

Personality Similarity and Work-Related Outcomes among African-American Nursing Personnel: A Test of the Supplementary Model of Person-Environment Congruence

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Drawing on the supplementary model of person-environment congruence (Muchinsky & Monahan, 1987), we employed aspects of the five-factor taxonomy of personality to test the effects of personality similarity on job satisfaction, job performance, and organization tenure in a structural model that also included psychological climate and role stress. Based on responses from 206 nursing service employees, we recovered five personality factors using similarity scores computed from the Adjective Check List (Gough & Heilbrun, 1965). Three of these factors (i.e., agreeableness, extraversion, conscientiousness) were included in an a priori, causal model using a subsample of 171 African Americans to demonstrate significant relations with job performance and organization tenure. The significant relations were incremental to the direct effects of psychological climate and role stress on job satisfaction and to the causal influence of satisfaction on tenure.

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The concept of person-environment (P-E) congruence (or "fit") has been a major focus of vocational psychology since first being introduced

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as a key aspect of Holland's (1966; Walsh & Holland, 1992) theory of personality types and model environments. In essence, Holland's theory holds that outcomes such as job satisfaction and performance are a function of the congruence or match between an individual's personality and psychological environment. Implicitly taking a person-by-situation approach, Holland argues that congruence comes from the tendency for people to both enter specific work environments because of their personalities and remain in those environments because of the reinforcements received. Conversely, an incongruent person-environment match prompts people to seek change. Within the vocational world, individuals who experience incongruence between their personality and the environment in which they work are presumed likely to change jobs so as to seek greater congruency elsewhere. Despite an impressive amount of evidence indicating that congruence is positively related to satisfaction, performance, and workplace tenure, questions persist regarding the appropriate assessment of congruence (Edwards, 1991). These questions partially result from the fact that what exactly constitutes a "good match" between individuals and their environments remains unclear, contributing to an incomplete understanding of the person-environment fit construct (Bretz & Judge, 1994).

In response, Muchinsky and Monahan (1987) have proposed two models of P-E congruence: supplementary and complementary. Supplementary congruence is the match between an individual and existing members of an environmental setting (e.g., an organization). According to this model, people seek to join specific environments because they perceive themselves as possessing characteristics (e.g., personality traits) that are similar to individuals within the environments. The supplementary model of congruence incorporates the rationale behind most vocational-counseling decisions. Complementary congruence is the match between the characteristics of an individual and the corresponding needs of an environment. The complementary basis of P-E congruence is the placing of individuals with certain knowledge, skills, and abilities in specific jobs that require such characteristics for successful coping. Complementary P-E congruence is the basis for most employee-selection decisions.

Much like Holland's theory of personality types and model environments, the Minnesota Theory of Work Adjustment (TWA) hypothesizes that work-related outcomes are a function of the fit between people and their work environments. First introduced in 1964 (Dawis, England, & Lofquist, 1964), TWA defines fit in terms of the interaction between individual characteristics and environmental demands. The process whereby individuals seek to achieve and maintain a correspondence with their work environment is called "work adjustment." A good fit between a person and a work setting (i.e., work adjustment) is thought to produce

job satisfaction and job tenure, with tenure indicative of more stable, long-term P-E congruence (Dawis, 1994).

Whereas TWA originally focused primarily on the structure of P-E fit, it has steadily evolved to increasingly emphasize the dynamic, ongoing relation between personality style and individual-work environment co-responsiveness (Lawson, 1993). To a large degree, this change in emphasis reflects a theoretical shift from complementary to supplementary congruence, representing a difference in thinking about environment as a particular place in time that is defined by role-based phenomena to one in which people comprise and define their environments (Schneider, 1987). Consistent with this shift, we expect that the degree to which an individual's personality matches with the personality of others within a work environment would be a useful way of considering P-E congruence/fit. Specifically, the reported study tested a model in which objective personality similarity was postulated to account for variation in job performance, job satisfaction, and organization tenure beyond that accounted for by psychological climate (i.e., work-environment attributes) and role stress (i.e., cognitive and affective reactions to work-role attributes).

Personality is an especially relevant element in supplementary P-E congruence for several reasons. First, personality is a key reference point in judging perceived similarity and, in turn, interpersonal attraction. It is the attraction of similar types of people to the same work setting that begins to determine that setting (Holland, 1985). Second, evidence suggests that people with similar personalities are not only likely to be attracted to each other but also likely to behave in similar ways (see George, 1992, for a recent review). Whereas the vast array of personality scales used in past research makes it difficult to evaluate which personality variables are predictive of which behavioral and attitudinal outcomes, in the last decade personologists have reached some accord regarding the existence of five major personality factors: extraversion/introversion, agreeableness, conscientiousness, neuroticism, and openness to experience. Indeed, these factors are seen by many as representing the core essence of personality (e.g., Digman, 1990). In this research we posited an a priori, causal model to examine the relations between the strongest and most interpretable of these factors, as indicators of personality similarity, and several representative work-place variables (viz., psychological climate, role stress, job satisfaction, job performance, and organization tenure).

The hypothesized relations (i.e., paths) among these variables and personality similarity are indicated in Fig. 1. Many of these relations are grounded in Holland's (1966, 1985) theory of personality types and model environments, as well as the Theory of Work Adjustment (Dawis & Lofquist, 1984). Role stress was hypothesized as a mediator between the

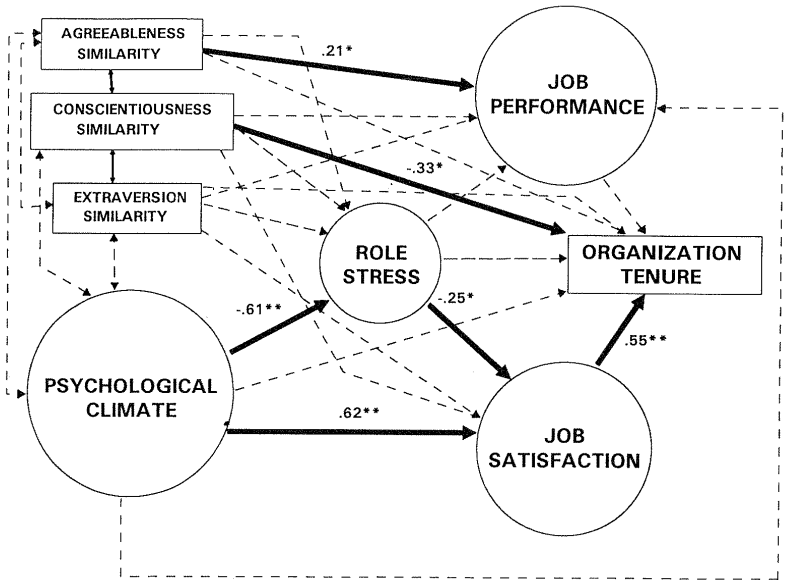


FIG. 1. Hypothesized structural model of personality similarity and work-related outcomes (solid lines indicate significant paths; dashed lines indicate nonsignificant paths).

exogenous variables of personality similarity and psychological climate and the endogenous variables of job satisfaction, job performance, and organization tenure. This positioning is consistent with the general perspective that certain antecedents such as interpersonal "alike-ness" or "sameness" and psychological environment (as measured by personality similarity and psychological climate, respectively) lead to stress reactions (e.g., Kahn, 1981). In turn, stress has been shown to lead to specific attitudinal (e.g., job satisfaction) and behavioral (e.g., job performance) outcomes (see Kahn & Byosiere, 1992, for a recent review). The model in Fig. 1 also estimated direct paths from personality similarity to job satisfaction, job performance, and organization tenure. These paths follow from the predictions of Muchinsky and Monahan's (1987) supplementary congruence model, as well as Holland's research. Psychological climate was also hypothesized to be directly and positively related to the same outcomes. Previous research indicates strong support for these hypothesized climate effects (e.g., Kopelman, Brief, & Guzzo, 1990). Personality similarity and psychological climate were allowed to covary in the model because situation and person factors cannot be fully separated in that people tend to locate themselves in settings with which they are compatible (Schneider, 1987). Due to the generally weak and inconsistent relation between job satisfaction and job performance (Iaffaldano & Muchinsky, 1985), the path linking these variables was fixed at zero, but paths were

included from job satisfaction and performance to organization tenure (Dawis, 1994; Dawis & Lofquist, 1984). The fit of the data to the model depicted in Fig. 1 was tested using structural equation modeling.

METHOD

Research Site and Respondents

The present study was conducted at a 1100-bed Veterans Administration Medical Center located in the southeastern United States. An estimated 60% of the center's work load is devoted to the care of psychiatric-care patients (both acute and long-term), with the balance of its activities devoted to acute and long-term medical and surgical patients. At the time of the study there were approximately 980 inpatients and 6000 outpatients on the rolls.

From an initial population pool of 460 nurses, 206 participated in the study, yielding a response rate of 44.8%. Respondents were drawn from all five levels in the center's nursing service. The distribution included 96 nursing assistants, 35 licensed practical nurses, 56 registered nurses, 8 nurse practitioners, and 11 nurse administrators (i.e., department heads and program coordinators). All respondents, except nursing assistants and licensed practical nurses, were RNs. Temporary or part-time employees were excluded, as were those who were either on leave of absence or on vacation during the study period.

All respondents had completed high school with 36% reporting a college background; most were African Americans (93%), with an average age of 39.08 years ($SD = 11.39$) and an average organization tenure of 13.83 years ($SD = 9.79$), ranging from a minimum tenure of approximately 1 year to a maximum of 37 years. Typical of a profession largely populated by women, a majority of respondents were female (57.5%). The relatively large percentage of male subjects is explained by the medical center's predominately male-patient clientele (i.e., military veterans) and their special requirements with respect to acute and long-term psychiatric treatment. Because there were so few non-Blacks in both the sample and target population, the 14 Whites and the 21 respondents with incomplete questionnaires were dropped from further analyses. Thus, the final sample consisted of 171 African-American subjects.

Because study participation was voluntary and the medical center would only release information pertaining to an employee's age, gender, level of education, and initial date of employment with written consent, we were unable to compare the demographic characteristics of nonrespondents to respondents at an individual level. However, three checks on sample representativeness were possible. First, the response rates of subjects working on all three of the center's shifts were proportionate to the actual distribution of nursing staff on these shifts. Second, the sample

involved a representative cross-section of employees from all levels of the nursing hierarchy and from all departments. Third, evidence obtained in a series of feedback sessions with nursing personnel and hospital administrators indicated that both groups viewed the results as highly representative. Given these checks and the favorable overall response rate, we judged the potential for response bias to be small.

Procedure

Randomly ordered questionnaires were administered to small groups under controlled conditions. To minimize demand characteristics and investigator bias, the study was identified as part of an established, ongoing research effort of the center's Nursing Services for Education staff. The questionnaire package was pretested on a representative group of respondents to determine the affect of factors such as length and readability. All respondents' queries were answered. The confidentiality of results was stressed and voluntary participation was indicated by signing a consent statement. Administrations of the questionnaire occurred over a 5-day period at times convenient to each of the center's three shifts.

Instruments

Psychological climate. Five composite scales from the Survey of Organizations (SOO; Taylor & Bowers, 1972) were used as indicators of a latent psychological climate variable. Evidence of the scale's reliability and convergent and discriminant validity is provided by Taylor and Bowers in their questionnaire manual. Individual items were scored using a 5-point response mode ranging from (1) To a very little extent to (5) To a very great extent. Indicator scale scores were constructed by averaging across respective items. The Technological Readiness scale contains two items that measure the extent to which resources, methods, and procedures are up-to-date (viz., "To what extent is this organization generally quick to use improved work methods?" and "To what extent are the equipment and resources you have to do your work with adequate, efficient, and well maintained?"). A coefficient alpha reliability of .50 was obtained for this scale in the present sample. The Human Resources Primacy scale consists of three items that measure the extent to which work is organized in a way that shows concern for people (e.g., "To what extent does this organization have a real interest in the welfare and satisfaction of those who work here?" and "How much does the organization try to improve working conditions?"). A coefficient α reliability of .78 was obtained for this scale. The Communication Flow scale contains three items that measure the extent to which information flows easily in upward, downward, and lateral directions (e.g., "How receptive are those above you to your ideas and suggestions?" and "How adequate for your needs is the amount of information you get about what is going on in other

departments and shifts?"). A coefficient α reliability of .68 was calculated for this scale. The Motivational Conditions scale consists of three items that measure the way conflicts are handled and the presence of factors that encourage hard work (e.g., "To what extent are there things about working here (people, policies, or conditions) that encourage you to work hard?" and "To what extent are differences and disagreements between persons or units avoided, denied, or suppressed?"). A coefficient α reliability of .57 was obtained for this scale. The Decision-Making Practices scale contains four items that measure the level at which decisions are made and the extent that those affected by decisions are consulted (e.g., "In this organization, to what extent are decisions made at those levels where the most adequate and accurate information is available?" and "When decisions are being made, to what extent are the persons affected asked for their ideas?"). A coefficient α reliability of .75 was obtained for this scale. The overall composite reliability for the latent psychological climate construct was estimated to be .84, using scale scores as indicator variables. Composite reliability estimates are analogous to coefficient alpha for latent variables (Netemeyer, Johnston, & Burton, 1990).

Role stress. Three scale scores (role conflict, role ambiguity, job tension) were used as indicators of a latent role stress construct. Role Conflict and Role Ambiguity were measured using scales developed by Rizzo, House, and Lirtzman (1970). Each item was answered using a five-point response mode ranging from very false to very true, and scale scores were calculated by averaging across the relevant items. The Role Conflict scale contains eight items (e.g., "I work under incompatible policies and guidelines"; "I have to break a rule or policy in order to carry out an assignment"), with an obtained coefficient α reliability of .88. The Role Ambiguity scale contains six items (e.g., "I know what my responsibilities are;" "There are clear, planned goals and objectives for my job"), with an obtained coefficient α reliability of .79. Both Role Ambiguity (reversed) and Role Conflict were scored so that greater scores indicate greater perceived stress. The Job Tension scale (Lyons, 1971) contains nine items in which respondents were asked to rate how often they feel bothered on their present job by a variety of work-related factors (e.g., "Feeling that you have to do things on the job that are against your better judgment;" "Feeling that you have too heavy a work load, one that you can't possibly finish during an ordinary work day"). Response categories (coded from 1 to 5) were never, rarely, sometimes, rather often, and nearly all the time. Items were averaged to yield a single tension score. The coefficient α reliability was estimated to be .86. This scale was selected because it parallels the Rizzo et al. scales and it was specifically designed for use with nursing personnel. The composite reliability of the role stress latent variable was estimated to be .76, using the Role Conflict, Role Ambiguity, and Job Tension scale scores as manifest indicators.

Job satisfaction. A 6-item scale taken from the Survey of Organizations (Taylor & Bowers, 1972) was used to measure job satisfaction. Respondents were asked to rate their satisfaction level for persons in work group, supervisor, job, organization, progress made in the organization up to now, and chances of getting ahead in the organization in the future. Response alternatives ranged from a very little extent (1, the least favorable response) to a very great extent (5, the most favorable response). Composite reliability was estimated to be .75, using item scores as indicators of a latent job satisfaction variable.

Job performance. This construct was defined as a behavioral outcome consisting of the quantity and quality of work, job-related knowledge, dependability, and overall performance (cf. Muckler & Seven, 1992). Approximately 2 months after the respondents completed the questionnaire package, all nurse supervisors were asked to evaluate the performance of their immediate staff members on the general factors of work quantity, work quality, dependability, work knowledge, and overall performance. Supervisors were instructed to evaluate their staff members by comparing each individual's performance to his/her co-worker's performance using the following five response alternatives: much less, slightly less, the same as, slightly more, and much more. Ratings were returned to the researchers under separate cover and were later matched to survey responses by means of a coded identification number. The composite reliability was estimated at .95, using item scores as indicators of a latent job performance variable.

Organization tenure. The date of initial employment provided by the medical center was used to calculate the length of time (in years) an individual had been employed by the medical center.

Personality. Personality was assessed using the Adjective Check List (ACL; Gough & Heilbrun, 1965). The ACL consists of 300 English-language adjectives, and respondents are instructed to check all adjectives considered to be self-descriptive. Each scale contains positively and negatively scored adjectives, and separate scales exist for men and women. Total raw scale scores were computed by summing the number of positive adjectives checked and subtracting the number of negative items checked. Raw scale scores were then transformed into standard T-scores adjusted for gender and the total number of adjectives checked, using the ACL conversion tables. We selected the 22 scales listed in Table 1 for use in this research. The ACL manual reports average test-retest reliabilities across these 22 scales of approximately .70 for college males and females (10 weeks), approximately .52 for adult males (6 months), and approximately .51 for medical students (5 years). In addition to its use as a general self-report measure of personality traits, the ACL has been shown to be a suitable measure of the five-factor model of personality (Piedmont, McCrae, & Costa, 1991).

TABLE 1
ACL Similarity Scale Factor Loadings

Scale	Factor				
	Agreeable	Extra	Consc	Hybrid	Openness
Defensiveness ^a	.62	-.10	.34	-.05	.26
Favorableness	.84^A	.13	.15	-.07	.13
Personal adjustment	.70^A	.02	.32	.10	-.06
Intracception	.78^A	-.03	.12	.13	-.14
Nurturance	.66^A	-.14	.27	.54	.03
Affiliation	.79^A	-.03	.22	.00	.15
Heterosexuality	.53^A	.07	-.25	.01	-.01
Self-confidence	.03	.77^E	-.15	.20	.17
Achievement	.34	.66^E	.38	-.16	.20
Dominance	.10	.89^E	.16	.10	.05
Exhibition	-.11	.48^E	-.16	.41	.09
Abasement	-.10	.73^E	.26	.22	-.07
Unfavorableness	.22	.10	.58^C	.41	-.18
Self-control	.10	-.18	.53	.47	.13
Endurance	.27	.14	.82^C	.03	.08
Order	.12	.01	.77^C	.01	.05
Succorance	.13	.36	.59^C	.12	-.09
Aggression	.31	.05	.22	.77	.09
Autonomy	-.07	.41^E	.10	.72	-.11
Deference	-.08	.39	.01	.71	.09
Change	.03	.17	-.11	.23	.66^O
Lability ^a	.07	.04	.12	-.10	.74

Note. $n = 206$. Agreeable, Agreeableness; Extra, Extraversion; Consc, Conscientiousness. Factor loadings greater than $|\cdot 40|$ are in boldface. Capitalized superscript denotes that a scale was also found by Piedmont et al. (1991) to load significantly on the indicated Big-Five factor.

^a Scale not included in the Piedmont et al. (1991) analysis.

Calculation of Personality Similarity

A two-step procedure was followed to compute the similarity of each respondent to others in the organization. We first computed the average similarity of each respondent to every other respondent on each ACL scale using the following formula:

$$\left[\sum_{j=i}^{n-1} (|s_i - s_j|) / n \right], \quad (1)$$

where n is the sample size, s_i is a respondent's score on an individual ACL scale, and s_j is the j th respondent's score on the identical scale. The signs were reversed on the final values so that larger scores reflected a smaller difference between a respondent and all other respondents on a particular ACL scale. Second, the resulting similarity scores were sub-

jected to a principal components analysis with varimax rotation. Six factors were obtained having eigenvalues greater than 1, but the sixth factor was defined uniquely by heterosexuality. We recomputed the analysis specifying a five-factor solution with a varimax rotation. Table 1 presents the factor loadings for the five-factor solution.

Three of the factors were very similar to those reported by Piedmont et al. (1991), even with our use of similarity scores. Also consistent with Piedmont et al.'s results, each ACL scale had a substantial loading on at least one factor. Factor 1 was denoted by similarity factor loadings on defensiveness, favorableness, personal adjustment, intraception, nurturance, affiliation, and heterosexuality. It thus appears to be most similar to the Big Five factor of agreeableness. Factor 2 was comprised of self-confidence, achievement, dominance, exhibition, and abasement; it appears to be extraversion. Factor 3 was defined by unfavorableness, self-control, endurance, order, and succorance; this is most consistent with the Big Five factor of conscientiousness. Factor 4 was marked by autonomy, aggression, and deference. This factor appears to be a hybrid of agreeableness and extraversion. Factor 5 was defined by factor loadings of lability and change, which is most consistent with the openness to experience factor. Factors 4 and 5 appear to be defined relatively weakly (three or fewer scales) and the Big Five factor of neuroticism was not obtained, but the agreeableness, extraversion, and conscientiousness factors all appear to be well defined by our results. Therefore, final similarity scores were computed only for those three factors by averaging across those scale scores with loadings exceeding .40 on each of those respective primary factors. Coefficient α reliability estimates for the similarity factor scores were: agreeableness = .87; extraversion = .83; conscientiousness = .71.

RESULTS

We examined the fit of our data to the model in Fig. 1 using the EQS structural equation program (Bentler, 1989) to separately estimate (a) the effect of each indicator per latent variable (i.e., measurement model), and (b) relations among constructs (i.e., structural model). A 24×24 covariance matrix was used as EQS input in both steps, choosing a maximum-likelihood solution. Because the distributions of several variables were asymmetrical, all data were subjected to a natural logarithmic transformation (as recommended by Bollen, 1989) before computing the covariance matrix. The resulting distributions were substantially less skewed. The estimated correlations among the seven structural variables, as well as means and standard deviations, are presented in Table 2.

In fitting the measurement model, the EQS program converged with no estimation problems. The measurement model and data differed significantly, $\chi^2(206) = 336.86$, $p < .01$, but models tested on large samples

TABLE 2
Descriptive Statistics and Estimated Correlations among Study Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Agreeableness similarity	69.29	18.48	.87							
2. Extraversion similarity	52.45	13.70	.08	.83						
3. Conscientiousness similarity	38.77	10.76	.48**	.42**	.71					
4. Psychological climate	3.02	.68	-.06	.02	.06	.84				
5. Job stress	2.50	.59	.02	-.06	-.09	-.61**	.76			
6. Job satisfaction	3.79	.81	-.10	.17*	.17*	.78**	-.65**	.75		
7. Job performance	3.62	1.05	.14*	-.06	-.06	.10	-.13*	.08	.95	
8. Organization tenure	14.44	9.65	-.10	.11	-.15*	.10	-.14*	.26*	.01	-.95

Note. $n = 171$. Correlations from the estimated measurement model. Means and standard deviations computed by averaging across relevant items or scales. Reliability estimates reported on the diagonal.

* $p < .05$; ** $p < .01$.

always have large and significant χ^2 values. We also examined several adjusted goodness-of-fit indices. The Bentler and Bonett (1980) normed fit index (NFI) indicates the percentage of the variance in the covariance matrix accounted for by the measurement model. Bentler and Bonett's non-normed fit index (NNFI) adjusts for degrees of freedom and is thus thought to be more invariant to sample size than the NFI. The comparative fit index (CFI) is least biased by sample size but retains the interpretation of the NFI (Bentler, 1990). The root mean square residual (RMR) is the square root of the average of the squared fitted residuals (Pedhazur & Schmelkin, 1991), with values less than .05 considered desirable. The NFI and CFI indices can generally take on values between 0 and 1.0, with values exceeding .90 suggesting adequate model fit (Bentler, 1989). The adjusted indices suggested an acceptable fit to the data, NFI = .84; NNFI = .92; CFI = .93; RMR = .01.

We further examined results at the construct level to determine how well the specified measurement model fit the data. All of the maximum likelihood parameter estimates were significantly different from 0 with t values ranging from 5.93 to 18.61. The explained variance estimates accounted for by the separate indicators (one minus the squared standardized error term) ranged from .20 to .96. Standard errors for the parameter estimates ranged from .08 to .44, and all were statistically different from zero. The average of the absolute standardized residuals was .049. The distribution of standardized residuals was symmetric and centered around

TABLE 3
Structural Model Standardized Parameter Estimates

Antecedent variable	Outcome variable			
	Role stress	Job satisfaction	Job performance	Tenure
Agreeableness similarity	-.006	-.123	.210*	.080
Extraversion similarity	.025	.097	-.009	.150
Conscientiousness similarity	.052	.124	-.170	-.328*
Psychological climate	-.608**	.622**	.052	-.312
Role stress	—	-.250*	-.124	-.002
Job satisfaction	—	—	—	.545**
Job performance	—	—	—	-.024

Note. $n = 171$.

* $p < .05$; ** $p < .01$.

zero, with 100% of the residuals falling between $\pm .20$. Taken together, these results suggest a reasonable fit of the latent constructs to the manifest indicators.

Given the absence of measurement problems, we next examined the structural portion of the hypothesized model. The standardized structural parameters from the model (see Table 3 and Fig. 1) indicate that psychological climate was the only significant predictor of role stress; climate and stress were significant predictors of job satisfaction. Only agreeableness significantly predicted job performance. Organization tenure was significantly predicted by job satisfaction and conscientiousness similarity.

DISCUSSION

Holland's (1966, 1985) theory of personality types and model environments and the Theory of Work Adjustment (TWA; Dawis & Lofquist, 1984) predict that optimizing person-environment (P-E) congruence will result in enhanced work-related outcomes. Our purpose was to empirically test the supplementary model of P-E congruence (Muchinsky & Monahan, 1987) using objective personality similarity as a measure of "alike-ness" or "sameness." Employing aspects of the five-factor model of personality, we tested the effects of personality similarity on role stress, job satisfaction, job performance, and organization tenure in a theoretically grounded model that also includes psychological climate. Our main focus was on determining whether personality similarity predicts work-related outcomes beyond that predicted by psychological climate and role stress.

The supplementary congruence model (Muchinsky & Monahan, 1987) holds that the degree of P-E fit (*vis-à-vis* personal characteristics) between an individual and others in an environmental setting produces positive

(or negative) outcomes. An implication of this notion is that people are attracted to specific organizations on the basis of the personality profiles of the people already there. This match results in greater job satisfaction, enhanced job performance, and increased organization tenure. Our results support this idea only for job performance: agreeableness similarity is associated with better job performance ratings. Furthermore, agreeableness similarity is the sole statistically reliable predictor of performance in the tested structural model. One explanation for this effect is that employees who are either noticeably more disagreeable than co-workers, or so friendly and agreeable as to appear to be disingenuous, receive unfavorable evaluations from better-established organization members (i.e., supervisors) than employees who are closer to the norm set by others. In other words, being substantially different in terms of agreeableness might result in less liking or higher negative affect on the part of a supervisor/rater (cf. Judge & Ferris, 1993).

Organization tenure is significantly predicted by job satisfaction and conscientiousness similarity. A satisfaction-tenure link is hypothesized by Holland's theory and the Theory of Work Adjustment. Conscientiousness similarity, however, is negatively related to tenure. Thus, being either substantially lower (or higher) than co-workers on conscientiousness is associated with longer tenure. The only apparent explanation for this effect is that employees high on conscientiousness stay on partly out of a sense of duty or responsibility, whereas those low on conscientiousness are protected from dismissal by workplace rules, given that previous research suggests that low conscientiousness is related to poorer job performance (Barrick & Mount, 1991).

It should be again noted that the effects for personality similarity are incremental to effects from psychological climate to both role stress and job satisfaction (and a stress-satisfaction link), and from satisfaction to organization tenure. These other paths have been discussed previously in the literature (e.g., Dawis & Lofquist, 1984; Kahn & Byosiere, 1992); what makes them worth noting here is that they are obtained with a sample of Black Americans. Thus, the core of our tested model replicates previous research, and adds to the relatively small number of empirical studies of African Americans in work settings (Graham, 1992).

Also deserving mention is the absence of association between personality similarity and psychological climate. Although some relation between these variables might be expected due to cognitive distortion (i.e., being different skews one's perceptions of an environment), a lack of significant association can be positively interpreted as indicating some degree of discriminant validity among constructs. It should also be noted that other researchers have failed to find significant links between psychological climate and selected personality variables (e.g., James & James, 1989).

Therefore, neither personality nor personality similarity appear to have much influence on cognitive work-environment appraisals (i.e., psychological climate).

As noted, personality similarity was computed from a relational framework, in that we used scores that indexed how objectively similar someone's responses were to those from all others sampled. Thus the variable of primary interest in the model (i.e., personality similarity) was not particularly susceptible to method bias. The possibility that other parameter estimates might be artificially inflated due to common method variance suggests the effects for similarity are likely to be conservative estimates. It should also be mentioned that the failure to find significant relations between personality similarity and job satisfaction, as hypothesized by Holland's theory, may be partially a function of the objective nature in which P-E congruence was operationalized in the present study. Nonetheless, we did find a significant path from conscientiousness similarity to organization tenure, which has been described as the most basic indicator of satisfaction in work settings (Dawis, 1994; Dawis & Lofquist, 1984).

Use of various conceptualizations of congruence has contributed to a lack of understanding regarding the P-E fit construct (Bretz & Judge, 1994). A similar point has been made with regard to similarity judgments (Medin, Goldstone, & Gentner, 1993). We studied objectively derived personality similarity indices of P-E fit with the advantage of minimizing common method bias. Another advantage of our P-E fit measure is that it represents a way of operationalizing Muchinsky and Monahan's (1987) concept of supplementary congruence, incorporating a variable long thought to be central to interpersonal attraction (*viz.*, personality).

The supplementary model of P-E congruence (Muchinsky & Monahan, 1987), along with predictions from Holland's (1966) theory of personality types and model environments and the Theory of Work Adjustment (Dawis & Lofquist, 1984), suggest that similarity in person characteristics (e.g., personality, interests, and values) within an organization will express itself in greater job satisfaction, enhanced job performance, and increased organization tenure. By combining recent theory and research pertaining to the five-factor model of personality (e.g., Piedmont et al., 1991) with methodological suggestions regarding the comprehensive use of structural equation modeling (Bentler, 1989), we demonstrate significant relations between personality similarity and the latter two of these outcomes. We do not believe, however, that supplementary congruence can fully replace the more traditional notion of complementary fit (i.e., matching individuals' knowledge, skills, and abilities with specific jobs that require such characteristics). A more comprehensive investigation of P-E congruence would include both types of congruence: supplementary and complementary. Unfortunately, there are scores of potential personal attributes that

might be used to investigate P-E fit. Our results indicate that personality offers promise as one such personal attribute to be considered in future studies of P-E fit in organizational settings.

The role of personality as a person characteristic affecting various work-related outcomes has a long tradition (George, 1992). Nevertheless, progress in understanding the role of personality in organizational life has been generally disappointing. The effects of interpersonal variables such as personality similarity, in combination with individual factors such as psychological climate, offer a new perspective for advancing contemporary knowledge. Though much remains to be done—especially in providing a better understanding of the construct of P-E fit—we believe that the similarity variables developed and tested here offer researchers a sound, parsimonious means of including personality information in applied research and we encourage their future use.

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