

Linking Personality to Helping Behaviors at Work: An Interactional Perspective

Eden B. King, Jennifer M. George, and
Michelle R. Hebl
Rice University

ABSTRACT Previous efforts to elucidate dispositional antecedents of organizational citizenship behaviors have yielded equivocal results. The current study presents and tests a theoretical argument for expecting conscientiousness to interact with interpersonal dimensions of personality in predicting helping behaviors. As hypothesized, the responses of 374 women and their supervisors reveal significant interactions between conscientiousness, on the one hand, and agreeableness, extraversion, and emotional stability, on the other, in predicting helping behaviors. Clarifying the relationship between personality and helping, these results suggest that the impact of conscientiousness in a social context depends on a positive interpersonal orientation. The implications of these findings for research and practice are discussed.

Eden B. King and Michelle R. Hebl, Department of Psychology, Rice University. Jennifer M. George, Jesse H. Jones School of Management and Department of Psychology, Rice University.

Portions of this research were presented at the Society for Industrial and Organizational Psychology's annual conference in April 2003.

We thank the National Association of Women in Construction, the Rice Scholars Program, Sharon Matusik, and David Harvey for their invaluable assistance in the completion of this project.

Correspondence concerning this article should be addressed to Eden B. King, Department of Psychology, Rice University, 6100 Main Street- MS 205, Houston, TX 77005. E-mail: edenking@aol.com

Journal of Personality 73:3, June 2005
© Blackwell Publishing 2005
DOI: 10.1111/j.1467-6494.2005.00322.x

The increasing use of teams, flexible and networked organizations, and a global workforce (e.g., LePine, Erez, & Johnson, 2002) places heightened importance on understanding the determinants of interpersonal workplace behaviors. Such behaviors have been studied under the rubrics of organizational citizenship behavior, organizational spontaneity, contextual performance, and prosocial behavior (Borman & Motowidlo, 1997; George & Brief, 1992; Organ, 1988). Regardless of which of these constructs is adopted, a major subset of the behaviors in question, which is included in the domains of each of the aforementioned constructs, refers to voluntarily helping others with work-related tasks and problems. Teams are highly dependent upon interpersonal helping for effective functioning. More generally, as work moves from being more routinized and preprogrammed to being more flexible and adaptive to a dynamic and changing environment, the importance of interpersonal helping is only likely to increase. Likewise, increasing globalization necessitates the sharing of information, products, services, technology, and procedures across cultures and country borders; such sharing is highly dependent on cooperative employees willingly helping others understand the dynamics of the business across geographic and social divisions.

In considering research on the antecedents of interpersonal helping, an interesting paradox emerges. On the one hand, personality is expected to be a significant determinant of behavior in “weak” or ambiguous situations in which there are few situational constraints on behaviors (Mischel, 1977; Organ, 1994). When situational pressures or constraints on behavior are few, people are freer to express themselves and behave according to their characteristic tendencies, predispositions, or innate traits. Using Mischel’s taxonomy of strong and weak situations, interpersonal helping takes place, in many organizational contexts, in a relatively weak situation. Although there are some occupations in which general helping behaviors are role prescribed (e.g., nursing, sales), workers are typically not required to come voluntarily to the aid of a coworker who is having trouble with an assignment, task, computer program, or piece of equipment. Hence, helping is one subset of behaviors that is included in virtually all conceptualizations of extra-role behavior. On the other hand, studies that have explored the relationship between personality and extra-role behaviors, including helping, have reached equivocal conclusions (e.g., Hurtz & Donovan, 2000; Podsakoff, MacKenzie, Beth, & Bachrach, 2000). In fact, job performance (which is role

prescribed and thus under considerable situational pressures or constraints) has generally been shown to have more consistent relations with personality traits such as conscientiousness (Barrick, Mount, & Judge, 2001; Hogan, Hogan, & Roberts, 1996) than has interpersonal helping (cf. Borman, Penner, Allen, & Motowidlo, 2001).

In an attempt to resolve this paradox, we adopt a more holistic and interactive perspective on personality and its relation to interpersonal helping. In particular, we theoretically reason how combinations of traits may be meaningfully associated with interpersonal helping. Our article unfolds as follows: First, we review literature on interpersonal helping as a form of extra-role behavior. Then, we discuss prior theorizing and research on potential relationships between personality traits and interpersonal helping. Building from this discussion, we theorize how an interactive approach to personality holds promise for understanding the relation between personality and interpersonal helping, and we develop specific hypotheses based on this approach. Lastly, we report the results of a field study that tests our theoretically driven hypotheses.

Helping Behaviors

The increased emphasis on flexibility, collaboration, and teamwork in contemporary organizations (Ilgen & Pulakos, 1999) underscores the importance of positive interpersonal behaviors in the workplace. However, even within the domain of interpersonal behaviors in the workplace, there remains some confusion over the labels, definitions, and dimensions of these behaviors. At a broad level, Borman and Motowidlo (1997) distinguish between the constructs of task performance and contextual performance. This differentiation parallels the distinction between in-role behaviors and extra-role behaviors (Van Dyne, Cummings, & Parks, 1995; Van Dyne & LePine, 1998). In-role behaviors refer to those behaviors that are formally required by a job and result in task performance. Extra-role behaviors are discretionary behaviors that are not role prescribed and result in contextual performance.

Within the category of extra-role behaviors that result in contextual performance, researchers have most commonly investigated organizational citizenship behaviors (OCBs), which consist of those actions that “contribute to the maintenance and enhancement of the social and psychological context that supports task performance”

(Organ, 1997, p. 95). Organ's (1988) original taxonomy of OCBs included five components: altruism, conscientiousness, sportsmanship, courtesy, and civic virtue. Additional overlapping taxonomies have been developed such as Podsakoff et al.'s (2000), which includes seven dimensions: helping behavior, sportsmanship, organizational loyalty, organizational compliance, individual initiative, civic virtue, and staff development. Interestingly, a few decades ago, Katz (1964) underscored the importance of extra-role behavior in his discussion of three important behavior patterns of effective organizations: attracting and retaining people in the organization, dependable role performance, and voluntarily performed extra-role behaviors. Building from Katz (1964), George and Brief (1992) articulated five forms of organizational spontaneity (i.e., citizenship behaviors): helping coworkers, protecting the organization, making constructive suggestions, developing oneself, and spreading goodwill.

In this study we focus on the interpersonal dimension of extra-role behavior that is common across different conceptualizations, taxonomies, and research—helping behaviors (Podsakoff et al., 2000). Following Organ (1988), George and Brief (1992), George (1991), and others, helping behaviors are behaviors voluntarily performed to aid or assist other organizational members with work-related tasks. Helping behaviors have been studied widely across organizational and social psychological research. One important example is the classic research regarding bystander intervention as a function of the presence of others and the diffusion of responsibility (Latane & Darley, 1969). In the workplace, helping behaviors are typically neither prescribed in job descriptions nor can they be planned for or anticipated in advance. Helping a coworker navigate an unfamiliar computer program, fixing a broken machine, and helping another group solve a problem are all examples of spontaneous or voluntary acts occurring in organizations that are often taken for granted. However, these instances of helping are essential for smooth organizational functioning and have been linked to positive organizational outcomes (Podsakoff, Ahearne, & McKenzie, 1997; Walz & Niehoff, 1996).

Given their importance, it is not surprising that an extensive and growing body of literature focuses on the antecedents of helping behavior in the workplace (Van Dyne & LePine, 1998). In addition to consideration of leader, task, and organizational antecedents of citizenship behaviors, research has also focused on personality as a predictor of interpersonal helping (Podsakoff et al., 2000). Because

helping behaviors are discretionary, extra-role behaviors that are not formally required of an individual in the workplace and often cannot be prescribed a priori, it stands to reason that “we should expect to find in OCB the kind of ‘performance’ that is attributable to personality” (Organ, 1994, p. 466). While personality traits typically do not account for much meaningful variance in behaviors in tightly controlled or role-prescribed situations (e.g., George & Zhou, 2001; Mischel, 1977), personality does play a role in behaviors that are discretionary or performed in weak situations with limited external constraints.

Hence, we return to the paradox described earlier. At best, personality traits appear to have weak relationships with extra-role behaviors, including helping. For example, results of one meta-analysis suggest that personality traits have lower predictive validities for helping behaviors than attitudes such as job satisfaction and organizational commitment, mood state, and perceptions of fairness (Organ & Ryan, 1995). When controlling for monomethod bias, personality traits appear to play an even smaller role in the etiology of interpersonal helping with only the trait of conscientiousness demonstrating some consistent relations across studies (Podsakoff et al., 2000). It is important to note that a more recent review cited stronger relationships between personality and helping (Borman et al., 2001). Specifically, when including 20 studies conducted since Organ and Ryan’s meta-analysis, a “somewhat higher” mean uncorrected correlation coefficient emerged (Borman et al., 2001, p. 65). However, given that personality reflects enduring tendencies to think, feel, and behave in certain ways and that helping behaviors are discretionary, these findings are paradoxical. In an attempt to resolve this contradiction, we take a more in-depth look at the Five-Factor personality traits and how and when they might be associated with interpersonal helping.

Personality can potentially yield helping behaviors in the workplace through several simultaneous and interrelated processes. First, differences in personality may influence how individuals are motivated (Judge & Ilies, 2002; Rioux & Penner, 2001). For example, individuals who are high in agreeableness may be more likely to be motivated to maintain relationships rather than preserve their own self-interest. Thus, motivation may be a mechanism by which personality yields helping. Second, personality characteristics may also affect how individuals interpret situations that arise and the

likelihood that they react in an interpersonally facilitative manner. For example, individuals low in emotional stability tend to view situations in a negative light (Costa & McCrae, 1992). Such individuals may interpret coworkers' help-seeking behaviors as annoyances or as threatening to status hierarchies, and may withhold helpful responses. Third, job satisfaction may mediate the relationship between personality factors and helping behaviors (LePine et al., 2002). Through these and other processes, it is likely that personality will influence interpersonal helping.

Personality Traits and Interpersonal Helping

Though not without its critics (see Block, 1995; Eysenck, 1992), the Five-Factor Model of personality is the most widely accepted and robust taxonomy of personality traits. The Five-Factor traits—conscientiousness, agreeableness, extraversion, emotional stability, and openness to experience—describe dispositions at the highest level of a hierarchy of personality traits (James & Mazerolle, 2002). This structure has been detected in longitudinal research of children and adults (Costa & McCrae, 1985) and has been confirmed across cultures and with various assessment techniques (McCrae & John, 1992; Piedmont, McCrae, & Costa, 1991). Though the Five-Factor traits can be utilized solely for descriptive purposes (Hough, 1992), their predictive power is of particular interest for organizational psychologists. The Five-Factor traits have been studied extensively as predictors of extra-role behaviors, including interpersonal helping, with disappointing results. In order to understand these results and build from them, we briefly describe each of the Five-Factor traits and findings regarding their relations with interpersonal helping.

Conscientiousness. Commonly associated with efficiency, organization, reliability, and thoroughness, conscientiousness is a dimension of personality that may both organize and direct behavior (McCrae & John, 1992). Theoretically, conscientiousness may be an important predictor of workplace behaviors because it provides the organization and direction that are necessary to produce targeted behaviors. Individuals high in conscientiousness often have long-term plans (McCrae & Costa, 1991). Thus, it is not surprising that this is the Five-Factor trait most consistently linked to performance on the job (Barrick et al., 2001; Borman et al., 2001), and is the personality

dimension that managers rate as being the most important (Dunn, Mount, Barrick, & Ones, 1995). In their meta-analysis of the relationship between personality and OCBs, Organ and Ryan (1995) found that conscientiousness was the most consistent, albeit weak, personality predictor of helping.

Agreeableness. Agreeableness refers to “the more humane aspects of humanity—characteristics such as altruism, nurturance, caring, and emotional support at one end of the dimension, and hostility, indifference to others, self-centeredness, spitefulness, and jealousy at the other” (Digman, 1990, p. 422). Individuals high in agreeableness are kind, sympathetic, and generous (McCrae & John, 1992) and deal with conflict cooperatively or collaboratively (Digman, 1990). Not surprisingly, then, agreeableness has been shown to predict performance in several interpersonally oriented jobs (Hurtz & Donovan, 2000). In their meta-analysis, Organ and Ryan (1995) likewise found agreeableness to be a weak, yet significant, predictor of helping.

Extraversion. Individuals high in extraversion are described by adjectives such as active, assertive, energetic, enthusiastic, and outgoing (McCrae & John, 1992). Though there is some evidence that extraversion is characterized by surgency to a greater degree than sociability (e.g., Hogan & Holland, 2003), individuals high in extraversion tend to be highly social, talkative, and affectionate (Schultz & Schultz, 1994) and commonly have numerous friendships and good social skills (McCrae & Costa, 1989). Extraversion has been found to relate positively to training proficiency (Barrick & Mount, 1991; Hough, 1992) and to job performance in occupations that necessitate social interactions (Barrick & Mount, 1991). However, when extraversion is included in studies of dispositional predictors of helping, the relationship is usually not significant (e.g., Barrick, Mount, & Strauss, 1992; Smith, Organ, & Near, 1983).

Emotional Stability. Individuals who are high on emotional stability tend to be calm, content, well-adjusted, and stable. They are not prone to getting upset and anxious. Emotional stability is often defined in terms of the low pole of the trait and referred to as neuroticism or negative affectivity (John & Srivastava, 1999). Individuals high in neuroticism (or low in emotional stability) tend to worry

a great deal and feel insecure and nervous (Schultz & Schultz, 1994). Individuals high on neuroticism are described as anxious, self-pitying, tense, touchy, unstable, and worrying (McCrae & John, 1992). With regard to helping behaviors, emotional stability (or neuroticism) has not been found to be a meaningful predictor (e.g., Barrick et al., 1992).

Openness to Experience. Openness to experience encompasses artistic, imaginative, insightful, and creative tendencies (McCrae & John, 1992). It may also include an aesthetic sensitivity, a need for variety, and wide-ranging intellectual interests. Preliminary research suggests that openness to experience is related to creative behaviors in the workplace when the work context is supportive of such behaviors (George & Zhou, 2001), but there is little support for a relationship with global measures of job performance (Barrick et al., 2001) or interpersonal helping.

Combined Effects of Personality Traits

Aside from the weak situation argument, why should any of the Five-Factor traits be linked, singly, or in combination, with interpersonal helping? To answer this question, it is important to consider how different predispositions or traits might encourage interpersonal helping in the workplace. Recall our earlier definition of helping, which is highly consistent with theorizing and research in this area: behaviors voluntarily performed to aid or assist other organizational members with work-related tasks. There are three key components of this definition: the behaviors are voluntary, they entail taking the initiative to do something that is good for the organization, and they involve initiating an interpersonal exchange to help another person. Given that interpersonal helping entails actions that are driven from at least two different motives—the motive to engage in discretionary behaviors for the good of the organization (e.g., solving or preventing a work-related problem) and the motive to volunteer to help other people (e.g., behaving prosocially to help a coworker with a difficult task), perhaps it is unrealistic to expect that any single trait such as conscientiousness will have much explanatory power (Hough, 1992; Organ, 1997).

Conscientiousness may be a necessary antecedent of interpersonal helping as it provides the diligence, responsibility, and dedication

required by the first motive—taking the initiative to voluntarily engage in behaviors that are not required for the good of the organization. However, it may not be sufficient as people high in conscientiousness can express their dedication in multiple ways that may or may not involve interpersonal helping. Furthermore, there are other dispositions that might discourage the expression of conscientiousness and dedication through interpersonal helping. For example, a person who is very shy or very distrustful of others may be reluctant to initiate helping behaviors unless asked to do so. People can express conscientiousness in multiple ways in organizations (e.g., through their own job performance) and voluntarily helping others might not be the most readily chosen route unless an individual is also positively predisposed toward the second motive of interpersonal helping—taking the initiative to offer and supply help to other organizational members. In fact, under certain circumstances, individuals high on conscientiousness may actually be very reluctant to engage in interpersonal helping. For example, individuals high on conscientiousness are motivated to meet deadlines and achieve their goals (McCrae & Costa, 1989). Individuals high on conscientiousness may seek to avoid helping others to the extent that time spent helping detracts from time spent on role-prescribed behaviors and jeopardizes meeting a deadline or achieving a goal. Because helping behaviors are not formally required of individuals on the job, taking the time to undertake such behaviors may actually interfere with those behaviors that are required. As such, being high on conscientiousness may only support helping behaviors to the extent that individuals also possess a positive interpersonal orientation. Without the influence of a positive interpersonal orientation, conscientiousness could actually inhibit interpersonal helping.

To the extent that individuals who are high in conscientiousness also possess a positive interpersonal orientation, helping behaviors are likely to be exhibited. A positive interpersonal orientation may be derived from three Five-Factor traits or dispositions: agreeableness, extraversion, and emotional stability.

Agreeableness encompasses a “prosocial and communal orientation” (John & Srivastava, 1999, p. 121), which suggests that individuals who are high on agreeableness might be more likely to engage in helping behavior than individuals low on this trait. When conscientiousness is high, individuals are dedicated to doing what is

good for the organization and this, in combination with agreeableness, should make them more likely to take the initiative to help coworkers with work-related problems and tasks. Conversely, when highly conscientious individuals are low in agreeableness, their lack of concern for others may inhibit the degree to which they are willing to help others and their dedication may be expressed in role-prescribed behaviors. Thus, we expect that conscientiousness will have a stronger, positive relation to interpersonal helping at work when agreeableness is high than when agreeableness is low (H1).

People who are high on extraversion are enthusiastically engaged in the social world, are proactive, and have a tendency to view other people and social interactions positively (John & Srivastava, 1999). Their outgoing and assertive nature, along with their tendencies to view others and opportunities for social interaction positively, may make them likely to be helpful to others. For individuals who are high on conscientiousness, a high level of extraversion is likely to result in their dedication and initiative being expressed in interpersonal helping at work. Consistent with this reasoning, results of a recent meta-analysis suggest that extraversion is positively associated with vocational interests of the social type (Barrick, Mount, & Gupta, 2003). Individuals who are high on conscientiousness and low on extraversion, alternatively, may be reluctant to initiate social interactions spontaneously to help others and may be task focused in terms of their own responsibilities and goals. Furthermore, individuals who are low on extraversion may not possess sufficient social confidence to offer their help to coworkers. It follows that conscientiousness will have a stronger positive relation to interpersonal helping when extraversion is high than when extraversion is low (H2).

Individuals who are high on emotional stability are well adjusted, calm, and confident. For those who are high on conscientiousness, a high level of emotional stability is likely to promote interpersonal helping as these highly dependable individuals will be able to calmly and confidently offer their assistance to coworkers tackling work-related problems. However, individuals who are low on emotional stability (or high on neuroticism) are more likely to be consumed by their own anxieties and stress, and in need of help rather than being able to offer it to others. A combination of high conscientiousness and low emotional stability is likely to result in individuals striving to perform at a high level and feeling nervous and anxious about

being able to achieve their own goals and objectives. Helping others might not even occur to such individuals, and if it does, they often might feel too pressured themselves to take the time to lend a hand to others. Thus, conscientiousness will have a stronger positive relation with interpersonal helping when emotional stability is high than when emotional stability is low (H3).

With an emphasis on intellect and creativity, openness to experience is not particularly relevant to the interpersonal side of workplace behaviors. An orientation toward aesthetics and a wide range of intellectual interests is unlikely to contribute to a positive social orientation, or to be related to the degree to which workers engage in helping behaviors. Thus, we do not hypothesize an interaction effect between conscientiousness and openness to experience in predicting interpersonal helping (H4).

In hypothesizing and testing interaction effects between conscientiousness and dispositions that underlie a positive interpersonal orientation in predicting helping behavior at work, our study has the potential to make several important contributions to the literature. First, we may help resolve the paradox described earlier (OCBs, being voluntarily performed with little situational pressures, are precisely the kinds of behaviors that *should* be related to personality yet prior research yields equivocal findings) and contribute to an understanding of how and when personality is related to helping at work. Second, to our knowledge, this is the first study to look at how personality traits might interact to influence helping behavior, or more generally, any dimensions of extra-role behaviors in the workplace. Lastly, and more broadly, our development and testing of theoretically based hypotheses concerning how personality traits might interact to influence specific behaviors in the workplace has the potential to contribute to an understanding of the role of personality in the world of work. With the exception of research by Witt and colleagues (Witt, 2002; Witt et al., 2002), the burgeoning number of studies on personality in the workplace have tended to adopt a unidimensional approach, focusing on single traits as predictors of outcomes. However, given that personality is composed of multiple traits that have the potential to operate in consort, the field might be advanced by considering how traits may or may not work together to influence behaviors of concern. Witt and his colleagues' focus on task performance is a crucial first step in the examination of interactional effects but is limited by its focus on role-prescribed task

performance. Importantly, we have focused on the specific motives likely to underlie helping behaviors and how alternative global dimensions of personality may underlie these motives.

METHODS

Participants

As part of a larger study, potential participants were drawn from the membership directory of the National Association of Women in Construction (NAWIC). This membership is comprised of 5,000 women from a wide range of organizations and positions including tradeswomen, construction company owners, architects, engineers, and secretaries who work in the construction industry. Due to time and cost constraints, we randomly selected 2,650 of 4,570 NAWIC members (approximately 60%) to whom the survey would be sent. An additional 350 women from 385 (approximately 90%), who were identified by NAWIC as being tradeswomen, were selected in order to increase the probability that this particular type of job would be represented in the full sample. We collected data from two sources: (1) NAWIC members who completed a questionnaire and (2) their supervisors who completed rating forms for the NAWIC members.

We received a total of 657 questionnaire responses back from the 3,000 distributed to NAWIC members for a 21.9% response rate. Similarly, the response rate for just those women who worked in trades-related positions was approximately 17%. Because 32 surveys were returned incomplete (e.g., retirement, death) or incorrectly completed, there were 625 usable responses. Of the women who responded, most were Caucasian (91.9%), with relatively equal representation of African American, Hispanic, Asian, and Native American respondents. Though NAWIC does not maintain complete records of the demographic composition of its membership, NAWIC staff reported that they have found that the vast majority of their survey respondents are Caucasian, with approximately equal distributions among other ethnic groups. Most of the participants (57.7%) were married, though 22.8% were divorced and 15.3% were single. The mean age of the participants was 45.44 years ($SD = 10.60$), and the average length of time working in the industry was 16.06 years ($SD = 10.24$).

We also received a total of 465 supervisor rating forms for a 73.4% response rate among supervisors who received the rating form (i.e., their subordinates returned a completed questionnaire). Of the supervisor surveys, 88 were returned incomplete due to the fact that the employees were owners without supervisors. An additional three supervisor surveys were completed incorrectly (e.g., filled out about themselves) and were

not included in the analyses. Overall, there were 374 interpretable supervisor rating forms (59.1% among those who received the form).

To test for potential differences between employees whose supervisors returned a survey and those whose supervisors did not, we conducted a binary logistic regression analysis. The results indicate that the participants' ethnicity ($\beta = -.43$, *ns*), marital status ($\beta = .06$, *ns*), and age ($\beta = .01$, *ns*) did not predict whether their supervisors completed and returned a survey. Furthermore, neither the supervisor's gender ($\beta = -.48$, *ns*) nor the ratio of women to men in participants' organizations ($\beta = .28$, *ns*) was related to supervisor response. However, participants with higher educational levels were significantly less likely to have supervisors who completed a survey ($\beta = -.22$, $p < .05$). This is likely due to the fact that participants with higher levels of education tended to be their own supervisors. As such, the analyses reported in the current study are based on a sample of 374 employees and their supervisors.

Procedures

The participants were sent a large envelope that included a cover letter addressed to them, a 15-page survey for them to complete, a cover letter addressed to their supervisors, a two-page survey (rating form) for their supervisors to complete, and two postage-paid envelopes addressed to the researchers. The participant cover letter explained the purpose of the study, encouraged the respondents to participate by completing the survey, asked them to give the second survey and envelope to their supervisors, and guaranteed confidentiality of the results. The cover letter addressed to the supervisors requested their evaluation of the target employee and ensured confidentiality of their responses.

Measures

Personality. Participants' completed the NEO-FFI as a measurement of their personality (McRae & Costa, 1989). This widely used 60-item assessment tool measures the Big- Five factors of personality, but not its narrower facets. All constructs were assessed with a five-point response format anchored with (1) "strongly disagree" and (5) "strongly agree."

The Conscientiousness scale ($M = 45.72$, $SD = 4.96$) includes 12 items, such as "I keep my belongings clean and neat." The measure of Agreeableness is also comprised of 12 items, including "I try to be courteous to everyone I meet" ($M = 45.90$, $SD = 5.39$). A sample from the 12-item Extraversion scale is "I like to have a lot of people around me" ($M = 44.51$, $SD = 6.16$). A sample item from the 11-item Emotional Stability/Neuroticism scale is "I am not a worrier" ($M = 41.45$, $SD = 6.42$). One item from the Emotional Stability/Neuroticism scale of the original

NEO-FFI was mistakenly omitted from the questionnaire (i.e., “I waste a lot of time before settling down to work”) and thus could not be included in the current analyses. Emotional Stability was scored such that higher scores reflected a higher level of Emotional Stability. Openness to Experience ($M = 39.79$, $SD = 5.27$) was measured with 12 items that included “I am intrigued by patterns I find in art and nature.” The internal consistency reliabilities for each of the Five-Factor personality traits were all above .70, as indicated in Table 1.

Helping behaviors. Supervisor ratings of the extent to which the target employees exhibited helping behaviors were measured using a seven-item scale (Podsakoff et al., 1997) with a 7-point response format anchored with (1) “strongly disagree” and (7) “strongly agree.” This scale was created with the intention of examining multiple, distinct dimensions of organizational citizenship, including civic virtue, sportsmanship, and helping behaviors. A sample item from the helping scale is “helps co-workers if they fall behind in their work.” In the current study, the internal consistency reliability for this scale was .86.

RESULTS

Recall that Hypothesis 1 predicted that Conscientiousness would have a stronger positive relation to interpersonal helping when Agreeableness is high than when Agreeableness is low. To test this hypothesis, we conducted hierarchical moderated regression analysis. At the first step, we entered the two main effects and at the second step, we entered the two-way, cross-product term. Support for

Table 1
Intercorrelations and Reliabilities for Study Variables

	Consci- entiousness	Agree- ableness	Extra- version	Emotional Stability	Helping
Conscientiousness	.80				
Agreeableness	.25**	.72			
Extraversion	.26**	.36**	.77		
Emotional Stability	.35**	.30**	.50**	.80	
Helping	.07	.11*	.18**	.08	.86

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

Note: Internal consistency reliabilities are reported on the diagonal.

Table 2
 Hierarchical Regression Analysis of Conscientiousness and Agreeableness on Helping

Step	Predictors	β	Total R^2	ΔR^2
1	Conscientiousness	.05		
	Agreeableness	.10	.01	.01
2	Conscientiousness \times Agreeableness	1.66*	.03*	.02*

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

Hypothesis 1 would be indicated by a significant change in R^2 at Step 2 and a pattern of results consistent with those hypothesized (Cohen & Cohen, 1983). As indicated in Table 2, the Conscientiousness \times Agreeableness interaction explained a significant incremental amount of variance in interpersonal helping after controlling for the two main effects ($\Delta R^2 = .02$; $p < .05$). To examine the nature of this interaction, we plotted the relation between Conscientiousness and helping for high and low levels (± 1 standard deviation from the mean) of Agreeableness (Aiken & West, 1991). As indicated in Figure 1, Conscientiousness had a strong positive relation with helping when Agreeableness was high (slope = 1.10) and a negative relation with helping when Agreeableness was low (slope = $-.40$). These results support Hypothesis 1.

Hypothesis 2 predicted that Conscientiousness would have a stronger positive relation to interpersonal helping when Extraversion is high than when Extraversion is low. Results of the hierarchical moderated regression analysis to test Hypothesis 2 are reported in Table 3. Consistent with Hypothesis 2, the Conscientiousness \times Extraversion cross-product term explained a significant incremental amount of variance in helping after controlling for the two main effects ($\Delta R^2 = .01$; $p < .05$). And as indicated in Figure 2, Conscientiousness was positively related to helping when Extraversion was high (slope = .93) and negatively related to helping when Extraversion was low (slope = $-.32$). These results support Hypothesis 2.

Hypothesis 3 predicted that Conscientiousness would have a stronger positive relation with interpersonal helping when Emotional Stability is high than when Emotional Stability is low. Results of

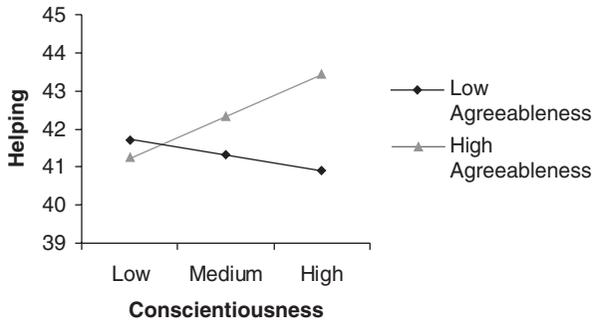


Figure 1

The interaction of Conscientiousness and Agreeableness on helping.

the hierarchical moderated regression analysis to test Hypothesis 3 are reported in Table 4. Consistent with Hypothesis 3, the Conscientiousness \times Emotional Stability interaction explained a significant incremental amount of variance in helping above and beyond that accounted for by the main effects ($\Delta R^2 = .01$; $p < .05$). As indicated in Figure 3, when Emotional Stability was high (slope = 1.08), Conscientiousness had a positive relation with helping, and when Emotional Stability was low, Conscientiousness was negatively related to helping. These results support Hypothesis 3 (slope = $-.20$).

As predicted in Hypothesis 4, results of the hierarchical moderated regression analyses revealed that the relationship between Conscientiousness and helping behaviors did not depend on Openness to Experience ($\Delta R^2 = .00$; $p > .05$)

Table 3
Hierarchical Regression Analysis of Conscientiousness and Extraversion on Helping

Step	Predictors	β	Total R^2	ΔR^2
1	Conscientiousness	.03		
	Extraversion	.17**	.03**	.03**
2	Conscientiousness \times Extraversion	1.30*	.04**	.01*

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

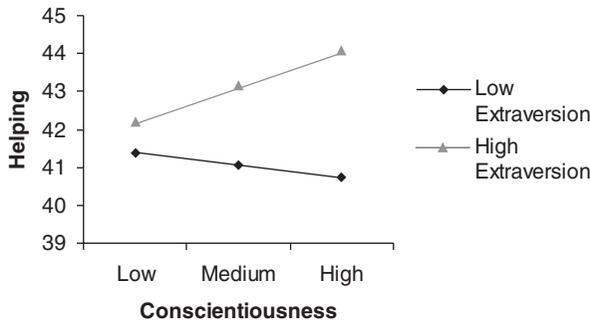


Figure 2
The interaction of Conscientiousness and Extraversion on helping.

DISCUSSION

One of the few axioms in personality research and interactional psychology is that personality is more likely to influence behavior when there are fewer, as opposed to greater, situational constraints or pressures (i.e., the situation is weak as opposed to strong) (e.g., Carson, 1989; Mischel, 1977; Organ, 1994; Pervin, 1985). In the organizational psychology literature, however, just the opposite appears to emerge when looking at relationships between the Five-Factor traits on the one hand, and performance and organizational citizenship behavior, on the other. That is, performance (which is typically subject to greater situational pressures) tends to have more consistent relations with global dimensions of personality than do extra-role behaviors (which, by definition, are more voluntary in nature) (e.g., Podsakoff et al., 2000).

In this article, we sought to resolve this paradox by reasoning theoretically how and when the Five-Factor traits may or may not be

Table 4
Hierarchical Regression Analysis of Conscientiousness and Emotional Stability on Helping

Step	Predictors	β	Total R^2	ΔR^2
1	Conscientiousness	.05	.01	.01
	Emotional Stability	.05		
2	Conscientiousness \times Emotional Stability	1.30*	.02*	.01*

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

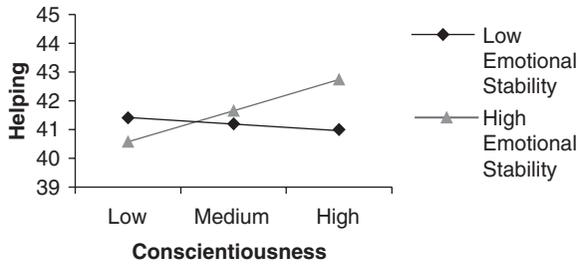


Figure 3

The interaction of Conscientiousness and Emotional Stability on helping.

related to one of the most universally identified dimensions of extra-role behavior in organizations: interpersonal helping. We reasoned that at least two salient motives might underlie voluntary acts of helping others with work-related problems and tasks. First, people must be predisposed to engage voluntarily in behaviors for the good of the organization. Second, people must be predisposed to initiate interpersonal interactions with others. Conscientiousness, with its emphasis on responsibility and dedication, is likely to underlie the first motive for interpersonal helping—taking the initiative to engage in behaviors for the good of the organization. However, we also reasoned that conscientiousness alone might not be enough. That is, conscientiousness can be expressed in numerous ways in organizations and, most obviously, in terms of job performance (hence, the well-documented relationship between conscientiousness and job performance). In order for helping to take place, individuals high on conscientiousness must also have a positive interpersonal orientation.

We examined three alternative ways in which a positive interpersonal orientation might be encouraged—through high agreeableness, through high extraversion, or through high emotional stability. In the presence of a positive interpersonal orientation, we proposed that increasing levels of conscientiousness should lead to increasing levels of helping. In each case, the hypothesized interaction effect was statistically significant and in the expected direction. Interestingly enough, for each of the three moderator traits (agreeableness, extraversion, and emotional stability), when the trait was high, the relation between conscientiousness and helping was positive, while it was negative when the moderator trait was low. In thinking about

the nature of these three moderators, the negative relation when the moderator was low is understandable. Individuals who are low in agreeableness are characterized as being antagonistic and rude, individuals low in extraversion are characterized by being independent and preferring to be alone, and individuals who are low in emotional stability are characterized by being distressed, hostile, and angry (Costa & McCrae, 1992; John & Srivastava, 1999). As conscientiousness increases, it stands to reason that those low on any one of these traits would not be likely to express their dedication by helping others. Rather, they would likely focus on their own individual task performance.

Our results suggest that extra-role behaviors may be meaningfully linked to personality. However, rather than simply correlating a multitude of traits with a multitude of dimensions of extra-role behavior, what is needed are theoretically based investigations of how and when different personality traits promote extra-role behavior. Moreover, given that individuals' personalities are comprised of multiple traits in a trait hierarchy, it is informative to consider the combined effects of traits that, theoretically, are expected to interact in ways to promote or inhibit a given behavior.

As with most field research, this study is not without limitations. One potential limitation is that we obtained a moderately low response rate. However, the rate is roughly equivalent to that of similar research and is likely explained by the length of the survey. Another potential limitation is that the current sample is comprised entirely of women in male-dominated organizations. On the one hand, this raises questions about the generalizability of our results to other populations and contexts. On the other hand, it might actually result in a conservative test of our hypotheses. That is, women in male-dominated organizations may be reluctant to volunteer help to their male coworkers for a variety of reasons (e.g., fear that their offers of assistance will be rebuffed or resented). However, our theoretically based hypotheses concerning how the interaction of personality traits might promote helping were supported in a sample in which helping behaviors, though discretionary, might actually be discouraged due to interpersonal dynamics resulting from gender composition. This suggests that the interactions of the relevant traits are significant determinants of helping behavior and influential enough to overcome any reluctance due to the social context. In other contexts in which helping might not be subtly discouraged,

even stronger results might be obtained. In any case, future research is needed to determine the extent to which these conjectures are supported and our results generalized to other contexts. Another limitation is that the current study considers only pairs of personality traits in relation to each other and does not take more complex constellations of personality into account. Finally, the effect sizes are somewhat small, but that is not unexpected given the difficulty of detecting interactions in field research of this kind (Aiken & West, 1991). We hope that future research will be encouraged by the current results and continue to examine theory-driven combinations of personality characteristics.

CONCLUSIONS

The results of the current study suggest that, despite previous equivocal findings, dispositional factors are meaningfully related to extra-role behaviors. In order to understand these relations, it is important to determine theoretically how personality traits may be linked to extra-role behaviors and take into account the combined effects of relevant traits. The results of the current study, in conjunction with the escalating importance of interpersonal behaviors in the workplace (e.g., Ilgen & Pulakos, 1999), suggest that continued attention be paid to the dispositional antecedents of extra-role behaviors.

REFERENCES

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Sage Publications: Newbury Park, CA.
- 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., Mount, M. K., & Gupta, R. (2003). Meta-analysis of the relationship between the Five-Factor Model of personality and Holland's occupational types. *Personnel Psychology*, **36**, 45–74.
- Barrick, M. R., Mount, M. K., & Judge, T. A. (2001). Personality and performance at the beginning of the new millennium: What do we know and where do we go next? *International Journal of Selection and Assessment*, **9**, 9–30.
- Barrick, M. R., Mount, M. K., & Strauss, J. P. (1992). The Big Five personality dimensions and ability predictors of citizenship, delinquency, and sales performance. Paper presented at the Seventh Annual Conference of the Society of Industrial and Organizational Psychology, Montreal.
- Block, J. (1995). A contrarian view of the five-factor approach to personality description. *Psychological Bulletin*, **117**, 187–215.

- Borman, W. C., & Motowidlo, S. J. (1997). Task performance and contextual performance: The meaning for personnel selection research. *Human Performance*, *10*, 99–109.
- Borman, W. C., Penner, L. A., Allen, T. D., & Motowidlo, S. J. (2001). Personality predictors of citizenship performance. *International Journal of Selection and Assessment*, *9*, 52–69.
- Carson, R. C. (1989). Personality. *Annual Review of Psychology*, *40*, 227–248.
- Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences* (2nd ed). Hillsdale, NJ: Erlbaum.
- Costa, P. T. Jr., & McCrae, R. R. (1985). Personality in adulthood: A six-year longitudinal study of self-reports and spouse ratings on the NEO Personality Inventory. *Journal of Personality and Social Psychology*, *54*, 853–863.
- Costa, P. T. Jr., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory (NEO-FFI): Professional Manual*. Odessa, FL.
- Digman, J. M. (1990). Personality structure: Emergence of the five-factor model. *Annual Review of Psychology*, *41*, 417–440.
- Dunn, W. S., Mount, M. K., Barrick, M. R., & Ones, D. S. (1995). Relative importance of personality and general mental ability in managers' judgments of applicant qualifications. *Journal of Applied Psychology*, *80*, 500–509.
- Eysenck, H. J. (1992). Four ways five factors are not basic. *Personality and Individual Differences*, *13*, 667–673.
- George, J. M. (1991). State or trait: Effects of positive mood on prosocial behaviors at work. *Journal of Applied Psychology*, *76*, 299–307.
- George, J. M., & Brief, A. P. (1992). Feeling good—doing good: A conceptual analysis of the mood at work—organizational spontaneity relationship. *Psychological Bulletin*, *112*, 310–329.
- George, J. M., & Zhou, J. (2001). Understanding when bad moods foster creativity and good ones don't: The role of context and clarity of feelings. *Journal of Applied Psychology*, *87*, 687–697.
- Hogan, R., Hogan, J., & Roberts, B. W. (1996). Personality measurement and employment decisions: Questions and answers. *American Psychologist*, *51*, 469–477.
- Hogan, J., & Holland, B. (2003). Using theory to evaluate personality and job-performance relations: A socioanalytic perspective. *Journal of Applied Psychology*, *1*, 100–112.
- Hough, L. M. (1992). The 'Big Five' personality variables—construct confusion: Description versus prediction. *Human Performance*, *5*, 139–155.
- Hough, L. M., & Oswald, F. (2000). Personnel selection: Looking toward the future—remembering the past. *Annual Review of Psychology*, *51*, 631–664.
- Hurtz, G. M., & Donovan, J. J. (2000). Personality and job performance: The Big Five revisited. *Journal of Applied Psychology*, *85*, 869–879.
- Ilgen, D. R., & Pulakos, E. D. (1999). *The changing nature of performance: Implications for staffing, motivation, and development*. San Francisco: Jossey-Bass.
- James, L. R., & Mazerolle, M. D. (2002). *Personality in work organizations*. Sage Publications: Thousand Oaks, CA.

- John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality* (2nd edition., pp. 102–138). New York: Guilford Press.
- Judge, T. A., Heller, D., & Mount, M. K. (2002). Five-factor model of personality and job satisfaction: A meta-analysis. *Journal of Applied Psychology*, **87**, 530–541.
- Judge, T. A., & Ilies, R. (2002). Relationship of personality to performance motivation: A meta-analytic review. *Journal of Applied Psychology*, **87**, 797–807.
- Katz, D. (1964). The motivational basis of organizational behavior. *Behavioral Science*, **9**, 131–146.
- Latane, B., & Darley, J. (1969). Bystander “apathy”. *American Scientist*, **57**, 244–268.
- LePine, J. A., Erez, A., & Johnson, D. (2002). The nature and dimensionality of organizational citizenship behavior: A critical review and meta-analysis. *Journal of Applied Psychology*, **87**, 52–65.
- McCrae, R. R., & Costa, P. T. Jr. (1989). The NEO five factor inventory. *Psychological Assessment Resources*. Odessa, FL.
- McCrae, R. R., & Costa, P. T. Jr. (1991). Adding Liebe and Arbeit: The full five-factor model and well-being. *Personality and Social Psychology Bulletin*, **17**, 227–232.
- McCrae, R. R., & John, O. P. (1992). An introduction to the five-factor model and its applications. *Journal of Personality*, **60**, 175–215.
- Mischel, W. (1977). The interaction of person and situation. In D. Magnusson & N. S. Endler (Eds.), *Personality at the crossroads: Current issues in interactional psychology* (p. 166–207). Hillsdale, NJ: Erlbaum.
- Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington, MA: Lexington Books.
- Organ, D. W. (1994). Personality and organizational citizenship behavior. *Journal of Management*, **20**, 465–478.
- Organ, D. W. (1997). Organizational citizenship behavior: It’s construct clean-up time. *Human Performance*, **10**, 85–97.
- Organ, D. W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. *Personnel Psychology*, **35**, 1–62.
- Paunonen, S. V. (1998). Hierarchical organization of personality and prediction of behavior. *Journal of Personality and Social Psychology*, **74**, 538–556.
- Pervin, L. A. (1985). Personality: Current controversies, issues, and directions. *Annual Review of Psychology*, **69**, 56–68.
- Piedmont, R. L., McCrae, R. R., & Costa, P. T. Jr. (1991). Adjective Check List Scales and the five-factor model. *Journal of Personality and Social Psychology*, **60**, 630–637.
- Podsakoff, P. M., Ahearne, M., & MacKenzie, S. B. (1997). Organizational citizenship behavior and the quantity and quality of work group performance. *Journal of Applied Psychology*, **82**, 262–270.
- Podsakoff, P., MacKenzie, S. B., Beth, J., & Bachrach, D. G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical

- literature and suggestions for future research. *Journal of Management*, **26**, 513–563.
- Rioux, S. M., & Penner, L. A. (2001). The causes of organizational citizenship behavior: A motivational analysis. *Journal of Applied Psychology*, **86**, 1306–1314.
- Russell, J. A., & Carroll, J. M. (1999). On the bipolarity of positive and negative affect. *Psychological Bulletin*, **125**, 3–30.
- Schultz, D., & Schultz, S. E. (1994). *Theories of personality*. Brooks/Cole Publishing Co.: Pacific Grove, CA.
- Smith, C. A., Organ, D. W., & Near, J. P. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology*, **68**, 655–663.
- Van Dyne, L., Cummings, L. L., & Parks, J. M. (1995). Extra-role behaviors: In pursuit of construct and definitional clarity (A bridge over muddied waters). In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior* (pp. 215–285). Greenwich, CT: JAI Press.
- Van Dyne, L., & LePine, J. A. (1998). Helping and voice extra-role behavior: Evidence of construct and predictive validity. *Academy of Management Journal*, **41**, 108–119.
- Walz, S. M., & Niehoff, B. P. (1996). Organizational citizenship behaviors and their effect on organizational effectiveness in limited-menu restaurants. In J. B. Keys & L. N. Dosier (Eds.), *Academy of Management Best Papers Proceedings* (307–311).
- Witt, L. A. (2002). The interactive effects of extraversion and conscientiousness on performance. *Journal of Management*, **28**, 835–851.
- Witt, L. A., Burke, L. A., Barrick, M. R., & Mount, M. K. (2002). The interactive effects of conscientiousness and agreeableness on job performance. *Journal of Applied Psychology*, **87**, 164–169.

