Promoting Theoretical Progress in Person-Environment Fit Research[1]

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Abstract

A recent evaluation of theoretical progress in person-environment (P-E) fit research (Edwards, 2008) concluded that most P-E fit theories fall short of basic criteria for strong theory, and recent theories are hardly stronger than those developed decades earlier. This evaluation led to several recommendations for strengthening P-E fit theories, three of which centered on conceptual issues that P-E fit theories have yet to address. These issues are summarized below.

Confront the Meaning of Fit

One conceptual issue yet to be resolved in P-E fit research is the meaning of fit itself. The P-E fit literature is rife with terms taken as synonyms for fit. Some of these terms are reasonably precise, as when P-E fit is described as the match, similarity, or congruence between the person and environment (Breaugh, 1992; Chatman, 1989; Dawis et al., 1964; French et al., 1974; Wanous, 1980, 1992; Werbel & Gilliland, 1999). These terms connote the proximity of the person and environment to one another, which is the proper conceptualization of P-E fit. Other terms are metaphors without clear meaning, such as harmony, compatibility, suitability, and consonance (Dawis & Lofquist, 1984; Lofquist & Dawis, 1969; Parsons, 1909). Fit has also been called an interaction (Dawis et al., 1964; Holland, 1966, 1973; Katzell, 1964; Murray, 1938, 1951) and a reciprocal relationship (Dawis & Lofquist, 1984), neither of which should be equated with P-E fit. To clarify the meaning of fit, we should start by using terms that refer to the proximity of the person and environment to one another and dispense with metaphors and terms that represent other types of person-environment relationships.

As a next step, we should come to grips with the status of P-E fit as a construct. P-E fit theories are essentially silent as to whether P-E fit is linguistic shorthand for the person and environment considered jointly or refers to a construct that exists separately from the person and environment. Many theories imply that P-E fit is a distinct construct, as evidenced by the inclusion of P-E fit along with the person and environment in models that depict the theory (Breaugh, 1992; Chatman, 1989; Dawis et al., 1964; Harrison, 1978; Werbel & Gilliland, 1999). However, if P-E fit is *defined* as the match between the person and environment, *then P-E fit has no meaning beyond the person and environment*. Rather, P-E fit is a statement about the level of the person and environment relative to one another. If the person and environment are at the same level, whether they are low, medium, or high, then by definition P-E fit exists. If the person and environment are at different levels, then P-E misfit exists, with the direction of misfit indicated by the relative levels of the person and environment. From this perspective, P-E fit does not exist separately from the person and environment, because any statement about P-E fit is completely determined by the person and environment considered jointly. Moreover, propositions that describe relationships between P-E fit and other constructs can be translated into joint propositions that describe

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relationships for the person and environment. Thus, if P-E fit is defined as the match between the person and environment, then theories should not treat P-E fit as a construct that is somehow distinct from the person and environment.

P-E fit can be considered a distinct construct when it refers to a *subjective judgment* of the match between the person and environment (Locke, 1969, 1976; Wanous, 1980; Schneider, 1983). However, such judgments are likely to reflect factors other than the relative standing of the perceived person and environment (Chambers & Windschitl, 2004; Medin, Goldstone, & Gentner, 1993; Mussweiler, 2003; Tversky, 1977). Therefore, introducing subjective P-E fit judgments into theories of P-E fit requires us to elaborate our theories to explain the psychological processes that map the perceived person and environment onto judgments of P-E fit and identify factors beyond the perceived person and environment that influence these judgments. Available evidence indicates that relationships linking the perceived person and environment to judgments of P-E fit contradict the theoretical logic that presumably ties them together (Edwards, Cable, Williamson, Lambert, & Shipp, 2006). Incorporating subjective P-E fit judgments in theories of P-E fit is crucial to our understanding of the meaning of P-E fit as a psychological phenomenon and the mechanisms by which it relates to other constructs.

Supplement Process with Content

P-E fit theories have been recognized as process theories (Campbell, Dunnette, Lawler, & Weick, 1970) because they conceptualize P-E fit without respect to the content of the person and environment dimensions involved (Harrison, 1978; Locke, 1976). Some P-E fit theories include frameworks that specify content dimensions, such as the six career types of the RIASEC model (Holland, 1973, 1985, 1997), the 20 need and reinforcer dimensions that accompany the theory of work adjustment (Dawis & Lofquist, 1984; Dawis et al., 1964; Lofquist & Dawis, 1969), and the 54 values of the OCP (Chatman, 1989, 1991; O'Reilly et al., 1991). Nonetheless, these theories treat P-E fit as a general concept that subsumes the content dimensions specified by the frameworks. As noted earlier, some theories suggest that P-E fit relationships are likely to differ across content dimensions (Caplan, 1983, 1987; French et al., 1974, 1982; Harrison, 1978, 1985; Locke, 1969, 1976), but the dimensions used to illustrate these relationships are selected on an *ad hoc* basis, as opposed to being drawn from theoretically anchored frameworks for describing the person and environment.

P-E fit theories must move beyond general statements that disregard the content of person and environment dimensions. As stressed by Cronbach and Gleser (1953: 457), "*similarity is not a general quality. It is possible to discuss similarity only with respect to specified dimensions*" (emphasis in original), an admonishment that applies in full to P-E fit. Up to this point, P-E fit theories have distinguished between demands-abilities fit, needs-supplies fit, and supplementary fit (Kristof, 1996; Muchinsky & Monahan, 1987) and fit between the person and the job, group, organization, and vocation (Edwards & Shipp, 2007; Werbel & Gilliland, 1999). Although these distinctions are useful, they do not bring content to the person and environment, which is essential for understanding the substantive meaning P-E fit. Clearly, excess demands for technical skills differ from excess demands for interpersonal skills, insufficient rewards for pay differ from insufficient rewards for autonomy, and similarity on values that espouse altruism differs from similarity on values that emphasize competition. Furthermore, one of the most significant shortcomings of P-E fit theories is that they do not specify the form of the relationship between P-E fit and other constructs, and any attempt to predict the form of P-E fit relationships depends on the content of the person and environment dimension involved (Edwards & Shipp, 2007; Harrison, 1978). If we are going to predict anything specific about P-E fit relationships, we must take into account the content of person and environment dimensions involved.

Content dimensions can be incorporated into P-E fit theories using existing

frameworks. For instance, content dimensions for demands-abilities fit can be drawn from frameworks that describe job requirements (Borman & Brush, 1993; Fleishman & Mumford, 1991) and employee skills (Fleishman & Reilly, 1992; Lubinski & Dawis, 1990). Likewise, content dimensions for needs-supplies fit can be obtained from typologies of work-related preferences (Amabile, Hill, Hennessey, & Tighe, 1994; Dawis, 1991; Pryor, 1987) and rewards (Dawis et al., 1993; Gagné & Deci, 2005; Hackman & Oldham, 1980). Content dimensions for supplementary fit can be derived from frameworks describing personality (Goldberg, 1992; McCrae & Costa, 1997) and values (Cable & Edwards, 2004; Quinn & Rohrbaugh, 1983; Super, 1973). Drawing from frameworks such as these, P-E fit theories can incorporate content dimensions into the process explanations of P-E fit. Without content, the meaning and implications of P-E fit will remain elusive, and P-E fit theories are unlikely to yield predictions that go beyond simplistic generalizations.

Close the Empirical Loop

Theoretical progress requires not only evaluating theories on their own merits, but also testing theories empirically and using the obtained results to corroborate, modify, or reject theories, in part or whole. Unfortunately, tests of P-E fit theories have been plagued with methodological problems. Perhaps the most serious problem is the use of difference scores and profile similarity indices to represent P-E fit as a single variable in data analyses (Edwards, 1994). The use of such variables is often attributed to theoretical considerations. For instance, a theory might predict that P-E fit is positively related to an outcome, and in response, a researcher will collapse measures of the person and environment into a difference score intended to represent P-E fit and correlate the score with a measure of the outcome. Using the score might seem theoretically justified, because the theory says that the outcome is caused not by the person and environment, but instead by P-E fit, and therefore some score must be constructed to capture what the theory says.

I will not reiterate the statistical problems with difference scores and profile similarity indices, as these problems have been described elsewhere (Cronbach, 1958; Edwards, 1994; Johns, 1981; Lykken, 1956; Nunnally, 1962), and solutions to these problems are available (Edwards, 1995; 2002; Edwards & Parry, 1993). Rather, my concern is that appealing to theory to justify using difference scores and profile similarity indices is woefully misguided, because doing so presupposes the theory is correct and shields it from being tested. For instance, if a theory predicts that the absolute difference between needs and rewards causes satisfaction, the theory should be tested not by correlating the absolute difference between needs and rewards with satisfaction, *but instead by testing the functional form the absolute difference is intended to represent*. This functional form should be treated as a hypothesis to be tested empirically, not as an assumption to be imposed on the data. When used as theoretical statements, difference scores can be useful, as they provide precision and clarity that can be difficult to convey with words, and the use of difference scores in this manner is illustrated by several of the theories reviewed (Katzell, 1964; Locke, 1976; McGrath, 1976). However, the implications of these statements should be tested empirically in order to complete the cycle that runs from theory to empiricism and back to theory.

Concluding Comments

P-E fit theories have progressed little since their inception, and many theories fall short of standards for strong theory. These recommendations for promoting theoretical progress in P-E fit research speak to fundamental conceptual issues that P-E fit research has yet to address. By addressing these issues, we can promote the development of strong theories of P-E fit, which is essential to the advancement of P-E fit research itself.

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