). Factor analysis of a Maslow-type need satisfaction questionnaire. PERSONNEL PSYCHOLOGY, *23*, 251–268.

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

*Phillips JS, Barrett GV, Rush MC. (1978). Job structure and age satisfaction. *Aging and Work, 1*, 109–119.

*Phillips AS, Bedeian AG. (1994). Leader–follower exchange quality: The role of personal and interpersonal attributes. *Academy of Management Journal, 37*, 990–1001.

*Piasentin KA, Chapman DS. (2004, April). Perceived similarity and complementarity as predictors of subjective person–organization fit. Paper presented at the 19th Annual Conference of the Society for Industrial and Organizational Psychology, Chicago, IL.

Podsakoff PM, MacKenzie SB, Lee J, Podsakoff NP. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*, 879–903.

Porter LW. (1961). A study of perceived job satisfactions in bottom and middle management jobs. *Journal of Applied Psychology, 45*, 1–10.

Porter LW. (1962). Job attitudes in management: I. Perceived deficiencies in need fulfillment as a function of job level. *Journal of Applied Psychology, 46*, 375–384.

*Posner BZ. (1992). Person–organization values congruence: No support for individual differences as a moderating influence. *Human Relations, 45*(4), 351–361.

*Ravlin EC, Ilsev A, Meglino BM. (2002, April). Person–organization fit and adaptability and change. Paper presented at the 17th Annual Conference of the Society for Industrial and Organizational Psychology, Toronto, Canada.

*Ravlin EC, Ritchie CM. (2003, August). Sharing in-use and espoused values: Attitudinal and behavioral outcomes. Paper presented at the Academy of Management Annual Meeting, Seattle, WA.

Reichheld FF. (1996). *The loyalty effect: The hidden force behind growth, profits, and lasting value*. Boston, MA: Harvard Business School Press.

*Rice RW, McFarlin DB, Bennett DE. (1989). Standards of comparison and job satisfaction. *Journal of Applied Psychology, 74*, 591–598.

Rice RW, McFarlin DB, Hunt RG, Near JP. (1985). Organizational work and the perceived quality of life: Toward a conceptual model. *Academy of Management Review, 10*, 296–310.

Riordan CM. (2000). Relational demography within groups: Past developments, contradictions, and new directions. In Ferris GR (Ed.), *Research in personnel and human resource management* (Vol. 19, pp. 131–173). Stamford, CT: JAI Press.

*Riordan CM, Weatherly EW, Vandenberg RJ, Self RM. (2001). The effects of pre-entry experiences and socialization tactics on newcomer attitudes and turnover. *Journal of Managerial Issues, 13*(2), 159–176.

*Rosman P, Burke RJ. (1980). Job satisfaction, self-esteem, and the fit between perceived self and job on valued competencies. *Journal of Personality, 105*, 259–269.

Roth PL, Bevier CA, Bobko P, Switzer FS III, Tyler P. (2001). Ethnic group differences in cognitive ability in employment and educational settings: A meta-analysis. PERSONNEL PSYCHOLOGY, *54*, 297–330.

*Ryan AM, Horvath M. (1997, August). Confirmatory biases in assessments of organizational fit. Paper presented at the Academy of Management Annual Meeting, Boston, MA.

*Ryan AM, Horvath M, Kriska SD. (2000, April). Organizational familiarity, organizational image, fit, and application decisions. Paper presented at the 15th Annual Conference of the Society for Industrial and Organizational Psychology, New Orleans, LA.

Ryan AM, Kristof-Brown AL. (2003). Personality's role in person–organization fit: Unresolved issues. In Barrick M, Ryan AM (Eds.), *Personality and work* (pp. 262–288). San Francisco, CA: Jossey-Bass.

*Ryan AM, Schmit MJ. (1996). An assessment of organizational climate and P-E fit: A tool for organizational change. *The International Journal of Organizational Analysis, 4*(1), 75–95.

Rynes SL, Gerhart B. (1990). Interviewer assessments of applicant "fit": An exploratory investigation. PERSONNEL PSYCHOLOGY, *43*(1), 13–35.

*Saks AM, Ashforth BE. (1997). A longitudinal investigation of the relationships between job information sources, applicant perceptions of fit, and work outcomes. PERSONNEL PSYCHOLOGY, *50*(2), 395–426.

*Saks AM, Ashforth BE. (2002). Is job search related to employment quality? It all depends on the fit. *Journal of Applied Psychology, 87*(4), 646–654.

Salancik G, Pfeffer J. (1978). A social information processing approach to job attitudes and task design. *Administrative Science Quarterly, 23*, 224–253.

Salvaggio AN. (2004, April). To help or to leave: Person–group fit as a correlate of aggregate organizational citizenship behavior and turnover. Paper presented at the 19th Annual Conference of the Society for Industrial and Organizational Psychology, Chicago, IL.

*Schaubroeck J, Lam SSK. (2002). How similarity to peers and supervisor influences organizational advancement in different cultures. *Academy of Management Journal, 45*, 1120–1136.

*Scheu CR, Ryan AM. (2001, April). Achieving recruiting goals: Applying what we know about person–organization fit across a range of organizational image. Paper presented at the 16th Annual Conference of the Society for Industrial and Organizational Psychology, San Diego, CA.

Schein EH. (1992). *Organizational culture and leadership* (2nd edition). San Francisco: Jossey Bass.

Schmidt FL, Le H. (2004). *Software for the Hunter–Schmidt meta-analysis methods*. University of Iowa, Department of Management & Organization, Iowa City, IA. 42242.

*Schneider B. (1975). Organizational climate: Individual preferences and organizational realities revisited. *Journal of Applied Psychology, 60*, 459–465.

Schneider B. (1987). The people make the place. PERSONNEL PSYCHOLOGY, *40*, 437–453.

Schneider B. (2001). Fits about fit. *Applied Psychology: An International Review, 50*(1), 141–152.

Schneider B, Goldstein HW, Smith DB. (1995). The ASA framework: An update. PERSONNEL PSYCHOLOGY, *48*(4), 747–773.

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

*Schneiderman J, Sachau D. (2005). The effect of person–organization fit on job satisfaction, performance, and intent to leave.

*Schwepker CJJ, Ferrell OC, Ingram TN. (1997). The influence of ethical climate and ethical conflict on role stress in the sales force. *Journal of the Academy of Marketing Science, 25*(2), 99–108.

*Sekiguchi T. (2003). *The role of person–organization fit and person–job fit in managers' hiring decisions: The effects of work status and occupational characteristics of job openings*. Unpublished doctoral dissertation. University of Washington.

*Senger J. (1971). Managers' perceptions of subordinates' competence as a function of personal value orientations. *Academy of Management Journal, 14*, 415–423.

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

Shaw JB. (2004). The development and analysis of a measure of group faultlines. *Organizational Research Methods, 7*, 66–114.

**Shaw JB, Gupta N. (2004). Job complexity, performance, and well-being: When does supplies–values fit matter? PERSONNEL PSYCHOLOGY, *57*, 847–879.

*Sheffey SC. (1994). *Person–organization fit: A quantitative assessment of the match between actual and ideal culture*. Unpublished doctoral dissertation, Loyola University of Chicago.

*Sheridan JE, Slocum JW Jr. (1975). The direction of the causal relationship between job satisfaction and work performance. *Organizational Behavior and Human Performance, 14*, 159–172.

*Shin H, Holland B. (2004, April). P-O fit as a moderator of personality-job performance relations. Paper presented at the 19th Annual Conference of the Society for Industrial and Organizational Psychology, Chicago, IL.

*Shockley-Zalabak P, Morley DD. (1989). Adhering to organizational culture: What does it mean? Why does it matter? *Group and Organization Studies, 14*(4), 483–500.

Shore LM, Martin HJ. (1989). Job satisfaction and organizational commitment in relation to work performance and turnover intentions. *Human Relations, 42*, 625–638.

*Sims RL, Keon TL. (1997). Ethical work climate as a factor in the development of person–organization fit. *Journal of Business Ethics, 16*, 1095–1105.

*Sims RL, Kroeck KG. (1994). The influence of ethical fit on employee satisfaction, commitment and turnover. *Journal of Business Ethics, 13*(12), 939–948.

*Slocum JW Jr. (1971). Motivation in managerial levels: Relationship of need satisfaction to job performance. *Journal of Applied Psychology, 55*, 312–316.

***Slocombe TE, Bluedorn AC. (1999). Organizational behavior implications of the congruence between preferred polychronicity and experienced work-unit polychronicity. *Journal of Organizational Behavior, 20*, 75–99.

**Smith MA. (2002, April). Subordinate–supervisor "fit" using the Big Five personality constructs. Paper presented at the 17th Annual Conference of the Society for Industrial and Organizational Psychology, Toronto, Canada.

*Soh S. (2000). *Organizational socialization of newcomers: A longitudinal study of organizational enculturation processes and outcomes*. Unpublished doctoral dissertation. Ohio State University.

*Sorensen JE, Sorensen TL. (1974). The conflict of professionals in bureaucratic organizations. *Administrative Science Quarterly, 19*, 98–108.

Spokane AR. (1985). A review of research on person–environment congruence in Holland's theory of careers. *Journal of Vocational Behavior, 26*, 306–343.

***Strauss JP, Barrick MR, Connerley ML. (2001). An investigation of personality similarity effects (relational and perceived) on peer and supervisor ratings and the role of familiarity and liking. *Journal of Occupational and Organizational Psychology, 74*, 637–657.

*Stumpf SA, Hartman K. (1984). Individual exploration to organizational commitment or withdrawal. *Academy of Management Journal, 27*(2), 308–329.

*Sturm PR. (1998). *Person–organization fit in service firms: Measuring service provider job satisfaction and organizational commitment*. Unpublished doctoral dissertation. Virginia Commonwealth University.

Super DE. (1953). A theory of vocational development. *American Psychologist, 8*, 185–190.

**Taris R, Feij JA. (2001). Longitudinal examination of the relationship between supplies-values fit and work outcomes. *Applied Psychology: An International Review, 50*(1), 52–80.

*Tepeci M. (2001). *The effect of personal values, organizational culture, and person–organization fit on individual outcomes in the restaurant industry*. Unpublished doctoral dissertation. Pennsylvania State University.

*Tikanmaki AK. (2001). *The impact of person–organization fit and perceptions of justice on employee organizational commitment, job satisfaction, and trust towards management after an acquisition*. Unpublished master's thesis. Simon Fraser University.

Tom VR. (1971). The role of personality and organizational images in the recruiting process. *Organizational Behavior and Human Performance, 6*, 573–592.

*Ton MN, Hansen JC. (2001). Using a person–environment fit framework to predict satisfaction and motivation in work and marital roles. *Journal of Career Assessment, 9*(4), 315–331.

*Torkelson GE. (1997). A study to examine the relationship between supervisor-subordinate similarity, performance ratings and promotions. Unpublished doctoral dissertation.

Tranberg M, Slane S, Ekeberg SE. (1993). The relation between interest congruence and satisfaction: A metaanalysis. *Journal of Vocational Behavior, 42*, 253–264.

Trevino LK, Hartman LP, Brown M. (2000). Moral person and moral manager: How executives develop a reputation for ethical leadership. *California Management Review, 42*(4), 128–142.

Turban DB, Dougherty TW. (1994). Role of protege personality in receipt of mentoring and career success. *Academy of Management Journal, 37*, 688–702.

*Turban DB, Jones AP. (1988). Supervisor–subordinate similarity: Types, effects and mechanisms. *Journal of Applied Psychology, 73*, 228–234.

Turban DB, Lau C, Ngo H, Chow IHS, Si SX. (2001). Organizational attractiveness of firms in the People's Republic of China: A person–organization fit perspective. *Journal of Applied Psychology, 86*, 194–206.

*Tziner A. (1987). Congruency issue retested using Fineman's achievement climate notion. *Journal of Social Behavior and Personality, 2*(1), 63–78.

*Valentine S, Godkin L, Lucero M. (2002). Ethical context organizational commitment, and person–organization fit. *Journal of Business Ethics, 41*(4), 349–360.

**Van Vianen AEM. (2000). Person–organization fit: The match between newcomers' and recruiters' preferences for organizational cultures. PERSONNEL PSYCHOLOGY, *53*, 113–149.

Van Vianen AEM. (in press). A review of person–environment fit research: Prospects for personnel selection. In Evers A, Voskuijl O, Anderson N (Eds.), *Handbook of selection*. Boston: Blackwell.

Van Vianen AE, de Pater I, Kristof-Brown AL, Johnson E. (2004). Fitting in: The impact of surface-and deep-level cultural diversity on expatriates' adjustment. *Academy of Management Journal, 47*, 697–709.

*Vancouver JB, Schmitt NW. (1991). An exploratory examination of person–organization fit: Organizational goal congruence. PERSONNEL PSYCHOLOGY, *44*(2), 333–352.

Vancouver JB, Millsap RE, Peters PA. (1994). Multilevel analysis of organizational goal congruence. *Journal of Applied Psychology, 79*(5), 666–679.

*Vandenberg RJ, Scarpello V. (1990). The matching model: An examination of the processes underlying realistic job previews. *Journal of Applied Psychology, 75*, 60–67.

*Vandenberg RJ, Self RM, Seo JH. (1994). A critical-examination of the internalization, identification, and compliance commitment measures. *Journal of Management, 20*, 123–140.

*Vernon RN, Bergman SM, Bowler MC, Engel EA, Zelno JA, Rentsch JR, Woehr DJ. (2003, April). Similarity vs. diversity: The impact of personality congruence on teams. Paper presented at the 18th Annual Conference of the Society for Industrial and Organizational Psychology, Orlando, FL.

*Verquer ML, (2002). *Fitting in at work: A comparison of the relationships between person–organization fit and person–group fit with work attitudes*. Unpublished doctoral dissertation. Central Michigan University.

Verquer ML, Beehr TA, Wagner SH. (2003). A meta-analysis of relations between person–organization fit and work attitudes. *Journal of Vocational Behavior, 63*, 473–489.

*Vigoda E. (2000). Internal politics in public administration systems: An empirical examination of its relationship with job congruence, organizational citizenship behavior, and in-role performance. *Public Personnel Management, 29*(2), 185–210.

*Vigoda E, Ben-Zion E. (2002, month). Organizational image and army officers' intentions to leave the service for a job in high-tech firms. Paper presented at the Academy of Management Annual Meeting, Denver, CO.

*Vigoda E, Cohen A. (2002). Influence tactics and perceptions of organizational politics: A longitudinal study. *Journal of Business Research, 55*(4), 311–324.

*Wanous JP, Lawler EE III. (1972). Measurement and meaning of job satisfaction. *Journal of Applied Psychology, 56*, 95–105.

*Wayne SJ, Liden RC. (1995). Effects of impression management on performance ratings: A longitidinal study. *Academy of Management Journal, 38*, 232–260.

*Weeks WA, Chonko LB, Kahle LR. (1989). Performance congruence and value congruence impact on sales force annual sales. *Academy of Marketing Science, 17*(4), 345–351.

*Welchans TD. (1996). *The effects of telecommuting and communication media on perceived value congruence, organizational support and job satisfaction*. Unpublished doctoral dissertation. Ohio State University.

Werbel JD, Gilliland SW. (1999). Person–environment fit in the selection process. In Ferris GR (Ed.), *Research in Personnel and Human Resource Management* (Vol. 17, pp. 209–243). Stamford, CT: JAI Press.

*Werbel J, Landau J, DeCarlo TE. (1996). The relationship of pre-entry variables to early employment organizational commitment. *Journal of Personal Selling and Sales Management, 16*(2), 25–36.

*Westerman JW, Cyr LA. (2004). An integrative analysis of person–organization fit theories. *International Journal of Selection and Assessment, 12*, 252–261.

Wexley KN, Pulakos ED. (1983). The effects of perceptual congruence and sex on subordinates' performance appraisals of their managers. *Academy of Management Journal, 26*, 666–676.

*White AT, Spector PE. (1987). An investigation of age-related factors in the age-job-satisfaction relationship. *Psychology and Aging, 2*, 261–265.

Williams CR. (1990). Deciding when, how and if to correct turnover correlations. *Journal of Applied Psychology, 75*, 732–737.

*Witt LA. (1998). Enhancing goal congruence: A solution to organizational politics. *Journal of Applied Psychology, 83*, 666–674.

*Witt LA, Nye LG. (1992). *Organizational goal congruence and job attitudes revisited*. Oklahoma City, OK: FAA Civil Aeromedical Inst.

*Xie JL. (1996). Karasek's model in the People's Republic of China: Effects of job demands, control, and individual differences. *Academy of Management Journal, 39*, 1594–1618.

*Xie JL, Johns G. (1995). Job scope and stress: Can job scope be too high? *Academy of Management Journal, 38*, 1288–1309.

*Yukl G, Fu PP. (1999). Determinants of delegation and consultation by managers. *Journal of Organizational Behavior, 20*, 219–232.