

THE RELATIONSHIP BETWEEN PERSONALITY AND DISCRETIONARY HELPING BEHAVIORS¹

IJ. HETTY VAN EMMERIK

*Department of Sociology
Utrecht University*

I. M. JAWAHAR

*Department of Management and Quantitative Methods
College of Business
Illinois State University*

THOMAS H. STONE

*Department of Management
College of Business Administration
Oklahoma State University*

Summary.—The relationship between personality and helping behaviors in three different contexts was examined in a field study. In a sample of 178 employees from three professional organizations, measures of the Big Five Personality factors were found to be related to discretionary helping behaviors performed in the context of one's home, workplace and the larger society. Collectively, the five personality factors accounted for 7% of the variance in Household Activities and Chores, 26% of the variance in Organizational Citizenship Behaviors and 10% of the variance in Volunteering. Implications of these relations are discussed.

Helping behaviors are important for the effective functioning of one's home, place of employment, and the society at large. Helping behaviors can be defined as activities entailing more commitment than spontaneous assistance in which time is given freely to benefit another person, group, organization or cause (Wilson, 2000). Such behaviors are generally characterized by the absence of monetary payment for the work undertaken (Noon & Blyton, 1997).

One type of helping behavior that occurs within a work organization is generally labelled organizational citizenship behaviors (Organ, 1997). Examples of organizational citizenship behaviors include performing extra-job activities, helping colleagues, meeting workplace rules, and acting according to the procedures regardless of personal inconvenience (Organ & Ryan, 1995). Volunteering is a second type of helping behavior that is directed toward those outside one's place of employment. Every year, millions of people volunteer substantial amounts of time to activities such as cooking for drug addicts, tutoring the illiterate, and counselling troubled people (Clary, Snyder, Ridge, Copeland, Stukas, & Haugen, 1998). A third type of helping behav-

¹Address correspondence to IJ. Hetty van Emmerik, Utrecht University, Willem C. Van Unnikgebouw kr 1426, Heidelberglaan 1, 3584 CS Utrecht, The Netherlands or e-mail (H.vanEmmerik@fss.uu.nl).

ior that occurs within one's own household involves performing the various household activities and chores. Household activities and chores include such things as cleaning, preparing meals, organizing the household, and shopping.

These types of helping behaviors are essentially carried out for the benefit of others (Brief & Motowidlo, 1986). In addition, these helping behaviors are more or less voluntary. However, the three differ on two dimensions, context and familiarity with recipient. First, household helping behaviors by definition are performed within the household, Organizational Citizenship Behaviors in an organizational context, and volunteerism in a societal context. Because the context varies, the beneficiaries of the behaviors also vary: household activities benefit other members of the household, Organizational Citizenship Behaviors primarily benefit the organization and volunteerism benefits the society at large. Second, compared to volunteering, Organizational Citizenship Behaviors are directed toward more or less familiar recipients, such as colleagues or customers. In contrast, volunteering is directed toward nonfamiliar recipients. Frequently, volunteers do not know in advance whom they help, since they are matched with recipients by service organizations (Omoto & Snyder, 1995). Furthermore, helping household members by performing household activities and chores is directed toward well-known recipients and, in contrast to volunteering, knowing the recipients is an essential part of the helping relationship.

A substantial body of research has focused on helping behaviours of paid employees, i.e., Organizational Citizenship Behaviors, within organizations (Smith, Organ, & Near, 1983; van Dyne, Graham, & Dienesch, 1994; Organ & Ryan, 1995; Rioux & Penner, 2001). In contrast, research on helping behaviors outside the workplace has been less widespread. Limiting analyses of helping behaviors to those directed toward others within an organization implies that other helping behaviors are of minor importance (Gerstel & Gallagher, 1993; Gallagher, 1994). In fact, from a broader societal perspective, helping others outside one's organization is as important as helping others within one's organization. To be sure, a significant number of people devote substantial time to volunteering (Clary, *et al.*, 1998; Penner & Finkelstein, 1998; Farmer & Fedor, 2001) and performing household activities and chores.

Explaining and predicting human behavior is a fundamental line of inquiry for behavioral scientists. In general, studies have shown people give altruistic reasons for engaging in helping behaviors (Wilson & Musick, 1997; Penner & Finkelstein, 1998; Farmer & Fedor, 2001). Previous research has related altruism to organizational citizenship behaviors (e.g., Smith, *et al.*, 1983; Piliavin & Charng, 1990; Carlo, Eisenberg, Troyer, Switzer, & Speer, 1991). For instance, Midili and Penner (1995) found a positive relationship

between the prosocial personality and organizational citizenship behaviors. Studies have also documented a relationship between altruism and volunteering (e.g., Clary, *et al.*, 1998; Penner & Finkelstein, 1998; Farmer & Fedor, 2001). For instance, Penner and Finkelstein (1998) found prosocial personality, specifically altruism, to be related to volunteer activities. These studies indicate that altruism is related to helping behaviors. Although the altruistic personality characteristic is also likely to be related to helping within one's household, to our knowledge, helping behaviors within one's household have not been investigated.

Altruism is a personality characteristic and refers to the tendency to think about the welfare and rights of other people, to feel concern and empathy for them, and to act in ways that benefit them (Carlo, *et al.*, 1991; Penner & Finkelstein, 1998). In recent years, a great deal of research on personality characteristics has concluded that five basic personality factors account for most of the variance in personality test scores (Snyder & Ickes, 1985; Mischel, 1990; Barrick & Mount, 1991; Costa & McCrae, 1992; Mount & Barrick, 1998; Hertz & Donovan, 2000; Paunonen & Ashton, 2001). These personality factors are generally labeled Neuroticism or Emotional Instability, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness (Norman, 1963; Barrick & Mount, 1991; Costa & McCrae, 1992; Hertz & Donovan, 2000).

Given that previous research has reported a positive relationship between altruism, a personality characteristic, and organizational citizenship behaviors and volunteerism, we expected personality measured in terms of the Big Five personality factors would account for significant variance in organizational citizenship behaviors, volunteerism, and household activities and chores. This study is the first to examine the relationship between personality indexed by a measure of the Big Five personality factors and these three types of helping behaviors that naturally occur in these three contexts, in a single study. We expected that scores on the Big Five personality factors would account for significant variance in the helping behaviors (a) volunteerism, (b) organizational citizenship behaviors, and (c) household activities and chores.

METHOD

Subjects

Employees of three organizations (a bank, a city's administration office, a university) located in a large city in the Netherlands were contacted by electronic mail to participate in the study. Surveys were distributed to 550 potential participants as an attachment to an electronic mail. Participants were guaranteed confidentiality and were requested to complete and return the survey directly to the researcher. One hundred and seventy-eight employ-

ees returned completed surveys and participated in the study for a response rate of 32%. Of the participants, 95 were employed at the bank (M tenure 9.4 yr.), 35 at the city's administration office (M tenure 10.1 yr.) and 48 at the university (M tenure 5.7 yr.). Thus, all participants had considerable work experience. One hundred and one participants were male and 77 were female. Mean age of the respondents was 38.3 yr. ($SD=9.8$) and mean years of education were 14.9 ($SD=2.5$). On average, the respondents spent 1.5 hr. ($SD=1.5$) per week on volunteer activities and 9.2 hr. ($SD=13.0$) per week on household tasks.

Measures

Personality factors.—Mowen's Personality Scale (2000) was used to measure the Big Five personality factors. The Mowen scale was derived from Saucier's 40-item Five-Factor Model scale (1994), which was derived from a much longer Five-Factor Personality Scale developed by Goldberg (1992). Previous research has established the convergent validity of Mowen's measures of the five personality factors. In a study conducted with 218 students, Mowen's scales correlated .8 or higher with Saucier's scales (personal communication, Mowen, 2003). Research has also demonstrated the predictive validity of the measure. For instance, Mowen's measures have successfully predicted a variety of behaviors including movie preferences, buying behaviors, sports participation, and lifestyles (Mowen & Sujan, 2003).

To ascertain the factor structure of Mowen's Personality Scale in this data, we conducted a factor analysis by subjecting scale items to varimax rotation. As expected, results of the factor analysis supported the theorized five-factor structure and are reported in Table 1. Openness to Experience, which is commonly associated with being imaginative, cultured, curious, original, broad-minded, intelligent, and artistically sensitive (Barrick & Mount, 1991), was measured with three items: Being Imaginative, Finding Novel Solutions, and Frequently Feeling Highly Creative ($\alpha=.83$). Conscientiousness incorporates volitional characteristics, such as being hard-working, achievement oriented, and persevering (Barrick & Mount, 1991) and was measured with three items: Being Orderly, Organized, and Precise ($\alpha=.87$). Extraversion is frequently associated with being sociable, gregarious, assertive, talkative, and active (Barrick & Mount, 1991). Introversion (the opposite of Extraversion) was measured with three items: Being Shy, Bashful When with People, and Quiet When with People ($\alpha=.83$). Neuroticism (Emotional Instability) is associated with being anxious, depressed, angry, embarrassed, emotional, worried, and insecure (Barrick & Mount, 1991) and was measured with the following three items: Being more Testy than Others, Emotions Go Way Up and Down, and Moody more than Others ($\alpha=.82$). Finally, Agreeableness most commonly associated with being courteous,

TABLE 1
LOADINGS FROM FACTOR ANALYSIS OF PERSONALITY ITEMS

	Factor				
	I	II	III	IV	V
Openness to Experience (alpha = .83)					
Imaginative	.92	.00	-.14	-.02	.07
Find novel solutions	.90	.01	-.07	-.06	.00
Frequently feel highly creative	.79	-.05	-.13	.03	.12
Conscientiousness (alpha = .87)					
Orderly	-.03	.90	.06	-.10	.08
Organized	.10	.87	.01	-.17	.09
Precise	-.12	.84	.13	-.02	.22
Introversion (alpha = .83)					
Shy	-.06	.00	.89	.09	.04
Bashful when with people	-.13	.17	.86	.02	-.01
Quiet when with people	-.17	.03	.81	.08	.21
Neuroticism (emotional instability) (alpha = .82)					
Testy more than others	.03	-.13	-.06	.89	-.16
Emotions go way up and down	-.12	-.13	.10	.86	.06
Moody more than others	.06	-.04	.18	.73	-.36
Agreeableness (alpha = .71)					
Kind to others	.09	.07	.10	-.11	.84
Tender hearted with others	.13	.14	.28	-.01	.74
Sympathetic	.00	.17	-.08	-.21	.73
Eigenvalue	2.4	2.4	2.4	2.2	2.1
% of variance	16.0	16.0	15.9	14.5	13.9
Cumulative % of variance	16.0	32.0	47.9	62.4	76.2

flexible, trusting, good-natured, cooperative, forgiving, soft-hearted, and tolerant (Barrick & Mount, 1991) was measured with the following three items: Kind to Others, Tender Hearted with Others, and Sympathetic (alpha = .84). The scales used a 7-point Likert-type scale with anchors of 1 = strongly disagree and 7 = strongly agree. Mowen's (2000) scale was used because it is much shorter than most other measures of Big Five personality factors.

Helping behaviors.—Engagement in volunteerism and household tasks was measured in self-reported hours per week devoted to these two helping behaviors. An individual can potentially engage in many volunteer activities and household tasks. Therefore, subjects were not provided with a list of specific volunteer and household activities because they may engage in activities not included in the list. In addition, because there are no validated scales to measure volunteerism and household-helping behaviors in a broad way, a common denominator was used as the dependent variable of time spent on these two activities.

In contrast, organizational citizenship behaviors are well understood and articulated in the literature and there are reliable scales to measure them.

Therefore, Organizational Citizenship Behavior was measured with six items adapted from Organ and Konovsky (1989) and also used in the studies of van Dyne (van Dyne, *et al.*, 1994; Vandewalle & van Dyne, 1995). Factor analysis showed a one-factor solution, eigenvalue 2.95; 49% of the variance was accounted for, with a Cronbach alpha of .79. The items were: "I speak up and encourage others to get involved", "I express my opinions about the organization honestly even when others think differently", "I make suggestions to others about things that might improve the organization", "I volunteer for things that are not required", "I orient new people when they move here", and "I develop and make recommendations concerning issues at this organization". The items were measured on a 7-point Likert-type scale with anchors of 1 = strongly disagree and 7 = strongly agree.

RESULTS

Means and standard deviations, along with correlations between study variables, are reported in Table 2. Results of regression analyses are reported in Table 3.

TABLE 2
MEANS, STANDARD DEVIATIONS, AND CORRELATIONS FOR HELPING
BEHAVIORS AND FIVE PERSONALITY FACTORS

	M	SD	r							
			1	2	3	4	5	6	7	8
1. Household tasks	9.2	13.0								
2. Organizational citizenship behaviors	4.0	0.5	.11							
3. Volunteerism	1.5	2.7	.10	.00						
4. Sex	0.4	0.5	.27†	-.04	-.01					
5. Openness to experience	5.1	0.9	.03	.34†	.19*	-.03				
6. Conscientiousness	5.2	1.2	.14	.20†	-.23†	.26†	-.05			
7. Extraversion	3.4	1.2	-.17*	-.22†	-.16*	-.01	-.26†	.15*		
8. Agreeableness	5.0	0.9	-.03	.13	-.04	.16*	.13	.30†	.20†	
9. Neuroticism	3.2	1.2	-.20†	-.35†	-.07	-.10	-.05	-.23†	.11	-.25†

* $p < .05$. † $p < .01$.

The five personality factors served as the independent variables. For each of the three dependent variables, a separate regression analysis was conducted. As expected, personality measures accounted for significant variance in all three types of discretionary behaviors: Household Activities ($R^2 = .07$), Organizational Citizenship Behavior ($R^2 = .26$), and Volunteerism ($R^2 = .10$). Results of these regression analyses are reported under Model 1 in Table 3. Additional analyses were conducted to see if sex was associated with amount of time devoted to household activities. According to Bem's perspective of gender socialization (Bem, 1974), women tend to assume a primary role for

household activities and chores in most societies. A hierarchical regression was run with Household Activities as the dependent variable, gender was entered in Step 1, and the five personality factors in Step 2 of the regression (see Model 2 in Table 3). Gender explained 6% of the variance. Importantly, when gender was statistically controlled, none of the personality factors were significantly related to the number of hours devoted to household activities.

TABLE 3
RESULTS OF HIERARCHICAL REGRESSION ANALYSES

	Household Activities		Organizational Citizenship Behaviors		Volunteering	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Background						
Sex		.25†		-.07		-.03
R ²		.06†		.00		.00
Personality						
Openness to experience	-.01	.00	.31†	.31†	.16*	.16*
Conscientiousness	.15	.09	.15*	.19*	-.24†	-.25†
Extraversion	-.18*	-.15	-.14	-.15*	-.08	-.07
Agreeableness	-.04	-.07	-.01	.00	.02	.01
Neuroticism	-.13	-.14	-.25†	-.25†	-.06	-.07
R ²	.07*	.12*	.26†	.27†	.10†	.10†

* $p < .05$. † $p < .01$.

Because sex was significantly related to one dependent variable, that is, Household Activities, two additional hierarchical regressions were run, one for Organizational Citizenship Behavior and one for Volunteerism. In both regression equations, sex was entered in Step 1 and the five personality factors in Step 2. Sex did not account for significant variance in Organizational Citizenship Behavior or Volunteerism. These results are reported under Model 2 in Table 3. It is interesting to note that there was no significant difference between men and women in terms of their self-reported Organizational Citizenship Behavior or Volunteerism. The regression results for the relationship of sex on Household Activities make sense given that women spent more than twice as much time per week on household chores relative to men (women = 13.3 hr. versus men = 6.1 hr.).

In terms of specific personality factors, Extraversion ($\beta = -.18$, $p < .05$) was related to number of hours devoted to Household Activities. Openness to Experience ($\beta = .31$, $p < .01$), Conscientiousness ($\beta = .15$, $p < .05$), and Social Adjustment (opposite of Neuroticism) ($\beta = .25$, $p < .01$) were positively related to self-reported Organizational Citizenship Behaviors. Openness to Experience ($\beta = .16$, $p < .05$) was positively related to the number of hours

devoted to Volunteerism and Conscientiousness was negatively related to Volunteerism ($\beta = -.24, p < .01$).

DISCUSSION

The primary purpose of this study was to examine the relationship of the Big Five personality factors on behaviors that occur in different contexts: within the household, within an organization, and in the larger society. As expected, scores on the five personality factors were related to number of hours devoted to Household Activities and Volunteerism, as well as to Organizational Citizenship Behavior. Personality scores accounted for more variance in self-reports of helping behaviors performed in the context of one's workplace than in self-reports of helping behaviors performed in the context of one's home or the larger society.

Although specific traits such as altruism have been previously related to volunteerism (e.g., Carlo, *et al.*, 1991), this is the first study to use measures of the Big Five personality factors to predict self-reported hours devoted to Volunteerism. Scores on Openness to Experience were positively related to Volunteerism but scores on Conscientiousness were negatively related to Volunteerism. Although the negative relationship might first appear odd, it makes perfect sense, as high scorers on Conscientiousness are described as individuals who are planful, organized, competitive, hardworking, and achievement-oriented. The work and career orientation of these qualities might detract one from engaging in activities such as volunteering that may not directly contribute to one's career progression. Consistent with previous research (e.g., Organ & Ryan, 1995), scores on the Big Five personality factors predicted Organizational Citizenship Behaviors. As one would expect, Openness to Experience and Social Adjustment were significantly related to Organizational Citizenship Behavior. Scores on Extraversion and Conscientiousness were also predictive of Organizational Citizenship Behavior.

This study is the first to examine the relationship of personality measures with household activities. Individuals who score higher on Introversion report spending more time on household chores than individuals who score lower on Introversion. This finding is not surprising, as the inclination to enjoy time alone is a defining characteristic of introverts, and many household chores are better performed individually. In addition, women spend more time on household activities than men, which is consistent with the gender socialization perspective (Bem, 1974).

Investigating the relationship of personality with three different behaviors in a single study allowed us to gain insights into the pattern of relationships between each facet of personality and diverse types of helping behaviors. The results suggest that Conscientiousness relates positively, albeit weakly, to helping behaviors that directly benefit the self (Household Activities)

or may benefit the self (Organizational Citizenship Behavior) but is in fact negatively related to helping behaviors (Volunteerism) that are unlikely to benefit the self. Likewise, Introversion was positively and weakly related to Household Activities, but negatively related to Organizational Citizenship Behavior. Openness to Experience accounted for more variance in Organizational Citizenship Behavior than in Volunteerism. It is not entirely clear why this pattern emerged. Perhaps volunteering outside one's workplace requires expending more effort and energy to seek out opportunities than helping one's coworkers and the organization.

Results indicate that personality is not only related to helping behaviors performed in an organizational context but it is also related to helping behaviors outside the organizational context. In addition, the present study focused specifically on personality variables to predict both organizational citizenship behaviors and volunteer behaviors. These results suggest that Organizational Citizenship Behavior and Volunteerism are associated with two of the same personality traits, Openness to Experience and Conscientiousness. These findings are consistent with Penner, Midili, and Kegelmeyer (1997) who argued that organizational citizenship behaviors and volunteerism are motivated by similar motives and personality traits. But, it is important to note that, while Conscientiousness was positively related to Organizational Citizenship Behavior, it was negatively related to Volunteerism.

There are some limitations of this study. Since self-report data were used, results may be contaminated by common method variance. However, none of the correlations reported in Table 2 exceeded .35. Given the modest size of the correlations between study variables, common method variance is an unlikely explanation for the results reported in this study. In general, the use of cross-sectional data preclude inferences about causality and directionality. Generalizability of the findings may be limited to employees working within professional organizations. For instance, some research suggests that, relative to other occupational groups, professionals may be more likely to engage in helping behaviors such as volunteerism (e.g., Pearce, 1987; Wilson & Musick, 1997). Consequently, researchers should investigate if these findings hold for nonprofessionals as well.

REFERENCES

- BARRICK, M. R., & MOUNT, M. K. (1991) The big five personality dimensions and job performance: a meta-analysis. *Personnel Psychology*, 44, 1-26.
- BEM, S. L. (1974) The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology*, 42, 155-162.
- BRIEF, A. P., & MOTOWIDLO, S. J. (1986) Prosocial organizational behaviours. *Academy of Management Review*, 11, 710-725.
- CARLO, G., EISENBERG, N., TROYER, D., SWITZER, G., & SPEER, A. L. (1991) The altruistic personality: in what contexts is it apparent? *Journal of Personality and Social Psychology*, 61, 450-458.

- CLARY, E. G., SNYDER, M., RIDGE, R. D., COPELAND, J., STUKAS, A. A., & HAUGEN, J. (1998) Understanding and assessing the motivations of volunteers: a functional approach. *Journal of Personality and Social Psychology*, 74, 1516-1530.
- COSTA, P. T., & MCCRAE, R. R. (1992) Normal personality assessment in clinical practice: the NEO Personality Inventory. *Psychological Assessment*, 4, 5-13.
- FARMER, S. M., & FEDOR, D. B. (2001) Changing the focus on volunteering: an investigation of volunteers' multiple contributions to a charitable organization. *Journal of Management*, 27, 191-211.
- GALLAGHER, S. K. (1994) Doing their share: comparing patterns of help given by older and younger adults. *Journal of Marriage and the Family*, 56, 567-578.
- GERSTEL, N., & GALLAGHER, S. K. (1993) Kinkeeping and distress: gender, recipients of care, and work-family conflict. *Journal of Marriage and the Family*, 55, 598.
- GOLDBERG, L. R. (1992) The development of markers of the Big-Five factor structure. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, 4, 26-42.
- HURTZ, G. M., & DONOVAN, J. J. (2000) Personality and job performance: the Big Five revisited. *Journal of Applied Psychology*, 85, 869-879.
- MIDILI, A. R., & PENNER, L. A. (1995) Dispositional and environmental influences on organizational citizenship behavior. Paper presented at the 103rd Annual Convention of the American Psychological Association, New York.
- MISCHEL, W. (1990) Personality dispositions revisited and revised: a view after three decades. In L. A. Pervin (Ed.), *Handbook of personality: theory and research*. New York: Guilford. Pp. 111-134.
- MOUNT, M. K., & BARRICK, M. R. (1998) Five reasons why the 'Big Five' article has been frequently cited. *Personnel Psychology*, 51, 849-857.
- MOWEN, J. C. (2000) *The 3M Model of motivation and personality: theory and empirical applications to consumer behavior*. Boston, MA: Kluwer Academic.
- MOWEN, J. C., & SUJAN, H. (2003) Exploring the personality trait and the intrinsic/extrinsic motive: antecedents of volunteerism. (Unpublished manuscript)
- NOON, M., & BLYTON, P. (1997) *The realities of work*. Houndsmills, UK: Macmillan.
- NORMAN, W. T. (1963) Toward an adequate taxonomy of personality attributes: replicated factor structure in peer nomination personality ratings. *Journal of Abnormal and Social Psychology*, 66, 574-583.
- OMOTO, A. M., & SNYDER, M. (1995) Sustained helping without obligation: motivation, longevity of service, and perceived attitude change among AIDS volunteers. *Journal of Personality and Social Psychology*, 68, 671-686.
- ORGAN, D. W. (1997) Organizational citizenship behavior: it's construct clean-up time. *Human Performance*, 10, 85-97.
- ORGAN, D. W., & KONOVSKY, M. (1989) Cognitive versus affective determinants of organizational citizenship behavior. *Journal of Applied Psychology*, 74, 157-164.
- ORGAN, D. W., & RYAN, K. (1995) A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. *Personnel Psychology*, 48, 775-803.
- PAUNONEN, S. V., & ASHTON, M. C. (2001) Big Five factors and facets and the prediction of behavior. *Journal of Personality and Social Psychology*, 81, 524-539.
- PEARCE, J. L. (1987) Making sense of volunteer motivation: the sufficiency of justification hypothesis. In R. M. Steers & L. W. Porter (Eds.), *Motivation and work behavior*. New York: McGraw-Hill. Pp. 545-554.
- PENNER, L. A., & FINKELSTEIN, M. A. (1998) Dispositional and structural determinants of volunteerism. *Journal of Personality and Social Psychology*, 74, 525-537.
- PENNER, L. A., MIDILI, A. R., & KEGELMEYER, J. (1997) Beyond job attitudes: a personality and social psychology perspective on the causes of organizational citizenship behavior. *Human Performance*, 10, 111-131.
- PILIavin, J. A., & CHARNG, H. W. (1990) Altruism: a review of recent theory and research. *Annual Review of Sociology*, 16, 27-65.
- RIoux, S. M., & PENNER, L. A. (2001) The causes of organizational citizenship behavior: a motivational analysis. *Journal of Applied Psychology*, 86, 1306-1314.
- SAUCIER, G. (1994) Mini-makers: a brief version of Goldberg's unipolar big-five markers. *Journal of Personality Assessment*, 63, 506-516.

/7

author and
motivation and behavior

New

- SMITH, C. A., ORGAN, D. W., & NEAR, J. P. (1983) Organizational citizenship behavior: its nature and antecedents. *Journal of Applied Psychology*, 68, 653-663.
- SNYDER, M., & ICKES, W. (1985) Personality and social behavior. In G. Lindzey & E. Aronson (Eds.), *Handbook of social psychology*. New York: Random House. Pp. 883-948.
- VANDEWALLE, D., & VAN DYNE, L. (1995) Psychological ownership: an empirical examination of its consequences. *Group and Organization Management*, 20, 210-226.
- VAN DYNE, L., GRAHAM, J. W., & DIENESCH, R. M. (1994) Organizational citizenship behavior: construct redefinition, measurement, and validation. *Academy of Management Journal*, 37, 765-802.
- WILSON, J. (2000) Volunteering. *Annual Review of Sociology*, 26, 215-240.
- WILSON, J., & MUSICK, M. A. (1997) Work and volunteering: the long arm of the job. *Social Forces*, 76, 251-272.

Accepted July 1, 2004.