

PERSONALITY AND SITUATIONS IN CO-WORKER PREFERENCE: SIMILARITY AND COMPLEMENTARITY IN WORKER COMPATIBILITY

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ABSTRACT: Guided by fit-oriented personality theories, we asked with whom people prefer to work, given their own and others' personality traits and in light of trait-relevant work situations. Participants ($N = 185$) completed the *Personality Research Form* (Jackson, 1989) and rated preference for hypothetical co-workers at opposite poles of Dominance, Affiliation, Autonomy, Defendance, and Abasement in simulated job settings varying in work proximity and supervisory status. As expected, judges preferred co-workers providing opportunity for trait expression (e.g., affiliative judges preferred affiliative co-workers), especially when expecting to work together and in light of who would be in charge (e.g., low-autonomous judges preferred dominant supervisors). Use of personality data in team building is discussed.

KEY WORDS: personality traits; co-worker preference; trait expression; person-job fit.

Meta-analyses founded on diverse assumptions indicate that personality can contribute meaningfully and substantially to the prediction of job performance (Barrick & Mount, 1991; Hough, 1992; Hough, Eaton, Dunnette, Kamp, & McCloy, 1990; Salgado, 1997; Tett, Jackson, & Rothstein, 1991). Tett et al. (1991; Tett, Jackson, Rothstein & Reddon, 1999) reported that personality-job performance relations are twice as strong when consideration is given to the conditions under which a par-

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ticular relation is expected. This supports repeated prescriptions for theory in studies of personality in the workplace (Adler, 1996; Guion & Gattier, 1965; Hogan & Shelton, 1998; Motowidlo, Borman & Schmit, 1997).

Growing interest in personality for employee selection encourages deeper reflection on how personality data might be used to match people with their work environments. Tett et al. (1999) suggested that personality can contribute to three levels of person-job fit. *Task-level fit* occurs with respect to the immediate activities, goals, and duties that define a given job; *group-level fit* denotes a matching of the person to his or her co-workers; and *organization-level fit* results when a person's traits match the organization's culture. Personality has been considered most often in the first respect, i.e., in fitting people to job tasks. Schneider (1983, 1987), Chatman (1989), and others (e.g., Day & Bedeian, 1991) have examined fit at the organizational level. With a few exceptions (see below), personality-based fit within groups has been largely ignored. Organizations are increasingly structuring jobs in terms of groups (Barrick, Stewart, Neubert, & Mount, 1998; Guzzo & Dickson, 1996; Levine & Moreland, 1990), yet relatively little is known about intragroup processes mediating individuals' contributions to team performance. Personality offers unique potential for understanding and improving fit within work groups.

Our goal here was to assess the role of personality in co-worker compatibility under selected trait-relevant work conditions. Previous studies of personality in groups (e.g., Barrick et al., 1998) have examined traits contributing to team orientation and effectiveness. In contrast, the current study targeted the *interaction* between respondents' and co-workers' trait levels. For example, does preference for low versus high dominant co-workers depend on subjects' own level of dominance, and are such effects more pronounced in some situations than others (e.g., where subjects expect to work closely with the co-worker vs. apart)? Our questions were framed around the distinction between supplementary and complementary fit (Muchinsky & Monahan, 1987) and a principle of interpersonal compatibility emphasizing opportunity for trait expression. Simply put, people prefer co-workers who let them be themselves.

SUPPLEMENTARY VERSUS COMPLEMENTARY FIT

Muchinsky and Monahan (1987) distinguished between two types of person-environment congruence. Supplementary congruence occurs when "an individual supplements, embellishes, or possesses characteristics which are similar to other individuals in [the] environment" (p. 269). Complementary congruence occurs where "the characteristics of the individual serve to 'make whole' or complement the characteristics of an

environment" (p. 271). Thus, supplementarity is defined in terms of similarity, and complementarity in terms of mutual need. Task-level fit is a case of complementarity: the job requires skills the person has and offers assets the person values. Fit at the organizational level tends to be supplementary: people feel most welcome in a culture where others think and behave as they do (Schneider, 1987). Applications at the group level are more complex. Co-workers may be most compatible when similar in some ways and complementary in others. The current study was intended to advance thinking in this area by drawing from personality theory bearing directly on similarity and complementarity as bases for interpersonal fit.

PERSONALITY AND INTERPERSONAL COMPATIBILITY

Byrne (1971, 1997) proposed that people choose to interact with similar others. Variants of this idea have been promoted in diverse contexts (e.g., Bauer & Green, 1996; Palmer & Byrne, 1970; Rubin et al., 1994; Rushton, 1995; Wetzel, Schwartz, & Vasu, 1979). McClane (1991) hypothesized that high quality leader-member exchange results from similarity in the needs for power and achievement, and locus of control. Support was obtained for similarity in need for power. Complementarity offers a unique basis for interpersonal attraction and group effectiveness. Interpersonal approaches to personality (e.g., Leary, 1957; Sullivan, 1953) and related circumplex models (Carson, 1969; Kiesler, 1983; Plutchik & Conte, 1997; Wiggins, 1979) hold that personality trait expression is a fundamental part of human nature (Bakan, 1966; Cote & Moskowitz, 1998; Wiggins & Trobst, 1997). The two most basic drives in such models are those for *agency* (i.e., status, power) and *communion* (i.e., love, companionship; Bakan, 1966). Expressing those drives during interpersonal encounters avoids or reduces corresponding agentic and communal anxieties.

A key feature of interpersonal models is that trait expression is viewed reciprocally: *personality compatibility results when one person's trait expression offers opportunities for the other's trait expression*. This is consistent with social exchange principles emphasizing costs and rewards (Foa & Foa, 1974; Thibaut & Kelly, 1959). Interpersonal relationships are maintained when psychological rewards exceed costs. If trait expression is inherently rewarding (i.e., anxiety reducing), then social exchange theory implies that people will be more comfortable in a relationship to the degree that it provides opportunities for trait expression.

The similarity-complementarity distinction is an explicit focus of circumplex models of personality (Plutchik & Conte, 1997). Similarity is said to hold along the communion axis, and complementarity along the

agency axis (Carson, 1969; Kiesler, 1983). Following Leary (1957), studies in this area have most often examined the effects of one behavior in eliciting similar (friendly-friendly) or complementary (dominant-submissive) responses in others. In a comprehensive review, Orford (1986) reported overall support for similarity but not complementarity: dominant behavior does not generally elicit submissiveness in others, nor vice versa. This finding raises concerns about complementarity as a basis for interpersonal compatibility, but two caveats bear consideration.

First, the behavioral elicitation studies have generally ignored individual differences in behavioral propensities (Bluhm, Widiger & Miele, 1990). Despite the negative results for complementarity in elicited behaviors (Orford, 1986), complementarity may hold in differential preferences for others as a form of trait expression (i.e., knowing what responses are elicited by a given behavior is not the same as knowing who will prefer whom in choice situations). Second, complementarity may apply to traits other than those falling on the agentic axis in circumplex models. The idea that people prefer others who allow them to express their traits is not tied exclusively to dominance-submissiveness relations. Someone high in dominance, for example, might avoid a defensive co-worker because the latter can be expected to respond poorly to direction. Such possibilities vitalize the complementarity hypothesis beyond traditional circumplex notions.

In the current study, similarity and complementarity were assessed as bases for understanding person-job fit with respect to an individual's preference in working with other people under selected work conditions. According to similarity theory, people prefer similar others. In terms of complementarity, they prefer those inviting expression of one's own traits. Although suggesting distinct explanations of compatibility, the similarity hypothesis can be derived as a special case of complementarity, where similarity promotes mutual trait expression. This and other possibilities are clarified below.

TARGETED TRAITS AND PRIMARY HYPOTHESES

We tested similarity and complementarity hypotheses in a population-relevant, simulated work situation allowing opportunities for the expression of several traits, including those representing agency and communion. The two primary traits of interest were Dominance and Affiliation, as assessed by Jackson's (1989) *Personality Research Form* (PRF). In keeping with interpersonal models of personality, affiliative judges were hypothesized to prefer affiliative co-workers (similarity), and high/low dominant judges to prefer low/high dominant co-workers (complementarity). We also examined three conceptually relevant but

correlationally distinct PRF-assessed traits, namely, Defence (i.e., defensiveness), Abasement, and Autonomy. All three latter traits are relevant to Dominance. In terms of complementarity, dominant people can be expected to prefer working with those low in Defence and/or Autonomy, and with those high in Abasement, because such individuals make it easier to be dominant. Expectations in the other direction are also reasonable. For example, autonomous individuals should especially avoid dominant co-workers because the latter can be expected to restrict opportunities for independence. The individualistic nature of Autonomy makes it relevant also to Affiliation. We expected that affiliative people would especially prefer non-autonomous co-workers, and vice versa.

Preferences based on each of the five traits were obtained in both directions (e.g., subject Dominance by co-worker Autonomy, and subject Autonomy by co-worker Dominance), yielding 25 linkages in all. Five were considered “intra-trait” comparisons (e.g., subject Dominance—co-worker Dominance) and the remaining 20 as “inter-trait” comparisons (e.g., subject Dominance—co-worker Autonomy). The intra-trait comparisons were especially relevant to circumplex hypotheses involving agency and communion because such expectations pertain to levels within a single dimension (e.g., high vs. low dominance). The inter-trait comparisons were undertaken as tests of the more general principle of trait expression opportunity, which is not restricted to single dimensions.

SITUATIONAL MODERATORS

In addition to the personality effects described above, we also sought to clarify the role of situations in interpersonal compatibility. An important point in personality research, extending back to Murray (1938), Allport (1937), Woodworth (1937), and McClelland, Atkinson, Clark, and Lowell (1953), is that study of personality traits requires suitable opportunity for their expression. The idea that traits are *activated* by situations is represented in Rosenman’s (1978) structured interview for assessing Type A personality, Snyder and Ickes’ (1985) notion of “precipitating situations,” and Bem and Funder’s (1978) template-matching approach to behavioral consistency. A situation offering opportunity for a given trait’s expression can be considered *relevant* to that trait (Tett & Guterman, 2000). Trait relevance is a key part of the mutuality hypothesis described above: two people are compatible when each offers the other opportunities for trait expression. It encompasses more than other people, however.

We targeted two contextual variables relevant to Dominance and Affiliation in work settings, namely, authority (i.e., who is in charge?) and work proximity (i.e., working together v. apart). Being in charge

makes it easy to be dominant, and being in a subordinate role, to be submissive. Accordingly, we expected dominant subjects in charge and submissive subjects in subordinate positions would care less about the trait levels of their co-workers than would their counterparts in opposite roles. Complementarity effects in co-worker preference should be stronger when the job role restricts trait expression (e.g., dominant subjects as subordinates) because co-workers then offer the main trait expression opportunity. Personality effects were also expected to be stronger when subjects assume close work proximity due to greater opportunity for interpersonal interaction. Affiliation effects were hypothesized to be especially sensitive to proximity because, more than the other traits, it requires close interaction for its expression.

We also compared two types of co-worker preference, the first centered on enjoying the work experience, and the second on getting the job done. These two preference types roughly parallel the distinction between job satisfaction and job performance. Iaffaldano and Muchinsky (1985) reported a meta-analytic mean correlation of only .15 between satisfaction and performance, based on 217 independent samples. The weak relationship suggests that current findings may vary by preference type. Personality effects were predicted to be stronger with respect to enjoying the work experience for two reasons. First, expectations of enjoyment include a unique and directly accessible affective component. Second, judging enjoyment is a natural and immediate extension of the preference for other people (e.g., akin to likeability; Lindzey & Byrne, 1968), whereas judging productivity focuses on work demands, requiring more complex considerations. In short, it is easier to judge enjoyment than performance as an outcome of interpersonal exchange.

METHOD

Participants

Over 200 undergraduate students enrolled in introductory and advanced psychology classes at a Midwestern American university participated for course credit. This number was reduced to 185 (see below). Mean age for the final sample was 19.7 years ($s = 2.3$) and 60% were women.

Measures

Personality Research Form (PRF; Jackson, 1989). The PRF is a 352-item true/false, self-report questionnaire assessing 20 normal personality traits based on Murray's (1938) taxonomy of psychogenic needs. It was selected over comparable measures due largely to its demonstrated psychometric qualities, including good reliabilities, relative freedom from

response sets, and diverse validity evidence from independent sources (cf. Jackson, 1989). It also allowed screening for non-purposeful responding via its Infrequency scale.

Co-Worker Descriptions. Brief descriptions of 20 hypothetical co-workers were prepared representing the high and low ends of PRF-Dominance, Affiliation, Autonomy, Defence, and Abasement. Two co-workers were described per pole per trait (without crossing) to allow assessment of reliability and reduce error through aggregation. Different trait adjectives, matched on apparent desirability and drawn from the same PRF trait descriptions, were used to describe the two co-workers sharing the same trait and pole. Sex-specific sets of co-workers were developed (sex effects were not of interest here). Four systematically diversified co-worker arrangements were prepared to control for order effects. Sample descriptions of high dominant male and low affiliative female co-workers are provided below.

High Dominance: Bill is described by those who know him as being influential. He enjoys leading others when the situation allows. After meeting him, you feel that Bill could be forceful or authoritative at times.

Low Affiliation: Karen enjoys being alone rather than with others. She is reserved and a little inhibited. People who know Karen describe her as being somewhat withdrawn. She might even be characterized as aloof.

Situations. Four hypothetical work situations centered on a research assistantship were developed by crossing two levels of each of two factors. "Work proximity" distinguished between working together with the co-worker versus separately, and "authority" distinguished between the subject versus co-worker being in charge of important assistantship duties. Four diverse situation orders were developed to control order effects. The subject-in-charge, close-proximity situation is provided below as an example.

In this project, you will be the Project Leader, and will be given the responsibility for all routine decisions affecting the project's success. You will have the authority to direct all research activities in the project. In addition, this project will entail you and your co-worker working on the same schedule such that you will always work together. All communications between you and your co-worker will occur directly and face-to-face.

Preference Ratings. Preferences for each co-worker were obtained using an 11-point scale ranging from -5 (strongly not preferred) to +5 (strongly preferred) with 0 as a midpoint (no preference either way). Two preference types were solicited, one with respect to "enjoying the work experi-

ence" (i.e., enjoyment) and the other to "getting the job done" (i.e., productivity). Order of preference type was reversed for half the subjects. Co-worker names were presented in the same order (one of four orders per gender) as listed in the co-worker descriptions. Participants completed a 2×4 (preference by situation) response grid for each of the 20 co-workers, yielding 160 values per subject.

Procedure

Participants first completed the PRF, then rated co-worker preference. The majority completed both measures in a single session in groups of up to 15. The remainder completed the materials on their own time in two waves separated by one to three weeks. The PRF took between 30 and 45 minutes to complete, and co-worker preferences, 20 to 30 minutes.

Detection of Invalid Cases

Participants' data were excluded from analysis for any of three reasons, none of which was judged to bias results in any way. First, the PRF-Infrequency scale was used to detect cases of non-purposeful responding, indicated by a score of 3 or higher (out of a possible 16). Second, we calculated within each subject the correlation between preferences given for the 10 pairs of like-described co-workers in identical situations and preference type ($N = 80$ data points per subject). Cases were excluded if this correlation was below .20, suggesting relative instability or lack of variability in preference ratings. Third, we counted the number of times each subject gave identical preference values for a given co-worker and preference type across all four situations. Cases with more than 20 (out of a possible 40) such occurrences were taken to suggest inattention to the situational manipulations and were dropped. Five, eight, and 11 cases were excluded, respectively and independently, based on the three criteria.

Statistical Analyses

Internal consistency reliabilities for the PRF scales were assessed using Cronbach's alpha. Reliabilities for the preference ratings were determined by correlating ratings of the 10 pairs of co-workers in each of the eight conditions (2×2 situations \times 2 preference types), and then stepping these values up using the Spearman-Brown formula. The result was a reliability coefficient for each of the 80 variables used in the main analyses, formed as averages across like-described pairs of co-workers under identical combinations of conditions.

Two sets of fixed-effects repeated measures ANOVAs were under-

taken. The first included only the four within-subjects variables ($2 \times 2 \times 2 \times 2$) and was based on all 185 usable cases. Data for the five traits were entered in separate analyses. The second set of ANOVAs added subject trait level as a between-subjects factor. Trait level was trichotomized and only the extreme groups were included. Crossing co-worker trait level and subject trait level on all traits yielded 25 separate analyses, each assessing the effects of all five independent variables (i.e., subject trait level, co-worker trait level, authority, work proximity, and preference type). Effect sizes were estimated as partial eta squares and are reported as percentages.

RESULTS

PRF scale means, standard deviations, and interscale correlations were consistent with those reported in the PRF manual (Jackson, 1989). An exception was a .51 alpha for Abasement. This may be due to a floor effect, evidenced by a low mean and standard deviation for this scale. Results involving Abasement warrant caution in their interpretation. The reliabilities for the 80 specific preference measures ranged from .36 to .82 with a mean of .61. All told, descriptive results for all measures were judged satisfactory for the main analyses.

The four-way within-subjects ANOVA results are presented in Table 1. Co-worker trait level had a strong effect on subjects' preference ratings. Review of cell means (available on request) showed that people generally prefer working with others who are high in Affiliation or Abasement, and with those low in Defendance, Autonomy, or Dominance. All 15 two-way interactions involving co-worker trait level are significant, 14 yielding a partial eta square exceeding 20%. The strongest involve work proximity. As expected, co-worker trait level matters more when judges assume they will be working closely with the co-worker and this holds especially in the case of Affiliation. Results also support the hypothesis that co-worker traits matter more in judging work enjoyment over productivity. Authority effects varied by trait. Whereas co-workers low on Dominance or Autonomy or high on Abasement were especially preferred as subordinates (i.e., subject in charge), co-workers low on Affiliation or high on Defendance were avoided as supervisors (i.e., co-worker in charge). Three-way effects are significant in seven of the 15 cases, the strongest being those involving preference type by work proximity, and the weakest, authority by work proximity. None of the four-way effects is significant, possibly due in part to the modest reliabilities of the 16 variables involved.

ANOVA results and effect sizes for the analyses involving all five independent variables are provided in Table 2. These results permit com-

Table 1
F Values and Eta Squares (%) for Co-Worker (CW) Traits and Interactions (N = 185)

Co-Worker Trait	CW Trait Main Effects				2-Way Effects				3-Way Effects				4-Way Effects	
	A	AB	AC	AD	ABC	ABD	ACD	ABCD	ABC	ABD	ACD	ABCD	ABC	ABCD
Dominance	54.7***	57.0***	88.0***	48.0***	27.1***	11.7***	2.5	—	27.1***	11.7***	2.5	—	—	—
	23%	24%	32%	21%	13%	6%	1%	—	13%	6%	1%	—	—	—
Affiliation	390.1***	95.4***	35.7***	162.5***	—	41.8***	—	1.1	—	41.8***	—	—	1.1	—
	68%	34%	16%	47%	—	19%	—	1%	—	19%	—	—	1%	—
Autonomy	64.2***	11.5***	67.4***	65.7***	12.6***	3.4*	—	2.5	12.6***	3.4*	—	—	2.5	—
	26%	6%	27%	26%	6%	2%	—	1%	6%	2%	—	—	1%	—
Defence	593.9***	67.6***	9.0***	99.0***	—	52.0***	—	—	—	52.0***	—	—	—	—
	76%	27%	5%	35%	—	22%	—	—	—	22%	—	—	—	—
Abasement	124.6***	75.9***	15.6***	94.4***	19.2***	18.0***	1.3	—	19.2***	18.0***	1.3	—	—	—
	40%	29%	8%	34%	9%	9%	1%	—	9%	9%	1%	—	—	—

A = co-worker trait level (low v. high); B = preference type (enjoyment v. productivity); C = authority (subject v. co-worker in charge); D = work proximity (together v. apart).

*p < .10, **p < .05, ***p < .01, two-tailed tests. F < indicated as “—”.

parisons with those in Table 1 by the addition of subject trait level as a between-subjects factor. Comparisons are compromised somewhat by the use of extreme groups on subject trait level, which reduces N for tests involving each trait by roughly a third. Effects overall are weaker than those involving just the within-subjects factors. This is understandable given that the co-workers were clearly described at one pole of a single dimension. Real people embody a complex mixture of traits, obscuring the effects of any one. Results are best considered in light of the relative impurity of subject traits.

Interactions involving subject trait level are significant in several notable cases. First, in keeping with expectations, affiliative judges especially preferred affiliative co-workers. Contrary to expectations, however, low dominant co-workers were not especially preferred by dominant judges. In fact, cell means suggested the opposite pattern, favoring similarity. Co-worker Dominance interacted instead with subject Autonomy and Affiliation, such that non-affiliative subjects and those high on Autonomy especially avoided dominant co-workers. Consistent with the complementarity hypothesis, dominant judges showed a particularly strong preference for non-defensive co-workers. Three-way effects involving co-worker and subject trait levels obtained in a number of cases, the strongest involving work proximity. For example, autonomous judges especially avoided dominant co-workers when assuming close proximity. Subject-by-co-worker trait effects are more pronounced for judgments of work enjoyment over productivity. Authority affected two subject-by-co-worker interactions, both involving subject Autonomy. Low autonomous judges especially preferred dominant supervisors but were indifferent to supervisors' Autonomy. High Autonomy judges, however, showed a moderate preference for low Autonomy supervisors. Several four-way effects involving subject trait level are significant, the two strongest including preference type and work proximity. Subject-by-co-worker trait effects are influenced by work proximity more with respect to enjoyment than productivity.

All significant interactions ($p < .05$, 1-tailed) involving subject and co-worker trait levels are summarized in Table 3. Effects are described uniformly as subjects at a given trait level preferring co-workers at a given trait level. Conditions where each interaction is most clearly evident are also described. Two three-way effects involving subject autonomy and co-worker dominance are depicted in Figure 1, exemplifying key principles under investigation here.

DISCUSSION

Calls for theory-driven study of personality in the workplace (Adler, 1996; Guion & Gottier, 1965; Hogan & Shelton, 1998; Motowidlo et al.,

Autonomy	Dominance	52	70	—	1.2	—	2.0	—	2.1	2.0	—
	Affiliation	61	60	—	1%	—	2%	—	2%	2%	—
	Autonomy	51	67	—	—	—	—	—	—	2.8*	—
	Defence	57	62	—	—	3.1*	—	—	4.0**	—	1.3
	Abasement	76	51	—	1.7	3%	1.1	1.1	3%	—	1%
	Dominance	52	70	—	2%	—	2%	—	—	—	—
	Affiliation	61	60	—	—	—	—	—	—	—	—
	Autonomy	51	67	—	2.0	—	2.6	1.0	—	—	1.9
	Defence	57	62	—	1.2	2%	2%	1%	—	—	2%
	Abasement	76	51	—	1.2	—	—	—	—	3.5*	—
	Dominance	52	70	—	1%	—	—	—	—	3%	—
	Affiliation	61	60	—	1.4	—	1.9	2.9*	—	—	1.0
	Autonomy	51	67	—	1%	—	2%	3%	—	—	1%
	Defence	57	62	—	—	—	—	1.1	—	—	—
	Abasement	76	51	—	—	—	—	1%	—	—	—
Abasement	Dominance	52	70	—	—	—	—	—	—	—	—
	Affiliation	61	60	—	—	—	—	—	—	—	—
	Autonomy	51	67	—	—	—	—	—	1.5	—	—
	Defence	57	62	—	—	—	—	—	1%	—	—
	Abasement	76	51	—	—	—	—	—	1.4	1.9	1.4
	Dominance	52	70	—	—	—	—	—	1%	2%	1%
	Affiliation	61	60	—	—	—	—	—	4.3**	1.3	—
	Autonomy	51	67	—	—	—	—	—	4%	1%	—
	Defence	57	62	—	2.2	—	2.7*	—	3.6*	—	—
	Abasement	76	51	—	2%	—	2%	—	3%	—	—

A = co-worker trait level (low v. high); B = preference type (employment v. productivity); D = work proximity (together v. apart); S = subject trait level (low v. high).
 * $p < .10$, ** $p < .05$, *** $p < .01$, two-tailed tests; $F < 1$ indicated as “—.”

Table 3
Summary of Subject-by-Co-Worker Trait Level Effects

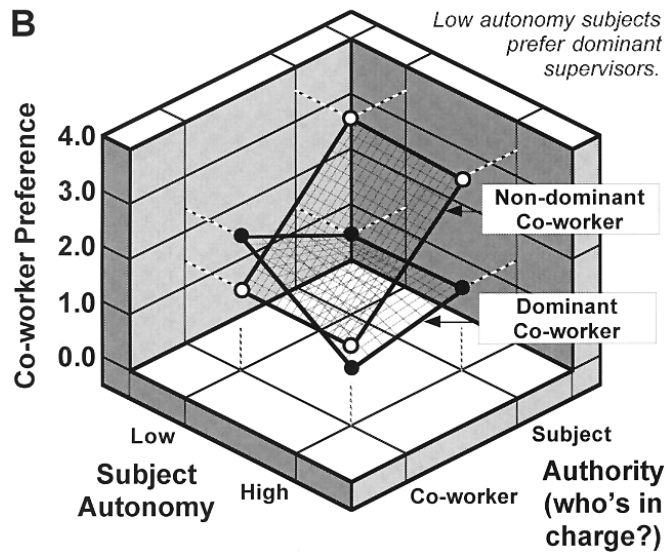
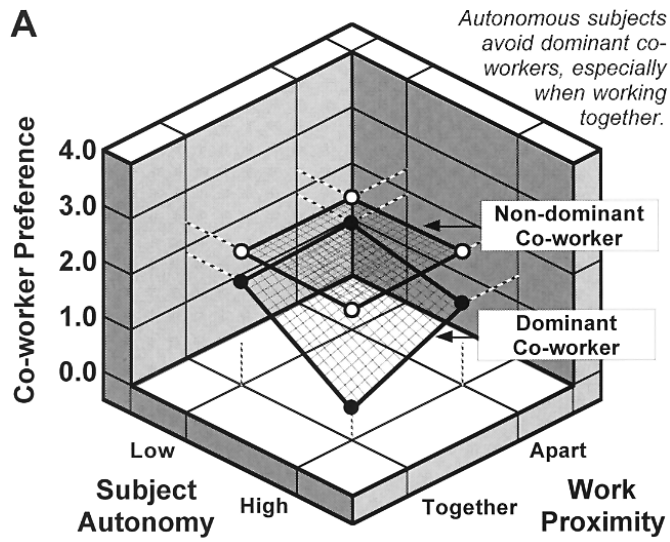
Subject Trait & Level	Preferred Co-Worker Trait & Level	Condition(s) Where Most Obvious ^a			Preference Type (E / P)
		In General (G)	Work Proximity (T / A)	Authority (S / C)	
<i>Intra-trait effects</i>					
low Dominance	low Dominance				E
high Affiliation	high Affiliation	G			
high Affiliation	high Affiliation				E
low Autonomy	high Autonomy			C	
high Autonomy	low Autonomy		A		E
low Defence	low Defence		T	C	
low Abasement	high Abasement		T		P
<i>Inter-trait effects</i>					
high Dominance	low Defence	G			
low Affiliation	low Dominance	G			
low Affiliation	low Dominance		T		
high Affiliation	high Autonomy		A	C	
high Autonomy	low Dominance	G			
high Autonomy	low Dominance		T		
low Autonomy	high Dominance			C	
low Autonomy	high Affiliation				E
low Defence	low Abasement		A		
low Defence	low Abasement		A		E
high Abasement	low Dominance		T	S	E
low Abasement	high Affiliation		T		
low Abasement	high Affiliation		T	S	E
high Abasement	high Defence			S	E
	Frequency of effects	4	11	7	9

^aT = working together; A = working apart; S = subject in charge; C = co-worker in charge; E = enjoyment; P = productivity.

1997; Tett et al., 1999), led us to ask whether personality matters when people consider working with others. Generally, we found that a co-worker's personality can influence others' preference for working with that person. Highly affiliative co-workers were especially preferred and highly dependent co-workers especially avoided. These findings may not be surprising, but they encourage more detailed investigation into the role of personality in work groups.

Beyond the main effects of co-worker traits, we also found that different people look for different traits in a co-worker. The similarity effect predicted by Byrne (1971, 1997) and by circumplex models (Carson,

Figure 1
Three-Way Effects on Co-Worker Preference Involving Subject
Autonomy and Co-Worker Dominance



1969; Kiesler, 1983) was observed in the case of Affiliation: affiliative co-workers were especially preferred by affiliative judges. In keeping with Palmer and Byrne (1970) but contrary to circumplex notions, similarity was supported as well in the case of Dominance (with respect to work enjoyment). That none of the conditions supported circumplex-based expectations for Dominance echoes Orford's (1986) conclusions challenging complementarity for agentic traits. Complementarity was observed in several non-circumplex cases, however. For example, autonomous judges especially preferred low dominant co-workers (in general and in close proximity), low autonomous judges preferred both high autonomous and high dominant supervisors, and dominant subjects generally preferred non-defensive co-workers.

All told, our findings support the idea that *people prefer those who let them be themselves*. Thus, low dominant judges prefer similar others (in terms of enjoyment) because it is easier to avoid interfering in others' affairs when those others reciprocate. Autonomous individuals shun dominant co-workers, especially in close proximity (see Figure 1A), because the latter are expected to restrict independence. Dominant judges are wary of defensive co-workers because the latter tend to react negatively to direction. Non-affiliative people avoid dominant and affiliative co-workers because either type of individual is likely to invade valued solitude. Low autonomous judges prefer affiliative co-workers (in terms of enjoyment) because the latter promise ample opportunities for dependence. The remaining effects allow similar interpretations. This holds just as well for affiliation as any other case: affiliative people seek each other out because affiliative behavior, by its nature, invites affiliative responses.

We suggest that complementarity in terms of general trait expression offers a more parsimonious and powerful account of personality-based compatibility than the more restrictive notion derived from circumplex models targeting agentic traits. Moreover, interactions among one or more of the five targeted variables attest that personality effects in work groups involve factors beyond personality traits per se.

Situational Moderators

As expected, trait-based preferences and related interactions were more pronounced, on the whole, when subjects assumed they would be working closely with the co-worker. This supports the view that personality traits (at least those considered here) have direct interpersonal relevance (Kiesler, 1983; Leary, 1957; Sullivan, 1953), and that personality effects in groups or teams are stronger when individuals work closely together. Co-worker traits also mattered more when subjects considered work enjoyment over performance, in support of enjoyment being more accessible and directly related to judgments of co-worker preference, perhaps via

likeability. It also suggests that personality-based compatibility among co-workers may be more important in the prediction of job satisfaction and related outcomes (e.g., organizational commitment, turnover) than performance per se. Further research is needed to explore this possibility.

Whether subjects assumed supervisory or subordinate roles also affected preference ratings. Co-workers low in dominance and autonomy were generally desired as subordinates. In present terms, this is because they were expected to accept direction better. Such authority effects varied, however, by subject trait level. For example, low autonomous judges especially preferred that their supervisors be high on dominance (see Figure 1B) and autonomy. This contradicts our hypothesis that people would care less about their co-workers' traits when in a role suited to their own traits. Our findings suggest instead that submissiveness may be activated by the subordinate role. Current results are important because they show that trait preferences vary with position level: a co-worker may be preferred as a supervisor but not as a subordinate.

Implications for Team Building

Our results speak directly to team development efforts. Evans and Dion (1991) reported a corrected meta-analytic mean correlation of .42 between group cohesion and group performance (.36 uncorrected). To the degree that interpersonal compatibility contributes to group cohesion (several studies in the meta-analysis defined cohesiveness in terms of co-worker preference), matching individuals on personality traits offers a possible basis for assembling effective teams. There are at least two caveats. First, we studied co-worker preference in dyads, whereas teams typically include more than two people and complexities of personality-based preference likely accelerate with team size. Unique considerations may arise as well in larger groups, pertaining to norms (e.g., Seashore, 1954), in-group status, and differential roles. A second concern stems from the distinction between group cohesion and productivity. The compatibility-performance relation is complicated by the fact that others' dispositions can activate desirable as well as undesirable traits (e.g., affiliative co-workers, though compatible, may distract one another from important tasks; Tett et al., 1999). Use of personality data in team building calls for careful consideration of participants' traits in light of their mutual activation effects on positively as well as negatively valued outcomes. Although provocative, current findings in all likelihood represent the tip of the iceberg in the use of personality information for matching people as team members.

Reciprocity is a guiding principle in interpersonal and circumplex approaches on which the current undertaking was founded. The clearest evidence of reciprocity was observed in the cases of low dominant, low

defendant, and high affiliative judges preferring respectively similar others. Reverse reciprocity was observed with affiliative judges preferring autonomous co-workers in the work-apart condition (perhaps to allow the affiliative subject greater freedom in social pursuits) and low autonomy judges generally preferring high affiliative co-workers (with respect to work enjoyment). Exceptions to mutual reciprocity pose challenges in assembling teams, as putting two people together may be desirable to only one. Further research is needed to more fully explore the role of reciprocity of personality preference in team functioning.

LIMITATIONS

Our findings are best regarded in light of several limitations. First, although the simulation was directly relevant to the targeted student population, concerns may be raised regarding generalizability to real-world settings. Replication with real people working on actual tasks would clarify current results. Second, every participant provided 160 ratings across combinations of diverse targets, conditions, and preference types. Our design thus demanded a high cognitive load that may have weakened results for particular effects. Cleaner findings may be possible with fewer variables considered conjointly. Third, although the PRF has demonstrated respectable validity in a variety of applications (cf., Jackson, 1989), it is not tied to circumplex models as closely as other available instruments (e.g., IASR-B5; Trapnell & Wiggins, 1990). More direct tests of the circumplex-based complementarity hypothesis might be afforded by the use of more relevant measures.

CONCLUSIONS

Use of personality measures for matching people to work settings continues to grow. Theory specifying the conditions under which trait measures can be expected to work best has greatly lagged. We propose that a key issue in any programmatic effort to fit people to jobs will be formal consideration of the opportunities a given work situation offers for the expression of targeted traits (Tett et al., 1999; Tett & Guterman, 2000). Co-workers are a critical part of the individual's work setting, providing a dynamic and interactive foil for self-expression. Matching co-workers on personality traits poses significant challenges stemming from complexities like those demonstrated here, involving a variety of situational and personal factors. Such complexities make it difficult to envision a usefully parsimonious and comprehensive understanding of personality-based group management. Experience tells us, however, that

interpersonal relationships really are complicated (at work and everywhere else), and expectations of simplicity are probably unrealistic.

Our results shed light on the role of personality in work groups. However, despite considering interactions involving five distinct factors and five distinct traits, and finding support for complex and meaningful interdependencies, we suspect that much remains beneath the surface. For example, traits likely do not operate independently within people. Dominance in an autonomous person may be expressed differently from the way it is expressed in someone more dependent (or high v. low in achievement, affiliation, or hostility). It is also likely to be activated in different sorts of situations and perceived differently by co-workers varying in relevant traits.

Evidence reported here suggests there may be value in considering that people tend to prefer those who allow them to be themselves. This is not a new idea (e.g., Kiesler, 1983; Leary, 1957; Plutchik & Conte, 1997), but it warrants renewed attention in developing hypotheses about who is and is not suited for a given job, work group, and organization (Tett et al., 1999). Continued research on this and related principles may allow practitioners to take fuller advantage of personality data in employment settings.

REFERENCES

- Adler, S. (1996). Personality and work behavior: Exploring the linkages. *Applied Psychology: An International Review*, *45*, 207–214.
- Allport, G.W. (1937). *Personality: A Psychological Interpretation*. New York: Holt, Rinehart, Winston.
- Bakan, D. (1966). *The Duality of Human Existence: Isolation and Communion in Western Man*. Boston: Beacon.
- Barrick, M.R., & Mount, M.K. (1991). The big five personality dimensions and job performance: A meta-analysis. *Personnel Psychology*, *44*, 1–26.
- Barrick, M.R., Stewart, G.L., Neubert, M., & Mount, M.K. (1998). Relating member ability and personality to work team processes and team effectiveness. *Journal of Applied Psychology*, *83*, 377–391.
- Bauer, T.N., & Green, S.G. (1996). Development of leader-member exchange: A longitudinal test. *Academy of Management Journal*, *39*, 1538–1567.
- Bem, D.J., & Funder, D.C. (1978). Predicting more of the people more of the time: Assessing the personality of situations. *Psychological Review*, *85*, 354–364.
- Bluhm, C., Widiger, T.A., & Miele, G.M. (1990). Interpersonal complementarity and individual differences. *Journal of Personality and Social Psychology*, *58*, 464–471.
- Byrne, D. (1971). *The Attraction Paradigm*. New York: Academic Press.
- Byrne, D. (1997). An overview (and underview) of research and theory within the attraction paradigm. *Journal of Social and Personal Relationships*, *14*, 417–431.
- Carson, R.C. (1969). *Interaction Concepts of Personality*. Chicago: Aldine.
- Chatman, J.A. (1989). Improving interactional organizational research: A model of person-organization fit. *Academy of Management Review*, *14*, 333–349.
- Day, D.V., & Bedeian, A.G. (1991). Predicting job performance across organizations: The interaction of work orientation and psychological climate. *Journal of Management*, *17*, 589–600.

- Evans, C.R., & Dion, K.L. (1991). Group cohesion and performance: A meta-analysis. *Small Group Research, 22*, 175–186.
- Foa, U.G., & Foa, E.B. (1974). *Societal Structures of the Mind*. Springfield, IL: Charles C. Thomas.
- Guion, R.M., & Gottier, R.F. (1965). Validity of personality measures in personnel selection. *Personnel Psychology, 18*, 135–164.
- Guzzo, R.A., & Dickson, M.W. (1996). Teams in organizations: Recent research on performance and effectiveness. *Annual Review of Psychology, 47*, 307–338.
- Hogan, R., & Shelton, D. (1998). A socioanalytic perspective on job performance. *Human Performance, 11*, 129–144.
- Hough, L. M. (1992). The “big five” personality variables—construct confusion: Description versus prediction. *Human Performance, 5*, 139–155.
- Hough, L.M., Eaton, N.K., Dunnette, M.D., Kamp, J.D., & McCloy, R.A. (1990). Criterion-related validities of personality constructs and the effects of response distortion on those validities Monograph. *Journal of Applied Psychology, 75*, 581–595.
- Iaffaldano, M.T., & Muchinsky, P.M. (1985). Job satisfaction and job performance: A meta-analysis. *Psychological Bulletin, 97*, 251–273.
- Jackson, D.N. (1989). *Personality Research Form Manual*. Port Huron, MI: Sigma Assessment Systems.
- Kiesler, D.J. (1983). The 1982 interpersonal circle: A taxonomy for complementarity in human transactions. *Psychological Review, 90*, 185–214.
- Leary, T. (1957). *Interpersonal Diagnosis of Personality*. New York: Ronald Press.
- Levine, J.M., & Moreland, R.L. (1990). Progress in small group research. *Annual Review of Psychology, 41*, 585–634.
- Lindzey, G., & Byrne, D. (1968). Measurement of social choice and interpersonal attractiveness. In G Lindzey & E Aronson (Eds.), *Handbook of Social Psychology*, Vol. II, pp. 452–525. Reading, MA: Addison-Wesley.
- McClane, W.E. (1991). The interaction of leader and member characteristics in the leader-member exchange LMX model of leadership. *Small Group Research, 22*, 283–300.
- McClelland, D.C., Atkinson, J.W., Clark, R.W., & Lowell, E.L. (1953). *The Achievement Motive*. New York: Appleton-Century-Crofts.
- Motowidlo, S.J., Borman, W.C., & Schmit, M.J. (1997). A theory of individual differences in task and contextual performance. *Human Performance, 10*, 71–83.
- Muchinsky, P.M., & Monahan, C.J. (1987). What is person-environment congruence? Supplementary versus complementary models of fit. *Journal of Vocational Behavior, 31*, 268–277.
- Murray, H. (1938). *Explorations in Personality*. New York: Oxford University Press.
- Orford, J. (1986). The rules of interpersonal complementarity: Does hostility beget hostility and dominance, submission? *Psychological Review, 93*, 365–377.
- Palmer, J., & Byrne, D. (1970). Attraction toward dominant and submissive strangers: Similarity versus complementarity. *Journal of Experimental Research in Personality, 4*, 108–115.
- Plutchik, R., & Conte, H.R. (1997). Introduction: Circumplex models of personality and emotions. In R. Plutchik, H.R. Conte (Eds.), *Circumplex Models of Personality and Emotions*, pp. 1–14. Washington, DC: American Psychological Association.
- Rosenman, R.H. (1978). The interview method of assessment of the coronary-prone behavior pattern. In T.M. Dembroski, S.M. Weiss, J.L. Shields, S.G. Haynes, M. Feinleib (Eds.), *Coronary Prone Behavior* pp. 55–69. New York: Springer-Verlag.
- Rubin, K.H., Lynch, D., Coplan, R., Rose-Krasnor, L. et al. (1994). “Birds of a feather . . .”: Behavioral concordances and preferential personal attraction in children. *Child Development, 65*, 1778–1785.
- Rushton, J.P. (1995). *Race, Evolution, and Behavior: A Life History Perspective*. New Brunswick, NJ: Transaction Publishers.
- Salgado, J. F. (1997). The five factor model of personality and job performance in the European community. *Journal of Applied Psychology, 82*, 30–43.
- Schneider, B. (1983). Interactional psychology and organizational behavior. In L.L. Cummings, B.M. Staw (Eds.), *Research in Organizational Behavior Vol. 5* pp. 1–31. Greenwich, CT: JAI Press.
- Schneider, B. (1987). The people make the place. *Personnel Psychology, 40*, 437–453.

- Seashore, S. (1954). *Group Cohesiveness in the Industrial Work-group*. Ann Arbor, MI: Institute for Social Research.
- Snyder, M., & Ickes, W. (1985). Personality and social behavior. In G. Lindzey, E. Aronson (Eds.), *The Handbook of Social Psychology* Vol. II, pp. 883–947. New York: Random House.
- Sullivan, H.S. (1953). *The Interpersonal Theory of Psychiatry*. New York: Norton.
- Tett, R. P., & Guterman, H. A. (2000). Situation trait relevance, trait expression, and cross-situational consistency: Testing a principle of trait activation. *Journal of Research in Personality*, *34*, 397–423.
- Tett, R.P., Jackson, D.N., & Rothstein M. (1991). Personality measures as predictors of job performance: A meta-analytic review. *Personnel Psychology*, *44*, 703–742.
- Tett, R.P., Jackson, D.N., Rothstein, M., & Reddon, J.R. (1999). Meta-analysis of bi-directional relations in personality-job performance research, *Human Performance*, *12*, 1–29.
- Thibaut, J.W., & Kelley H.H. (1959). *The Social Psychology of Groups*. New York: Wiley.
- Trapnell, P.D., & Wiggins, J.S. (1990). Extension of the Interpersonal Adjective Scales to include the Big-Five dimensions of personality. *Journal of Personality and Social Psychology*, *59*, 781–790.
- Wetzel, C.G., Schwartz, D., & Vasu, E.S. (1979). Roommate compatibility: Is there an ideal relationship? *Journal of Applied Social Psychology*, *9*, 432–445.
- Wiggins, J.S. (1979). A psychological taxonomy of trait-descriptive terms: The interpersonal domain. *Journal of Personality and Social Psychology*, *37*, 395–412.
- Wiggins, J.S., & Trobst, K.K. (1997). When is a circumplex an “interpersonal circumplex”? The case of supportive actions. In R Plutchik, HR Conte, et al. (Eds.). *Circumplex models of Personality and Emotions* pp. 57–80. Washington, DC: American Psychological Association.
- Woodworth, R.S. (1937). *Psychology*. New York: Holt.