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# The proactive component of organizational behavior: A measure and correlates

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## Summary

This study investigated a personal disposition toward proactive behavior, defined as the relatively stable tendency to effect environmental change. We developed an initial scale to assess the construct and administered it to a sample of 282 undergraduates. Factor analysis led to a revised, unidimensional scale with sound psychometric properties. A second sample of 130 undergraduate students was used to determine the relationships between the proactive scale and the 'Big Five' personality domains: neuroticism, extraversion, openness, agreeableness, and conscientiousness. In a third sample of 148 MBA students, we assessed the proactive scale's relationships with three personality traits and three criterion measures. Consistent with hypotheses, scores on the proactive scale correlated with need for achievement, need for dominance, and independent measures of the nature of subjects' extracurricular and civic activities, the nature of their major personal achievements, and peer nominations of transformational leaders. We discuss the potential of the proactive construct to enhance our understanding of, and ability to predict, a wide range of behaviors.

## Introduction

Psychologists and lay people alike agree that two individuals in the same role may behave in quite different ways. For instance, in the workplace, we all have witnessed managers who frequently launch new initiatives, as well as 'maintenance' or custodial managers (Van Maanen and Schein, 1979) who conform to the status quo. Similarly, most can conceive, if not name, one employee who tackles issues and crusades for constructive reform, and another who just 'goes with the flow'. Routinely, people use terms like 'proactive' and 'passive' to describe behavior.

The purpose of this paper is to empirically introduce proactive behavior as a dispositional construct that identifies differences among people in the extent to which they take action to influence their environments. The proposition that such a construct exists is based in the comprehensive view of the person-situation relationship taken by the interactionist perspective (Bandura, 1977; Bowers, 1973; Schneider, 1983), which considers the possibility that individuals

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create their environments. We report the development of a scale, its psychometric properties, and its relationships with an array of personality traits and criterion variables.

### *Proactive behavior*

In the psychology and organizational behavior literatures, the theme of interactionism holds that behavior is both internally and externally controlled, and situations are as much a function of persons as *vice versa* (Bowers, 1973; Schneider, 1983). Theorists consider a dynamic interaction process in which the person-environment relationship is characterized by reciprocal causal links (Magnusson and Endler, 1977). Thus, person, environment, and behavior continuously influence one another (Bandura, 1986).

Consistent with this formulation, one recent strategy for studying personality focuses on the person-environment link in which individuals influence their situations. People are not 'passive recipients of environmental presses' (Buss, 1987, p. 1220). They influence their own environments.

Specific processes through which people influence environments that have been studied empirically include: (1) selection, which occurs when people choose situations in which to participate (Schneider, 1983); (2) cognitive restructuring, referring to the processes by which people perceive, construe, or appraise their environments (Secord and Backman, 1986; Lazarus, 1984); (3) evocation, through which people unintentionally evoke reactions from others, thereby altering their own social environments (Buss, 1987; Scarr and McCartney, 1983) and (4) manipulation, which involves people's intentional efforts to shape, alter, exploit, or change their interpersonal environments (Buss, 1987; Buss, Gomes, Higgins and Lauterbach, 1987). The domain of manipulation tactics is the social environment, i.e. manipulating the responses of other people.

The study reported below considers a related, but more general, process by which individuals influence their environments. Consistent with the broad perspective of interactionism, people are assumed capable of intentionally altering situations in ways other than selection, cognitive restructuring, (unintentional) evocation, or (intentional) manipulation of social responses by others. People can intentionally and directly change their current circumstances, social or nonsocial (including their physical environment; Buss, 1987). This is the essential characteristic of proactive behavior.

### *A dispositional approach*

Proactive behavior is behavior that directly alters environments. Like all behavior, it has both personal and situational causes (Lewin, 1938). Our focus in this study is on the measurement and correlates of proactive behavior as a personal disposition - that is, a relatively stable behavioral tendency. Like other dispositions, the tendency to engage in proactive behavior comprises a category used to summarize acts that are topographically dissimilar but which are manifestations of a general behavioral trend or a dispositional tendency to behave in certain ways (Buss and Craik, 1980). Also like other dispositions, people are assumed to be differentially predisposed to behave proactively toward their situations.

The proactive dimension of behavior is rooted in people's needs to manipulate and control the environment (White, 1959; Langer, 1983). Many other writers have alluded to similar processes whereby individuals can behave proactively. Among psychologists, Bandura (1986) stated, 'people create environments and set them in motion as well as rebut them. People are foreactive, not simply counteractive' (p. 22). Maddi (1989) categorizes some individual behaviors as transcendent, that is, they transform or surmount environments rather than adjust or acquiesce to them. Weisz (1990) distinguishes between primary and secondary control, with primary control

referring to attempts to change objective conditions, and secondary control attempts to accommodate to conditions. (The distinction is akin to that of George Bernard Shaw's (Handy, 1990), who described people who change the world and those who adapt *to* the world.) Similarly, one of Harre's (1984) interpersonal orientations is active (an 'agent') versus passive (a 'patient'). In the present study, we conceive of proactive behavior as a process that is foreactive more than counteractive, transcendent more than acquiescent, a means of primary more than secondary control, and as agency more than passivity.

Similar distinctions exist throughout the organizational behavior literature. Bell and Staw (1990), maintaining that the field has swung too far away from personal dispositions and toward the situational view, discuss people as sculpture and as sculptors, or active agents that shape their organizational fates. Similarly, DeCharms (1968) spoke of people as self-determined origins of their behavior or as pawns of external forces. Individuals can be active rather than passive in the role-making process (Graen, 1976), and they can create 'ecological change' in their environments (Weick, 1979). Hirschman (1970) described how workers passively withdraw or actively try to change working conditions as they adapt to dissatisfying work environments. In general, then, there exists great potential for assigning to the individual a more proactive role in models of employee behavior (Brief and Aldag, 1981) - and for developing techniques of measuring proactive behavior.

Proactive processes occur also at the levels of groups and organizations (although the processes are grounded in the behavior of individual actors). A key activity of any group is to manage the interfaces between units (Ancona, 1987); effective groups engage in activities aimed at proactively influencing outside groups with which they are interdependent. In organization strategy, prospectors actively search the environment for opportunities and emphasize innovation and change, whereas defenders adapt to their external environments by emphasizing stability and perhaps retrenchment (Miles and Snow, 1978). In marketing, a variety of strategies are aimed at proactively managing external environments (Zeithaml and Zeithaml, 1984).

The premise here is similar: People can initiate and maintain actions that directly alter the surrounding environment. Moreover, individuals differ in this proclivity. In triadic reciprocal causation, the relative influence of person, behavior, and environment varies not only across activities and circumstances, but across people (Bandura, 1986). Differences in personality correspond with general orientations toward situations (Snyder and Ickes, 1985); one aspect of such orientations would be toward directly altering them. Buss (1987) found strong differences in people's use of manipulation tactics across contexts, and considers the use of such tactics a type of individual difference.

The prototypic *proactive personality*, as we conceive it, is one who is relatively unconstrained by situational forces, and who effects environmental change. Other people, who would not be so classified, are relatively passive - they react to, adapt to, and are shaped by their environments. Proactive people scan for opportunities, show initiative, take action, and persevere until they reach closure by bringing about change. They are pathfinders (Leavitt, 1988) who change their organization's mission or find and solve problems. They take it upon themselves to have an impact on the world around them. People who are not proactive exhibit the opposite patterns - they fail to identify, let alone seize, opportunities to change things. They show little initiative, and rely on others to be forces for change. They passively adapt to, and even endure, their circumstances.

### *Objectives and hypotheses*

In this study, our first objective was to develop a self-report scale that could easily measure the proactive construct and uncover systematic variability in the construct among individuals.

Our second objective was to assess the validity of the proactive scale by determining its relationships with the 'Big Five' superordinate personality dimensions (neuroticism, extraversion, openness or intelligence, agreeableness or friendliness, and conscientiousness or will), three specific personality traits (locus of control, need for achievement, and need for dominance), and three criterion variables: the nature of people's extracurricular and civic activities, the nature of their personal achievements, and transformational leadership.

To help establish the construct domain of proactive behavior, our first interest was to determine the relationships between the proactive construct and the five general factors of personality. Over several decades, independent streams of systematic research into personality traits have converged on the same general conclusion: the domain of personality attributes can be described by five superordinate constructs (Digman, 1990). These five general, robust factors of personality are now called the 'Big Five' (*cf.* Digman, 1990; McRae and Costa, 1989; Wiggins and Pincus, 1992). The big five are at a higher level of abstraction than, and subsume, more specific personal attributes, dispositions, habits, and behaviors. Thus, these factors are not considered a comprehensive list of traits or a replacement for other personality systems, but a framework for interpreting other personality constructs (McCrae and Costa, 1989; Wiggins and Pincus, 1992).

The five factors are: (1) Neuroticism, or emotional instability as opposed to adjustment; (2) extraversion, described by a need for stimulation, activity, assertiveness, and quantity and intensity of interpersonal interaction; (3) openness or intellect, represented by flexibility of thought and tolerance of, and sensitivity and openness to, feelings, experiences, and new ideas; (4) agreeableness, represented by a compassionate rather than antagonistic interpersonal orientation; and (5) conscientiousness, or the degree of organization, persistence, and motivation in goal-directed behavior.

The disposition to engage in proactive behavior was presumed to be related to some of the Big Five but not to others. The proactive disposition is conceptually related to extraversion in that they both imply seeking new experiences and activities. It should also be related to conscientiousness, in that both are goal-oriented and imply persistence toward reaching closure on an objective. Neuroticism and agreeableness appear to have no major implications for, or construct overlap with, proactive behavior. Proactive behavior may be related to openness, as they both imply exploration of the unfamiliar; but openness also implies tolerance, perhaps suggesting passivity. Openness also appears to be more a cognitive than behavioral disposition. Moreover, openness is not related statistically to extraversion or conceptually with conscientiousness (McRae and Costa, 1986), the two factors predicted to relate to the proactive construct. Thus, hypothesis 1: Scores on the proactive scale will be positively correlated with extraversion and conscientiousness, but not with neuroticism, agreeableness, or openness.

To further establish the domain of the proactive construct, and because it is a more specific disposition than the Big Five, we assessed its relationships with more specific personality dimensions that are among the most prominent and valid in the field of organizational behavior: locus of control, need for achievement, and need for dominance. Conceptually, proactive behavior is different from all three of these traits but shares some construct overlap with the needs for achievement and dominance. The tendency toward proactive behavior, like need for achievement and need for dominance, is an instrumental rather than cognitive or affective trait (Buss and Finn, 1987; James, 1890). Instrumental traits are the class of behaviors that have an impact on the environment. In contrast, cognitive traits are behaviors that have a large component of thought or information processing, and affective traits are behaviors that have a strong emotional component (Buss and Finn, 1987). Proactivity thus differs fundamentally from affective traits like empathy and well-being, and from cognitive traits like locus of control. The proactive disposition also differs from beliefs of personal control (Greenberger and Strasser,

1986, 1991) — a cognitive construct that may change over time and across circumstances - and from other control perceptions such as outcome control, control over behavior, or the ability to make sense of or predict one's environment (Staw, 1986; Bell and Staw, 1990). Rather, the proactive disposition is a more stable and behavioral tendency to effect change.

Thus, a measure of the proactive disposition is expected to share some variance with measures of the needs for achievement and dominance, but not locus of control. However, the general tendency to exhibit proactive behavior is also unique and distinguishable from the needs for achievement and dominance. It is broader in domain; need for dominance (Murray, 1933; McClelland, 1961) is limited to the interpersonal domain, and need for achievement (Murray, 1933; McClelland, 1961) is limited to the nonsocial, task performance domain, with no requirement to effect environmental change. Proactivity is thus one of the few personal dispositions (e.g. anxiety) that are so generalized as to include both social and nonsocial behavior (Buss and Finn, 1987).

In these ways, the proactive construct is conceptually different from other individual-difference constructs. Nonetheless, we anticipate some shared variance with the needs for achievement and dominance because all three are in the instrumental class of behaviors. Thus, hypothesis 2: Scores on the proactive scale will be more strongly (positively) associated with need for achievement and need for dominance than with locus of control.

Our first prediction regarding criterion variables was an expected association between the proactive disposition and involvement in related (i.e. proactive) extracurricular and community service activities. We reasoned that proactive individuals are more actively involved in the world around them, in professional activities that enhance their interpersonal networks and potentially their careers, and in volunteer, charity, and related activities that strive to improve communities and others' lives. In our measure, we did not include activities of a purely social or athletic nature, without a primary mission of constructive change. Although people engage in service and extracurricular activities (including sports and fraternities) for a variety of reasons, and people can be more or less proactive in any of them, we believed that, all else equal, people with a proactive disposition would be involved in more activities aimed at constructive change. This led to the following prediction: Hypothesis 3: Individuals' scores on the proactive scale will be positively related to their degree of involvement in extracurricular and service activities, the mission of which is to effect constructive change.

Our second prediction for criterion variables was that high-proactive individuals would have major achievements of a kind different from those of low-proactive individuals. Like people, achievements can also vary from proactive to passive. Some achievements are proactive in the sense that they represent intentional constructive change. For example, starting a new organization, taking the initiative in solving a long-standing organizational problem, and identifying a market opportunity and capitalizing on it are proactive efforts that directly alter situations. With their orientations toward effecting environmental change, the achievements of high proactives should reflect the bringing about of such purposeful change. Other achievements are more passive. The personal achievements of less proactive individuals might reflect the attainment of personalized goals representing high performance on assigned tasks, but not environmental change. For example, in the present study, low proactives were expected to report successes like meeting deadlines, completing tasks under budget, or setting sales records. Thus, we formulated the following hypothesis: Hypothesis 4: Individuals' scores on the proactive scale will be positively related to the degree of constructive environmental change revealed in their most significant personal achievements.

Next, consistent with the suggestion that effective CEOs are likely to be proactive with respect to their organizations' environments (House and Singh, 1987), we expected the proactive disposi-

tion to relate to an important type of leader behavior: Transformational leadership. Transformational leaders are those who have a special gift of seeing what is really important, have a sense of mission, inspire their followers, change entire organizational or societal perspectives, and have the self-determination to see their vision through no matter how difficult the obstacles (Bass, 1985). Logically, these behaviors would derive from the basic characteristics of the prototypic proactive individual: scanning the environment and identifying opportunities for constructive change, showing initiative and taking action, and persevering until change is affected. Thus, hypothesis 5: Individuals' scores on the proactive scale will be positively related to identification by peers as transformational leaders.

In the study described below, after constructing and establishing psychometric characteristics of the proactive scale and its relationships with the Big Five and three specific personality traits, we establish criterion validity by assessing its associations with the three variables hypothesized above: Involvement in extracurricular and civic activities that effect change, the degree of environmental change reflected in personal achievements, and peer nominations as transformational leaders.

## Method

The study used three samples and proceeded through several stages. Sample 1 was composed of undergraduates who completed the initial proactive scale. These data were factor analyzed to create a revised, unidimensional scale. Sample 2 was made up of undergraduates who completed the revised proactive scale and measures of the Big Five personality constructs. Sample 3 was composed of MBA students who completed the proactive scale, and included several subsamples who completed different personality scales in tests of hypothesis 2 or who completed the proactive scale a second time to determine test-retest reliability. Samples 1 and 3 completed different proxy measures of social desirability, and independent data collected on sample 3 were used to test the three hypotheses regarding criterion validities.

### *Samples*

Sample 1 consisted of 282 upper-level undergraduates enrolled in the required organizational behavior course at a southeastern state university. The sample was 45 per cent male, and the average age was 20. Sample 2 were 130 business students at a private university in the midwest. The average age was 19.5, and 65 per cent were male. Sample 3 consisted of 134 first-year MBA students. Virtually all had full-time work experience, with an average of 3.7 years. The sample was 75 per cent male, and the average age was 27.5.

### *Procedure*

Survey questionnaires were administered to sample 1 respondents during class time, and to sample 2 in sessions for which they volunteered to receive extra course credit. For sample 3, surveys were distributed in an orientation session and in campus mail files during the first two weeks of first-year, first-semester MBA classes. In every administration, the importance of honesty was stressed, and confidentiality was assured. One hundred and forty-eight of 204 first-year MBAs returned the survey, for a sample 3 response rate of 72.5 per cent. Fourteen were dropped from the analysis because of incomplete data.

The sample 3 questionnaire included measures of need for achievement, need for dominance, and locus of control in addition to the proactive scale. To reduce problems of excessive survey length in a volunteer sample, the sample was divided into subgroups that filled out different



personality scales. That is, while all subjects completed the proactive scale and a measure useful for assessing social desirability, a given subject completed only one or two other scales. Thus, subsamples completed measures of locus of control ( $n = 92$ ), need for achievement ( $n = 62$ ), and need for dominance ( $n = 38$ ). For the entire sample 3, data for criterion variables were collected from peer nominations and from all subjects' MBA program applications, as described below.

### Measures

The three questionnaires variously included self-report measures of proactive behavior, private and public self-consciousness (assessed for purposes of analyzing issues of social desirability), general mental ability (for exploratory purposes), the Big Five personality factors, need for achievement, need for dominance, and locus of control.

The self-report measure of *proactive behavior* was a 17-item scale with coefficient alpha of 0.89 in sample 1, 0.87 in sample 2, and 0.87 in sample 3. Because the first objective of the study was to develop a reliable self-report measure of a single, general factor of proactive behavior, further detail about instrument development and psychometric properties are reported in the Results section.

*Private self-consciousness* is the dispositional tendency toward self-attention. People who score high on this scale are attentive to their own inner thoughts and feelings (Fenigstein, Scheier and Buss, 1975; Carver and Scheier, 1981). *Public self-consciousness* is a focus on others rather than the self; it is related to social sensitivity, anxiety, other-directedness, and self-presentation (Fenigstein, 1979; Gibbons, 1990). These two measures were administered because they relate to respondents' concerns for social desirability.

Social desirability has two components: Self-deception and impression management (Paulhus, 1989). Self-deception is an honest self-assessment with a positivistic bias. Impression management is conscious self-presentation. Since private self-consciousness is related to the accuracy of self-ratings (Carver and Scheier, 1981; Hollenbeck, 1989), and public self-consciousness reflects a dominant concern for impression management (Gibbons, 1990), the two scales of Fenigstein *et al.* (1975) were used as proxies for assessing social desirability response biases. The public self-consciousness scale was administered in sample 1, and had a coefficient alpha of 0.79. Private self-consciousness was measured in sample 3; coefficient alpha was 0.74.

Sample 2 completed measures of general mental ability and of the Big Five. *General mental ability* was measured with the Wonderlic Personnel Test, a standardized 12-minute test of 'general g', the primary factor among the various factors comprising adult intelligence (Wonderlic, 1983). The *Big Five* were measured with the 60-item NEO-FFI (Costa and McCrae, 1989). In the present study, coefficient alphas for the five scales ranged from 0.70 to 0.87, with a mean of 0.78.

In sample 3, *need for achievement* and *need for dominance* were assessed in two subsamples with the Jackson Personality Research Form (PRF). The PRF afforded the most appropriate measure of these constructs because its psychometric properties are superior to other such measures (Anastasi, 1988; Bretz, Ash and Dreher, 1989). In the present study, the internal reliability estimates (coefficient alphas) for the 16-item scales were 0.72 for need for achievement and 0.79 for need for dominance.

*Locus of control* was measured in a subgroup of sample 3 with Rotter's 23-item forced choice scale (Rotter, 1966). The higher the score, the more external the individual. The internal reliability in the present study was 0.75.

In addition to the questionnaires, independent data on sample 3 participants were collected

for three criterion variables. The nature of *extracurricular and civic activities* was assessed from subjects' MBA program applications. The measure was a simple count of how many civic, community, and extracurricular activities were listed by the applicant, less items representing purely social or athletic activities that do not have a change-oriented mission. Excluded, for example, were memberships in fraternities, sororities, and intramural and varsity sports. Included were memberships in professional associations, charitable activities (e.g. United Way or Special Olympics volunteer work), and noncompensated activities aimed at bettering the community (e.g. the arts), facilitating children's growth and development (e.g. tutoring, coaching), and enhancing adult welfare (e.g. literacy, food, and homeless projects). Thus, the final count measured nonrequired activities aimed at constructively changing the environment - either the subject's own (e.g. professional associations), or other people's (e.g. volunteer work).

The nature of *personal achievements* also was assessed from subjects' MBA program applications. The students had written lengthy essays in response to the question, 'Discuss three of your major successes that demonstrate your potential managerial and leadership abilities. Explain why you view them as such'. Five PhD-student coders, trained via written and verbal instructions in the meaning of proactivity and environmental change (as opposed to individual achievement without bringing about such change), read the essays. The coders were admonished not to be influenced by irrelevant essay characteristics like length, magnitude of depicted successes, eloquence/style, and inferred intelligence, but rather to focus strictly on the degree of change brought about by the essayist. Using a seven-point Likert scale, with 7 = extremely proactive to 1 = not at all proactive, they rated each essay on what they perceived as the total amount of change effected by the writer. The overall mean rating (the average across five raters) was 3.6 (*S.D.* = 1.34), with a range of 1.0 to 7.0. Thus, the raters used the entire scale and generated a mean rating very close to the midpoint. The composite reliability coefficient (Holsti, 1969) for assessing interrater reliability was 0.85.

*Transformational leadership* was measured via peer nominations. After several months of an intensive, case- and study-group oriented MBA program, students had come to know reasonably well a large number of their peers. Late in the semester, the entire first-year MBA class was asked, in a survey administered in organizational behavior class, to consider their entire class ( $n = 204$ ) and make a prediction as to who would be the transformational leaders of the future. Transformational leaders were defined on the survey as those who have a special gift of seeing what is really important, have a sense of mission, inspire their followers, change entire organizational or societal perspectives, and have the self-determination to see their vision through no matter how difficult the obstacles (Bass, 1985). Respondents were asked to name from four to eight individuals out of their first-year MBA class who fit this description. Because of the non-normal distribution, with the modal number of peer nominations received by students being zero, this variable was dichotomized into subgroups of students who were nominated by no peers ( $n = 58$ ) and those who were nominated by one or more ( $n = 76$ ).

## Results

Results will be described for the development of the proactive scale, and for tests of the hypotheses.

### *Scale development*

Based on the conceptualization of proactive behavior, we initially generated 47 items, from which we selected 27 that we believed were most representative of the construct. We placed those 27 items in a Likert format anchored from 'strongly agree' to 'strongly disagree'. Factor

analysis of the sample 1 data was used to create a unidimensional, 17-item scale, which was then factor analyzed in samples 2 and 3. The results were consistent across samples, and the revised 17-item scale was used for all hypothesis tests in samples 2 and 3.

The original 27-item proactive scale was initially assessed using data from sample 1. Because the proactive construct is assumed to reflect a single latent person variable, we considered it most informative to test for a general factor on which most of the items load positively (Snyder and Gangestad, 1986). Principal-axis factor analysis, using squared multiple correlations as estimates of common variance, revealed a first unrotated factor that had an eigenvalue of 6.20. Only two other factors had eigenvalues greater than 1.0 (1.38 and 1.14). Consistent with the original objective of generating a unidimensional scale tapping a single proactivity factor, we conducted estimates of internal reliability. Coefficient alpha for the sample 1 general factor was 0.83. To further increase homogeneity, and with an interest in developing a more parsimonious scale, we dropped the 10 items that decreased reliability and had loadings on the general factor of less than 0.40. Principal-axis factor analysis on the remaining 17 items revealed only one factor with an eigenvalue greater than one, at 5.63. Importantly, the scale was not correlated with the first measure of social desirability, the public self-consciousness scale ( $r = -0.004$ ).

The final 17-item scale had a coefficient alpha in sample 1 of 0.89, and an average interitem correlation of 0.32. This fits comfortably in the range of average interitem correlations - 0.20 to 0.40 - recommended by Briggs and Cheek (1986). This range is preferred because it indicates a common domain but lack of item redundancy. The scale, shown in Table 1, was the scale we used in all subsequent analyses. The table also indicates the factor loadings on the single factor for each item in all three samples.

In samples 2 and 3, analyzed independently, factor analysis (on the 17 items of the revised scale) again indicated only one factor with an eigenvalue greater than 1.0 (5.24 in sample 2 and 5.21 in sample 3). Cattell's (1966) scree plot criterion again indicated in each sample that only one factor should be retained. The percentage of total variance explained by the general factor was 30.8 per cent in sample 2 and 30.6 per cent in sample 3. The average interitem correlations again were ideal, at 0.29 in each sample. Results from a sample 3 subgroup ( $n = 71$ ) revealed a test-retest reliability, over a three-month period, of 0.72.

On the basis of these results, we concluded that the revised 17-item proactive scale taps a single broad construct of high internal reliability, and treated it as such in the remaining (samples 2 and 3) analyses.

### *Hypothesis tests*

Hypothesis 1, regarding the relationships between the proactive scale and the Big Five, received support. The proactive scale was positively correlated with conscientiousness ( $r = 0.43, p < 0.001$ ) and extraversion ( $r = 0.25, p < 0.01$ ). It was not significantly correlated with openness ( $r = 0.17$ ), agreeableness ( $r = -0.09$ ), or neuroticism ( $r = -0.16$ ).

In an exploratory test, results from sample 2 revealed the proactive measure to be unrelated to general mental ability as measured by the Wonderlic ( $r = -0.14$ , n.s.). Regarding social desirability and hypotheses 2 through 5, Table 2 shows the intercorrelations among the variables in sample 3. Of the variables collected for all sample 3 subjects (age, sex, years of work experience, and private self-consciousness), only private self-consciousness was significantly correlated with the proactive measure ( $r = 0.19, p < 0.05$ ). Respondents with high scores on the private self-consciousness scale - who typically provide more valid self-assessments - scored higher on the proactive scale. The direction of the relationship is opposite that which would be found if a social desirability response bias were operating. This result, coupled with the sample 1 result

Table 1. The proactive personality scale

	Sample 1	Factor loadings Sample 2	Sample 3
1. I am constantly on the lookout for new ways to improve my life	53	56	56
2. I feel driven to make a difference in my community, and maybe the world	40	43	50
*3. I tend to let others take the initiative to start new projects	44	37	48
4. Wherever I have been, I have been a powerful force for constructive change	58	57	57
5. I enjoy facing and overcoming obstacles to my ideas	62	41	49
6. Nothing is more exciting than seeing my ideas turn into reality	68	60	62
7. If I see something I don't like, I fix it	64	62	60
8. No matter what the odds, if I believe in something I will make it happen	65	72	59
9. I love being a champion for my ideas, even against others' opposition	61	58	63
10. I excel at identifying opportunities	58	59	58
11. I am always looking for better ways to do things	63	68	62
12. If I believe in an idea, no obstacle will prevent me from making it happen	65	74	61
13. I love to challenge the <i>status quo</i>	52	48	51
14. When I have a problem, I tackle it head-on	61	59	43
15. I am great at turning problems into opportunities	55	45	57
16. I can spot a good opportunity long before others can	58	50	62
17. If I see someone in trouble, I help out in any way I can	41	33	34

\* Reverse coded.

Responses are indicated on 7-point Likert scales.

concerning public self-consciousness, provides some evidence that the findings from these samples were not contaminated by either form of social desirability response bias (self-deception or impression management).

The correlations in Table 2 show support for hypothesis 2. In the subsamples, scores on the proactive personality scale were not correlated significantly with locus of control ( $r = 0.18$ , n.s.), but the correlations were significant for need for achievement ( $r = 0.45$ ,  $p < 0.01$ ) and need for dominance ( $r = 0.43$ ,  $p < 0.01$ ).

Thus, to this point, the data supported the predicted relationships between the proactive scale and four personality constructs: Conscientiousness, extraversion, and the needs for achievement and dominance. Discriminant validity was shown between the proactive scale and neuroticism, openness, agreeableness, intelligence, private self-consciousness, and locus of control, as well as age, sex, and years of work experience.

Turning to criterion validity, and in support of hypotheses 3, 4, and 5, the proactive scale was significantly related to all three criterion variables. Controlling for private self-consciousness because of its significant relationship with the proactive scale, the proactive scale was positively associated with extracurricular activities aimed at constructive change (partial  $r = 0.29$ ,  $p < 0.01$ ),

Table 2. Means, standard deviations, and intercorrelation matrix of study variables

Variable	<i>M</i>	<i>S.D.</i>	Intercorrelations							
			1	2	3	4	5	6	7	8
1. Proactive personality	90.7	11.4	—	0.18	0.45*	0.43*	0.19†	0.26*	0.18†	0.30*
2. Locus of control ( <i>n</i> = 92)	158.0	17.9		—	na	0.11	-0.10	-0.02	0.14	0.13
3. Need for achievement ( <i>n</i> = 62)	11.9	2.9			—	na	-0.04	0.03	-0.07	0.32†
4. Need for dominance ( <i>n</i> = 38)	12.9	3.0				na	-0.21	0.15	0.15	0.35†
5. Private self-consciousness	49.4	8.2					—	-0.15	-0.05	-0.03
6. Extracurricular activities	3.4	2.1						—	0.15	-0.02
7. Personal achievements	3.6	1.3							—	0.09
8. Transformational leadership	0.6	0.5								—

*N* = 134 except where indicated otherwise.

\*  $P \leq 0.01$ .

†  $P \leq 0.05$ .

personal achievements reflecting change (partial  $r = 0.21$ ,  $p < 0.05$ ), and peer nominations of transformational leadership (partial  $r = 0.33$ ,  $p < 0.01$ ).

Importantly, the proactive scale bore the strongest relationships with the array of criterion variables. None of the three personality traits were associated with all three criteria. Locus of control was not correlated with any of them, and need for achievement was correlated with only one (transformational leadership). Need for dominance also was correlated with only one, although a smaller subsample size may have precluded a marginally-significant relationship with the others. In the need for dominance subsample, when need for dominance and private self-consciousness were controlled, the transformational leadership correlation with the proactive scale was insignificant at  $r = 0.07$ . However, the correlations between the proactive scale and extracurricular activities ( $r = 0.40$ ) and personal achievements ( $r = 0.37$ ) both remained significant at  $p < 0.05$ .

## Discussion

The interactionist view of psychology (Bandura, 1977; Bowers, 1973; Schneider, 1983) for years has postulated the existence of a dimension of behavior whereby people influence their environments. The instrument developed in this study to measure people's propensity to engage in proactive behavior was shown to be internally consistent and to differentiate among individuals. And it is associated with, as hypothesized, an array of criterion variables. While the correlational design of the study has shortcomings - which suggest avenues for future research - the initial evidence is sufficiently encouraging to suggest that proactive behavior may be a significant, measurable component of organizational behavior.

Specifically, the proactivity construct was operationalized via a self-report scale administered to three samples and assessed via factor analysis with a goal of identifying a single, general proactivity factor. The measure had high internal and reasonable test-retest reliabilities. The stability coefficient occurred despite a relatively long time lag and major changes going on in the lives of study participants, who had all recently left jobs, relocated, and entered a stressful MBA curriculum.

In addition to the acceptable psychometric properties, the proactive scale showed significant

criterion validities. Consistent with the definition and conceptual underpinnings of the proactive construct, we hypothesized that the measure would relate to people's scores on an array of criterion variables: Extracurricular and civic activities aimed at bringing about constructive change, personal achievements that effected such change, and transformational leadership. All of these variables were assessed via independent methods, and all three criterion variables were significantly correlated with scores on the proactive scale.

While these results argue for the usefulness of the proactive construct for behavioral prediction, the present study has limitations that temper the conclusions and make requisite further research. Method variance may have contaminated the findings, in that two of the three criterion variables were provided by subjects' self-reports. However, steps were taken to reduce the potential impact of method variance, as suggested by Podsakoff and Organ (1986): The data were collected at different times (at least six months apart), in different places, and with different scaling formats, so there was no consistency motif or item similarity across constructs. Also, social desirability was assessed and controlled. Social desirability routinely should be measured - via self-consciousness scales or other standard social desirability scales - and controlled when necessary. And while the validity of self-report is well-substantiated (e.g. Pervin, 1985), alternative and multiple measures of the proactive construct could be developed and validated.

Discriminant validity - the nature of the relationship between the disposition to engage in proactive behavior and other major personality constructs - remains a significant issue in need of further investigation. The proactive construct was unrelated to general intelligence, five personality constructs, and three demographic variables. It was correlated with four personality constructs, indicating some (predicted) construct overlap. The magnitudes of the significant correlations (indicating 80 per cent noncommon variance), and potential contamination (inflated correlations) from common method variance, suggest that the proactive construct is substantially different from these other variables and a construct worthy of independent empirical pursuit. Still, there exists a need for more work assessing discriminant validity.

The MBA sample in this study was relatively homogeneous with respect to age and career aspirations. Of course, the use of other samples in other settings will provide evidence for or against the generalizability of the present findings. But a high degree of generalizability is plausible, given that the focal variable is an individual difference construct. In fact, a more heterogeneous sample, with the potential for generating greater range and variance in the measured constructs, could reveal that the proactive scale has criterion validities even stronger than in the present study.

Longitudinal studies demonstrating *predictive* validity for the proactive disposition, with implications for causal directionality, are essential. One of the criterion measures in the present study was assessed several months after the proactive scale was administered, but the other two were generated (in the MBA program applications) several months prior to the administration of the proactive scale. Thus, this study does not offer conclusive evidence that the proactive disposition *caused* people to engage in proactive achievement or extracurricular (or for that matter, actual transformational leadership) behaviors. To a significant degree, study participants may have been inferring from their past behavior when completing the self-assessment of proactive behavior.

But that is how individual differences typically are assessed, whether via self-report or observer ratings. Past behavior is used as data for making appraisals and inferences about personality. In fact, some view personal dispositions as summary labels of behavior rather than as intrapsychic causes (Buss and Craik, 1980, 1981; Hetttema, 1989; Mischel, 1973). Still, future research should assess the proactive construct and the extent to which it predicts *future* behaviors of interest. Such work should be conducted in employment and other life settings. Ideally, it would measure

ongoing change in environments and persons, mutual influence, and person–situation accommodation (Schneider, 1983).

Additional research avenues are construct and scale refinement and controlled laboratory investigations. For example, one question is whether the proactive construct is best conceived and studied as a discrete entity or a normally-distributed, continuous variable (Gangestad and Snyder, 1985). Another is how the construct can contribute to behavioral prediction in experimental settings. As the impact of personality is more powerful in ‘weak’ than in ‘strong’ situations (Ickes, 1982; Mischel, 1977; Monson, Hesley and Chernick, 1982; Weiss and Adler, 1984), proactive behavior may be more likely in weak situations that are less constraining of behavioral options — although some (e.g. Maslach, Santee and Wade, 1987) maintain that strong situations may trigger self-expressive behaviors (Bell and Staw, 1990). Other situational attributes (and even personal attributes like self-concept; Bell and Staw, 1990; Swann and Ely, 1984) may serve as moderating influences (e.g. Snyder, 1979) and precipitate or polarize (Snyder and Ickes, 1985) manifestations of the proactive disposition.

What other behaviors might proactive individuals exhibit? The potential range seems limitless. It includes natural extensions of the variables investigated in the present study - for example, the various behavioral dimensions of transformational leadership (Bass, 1985) and the nature of various context-specific personal achievements. Also pertinent may be occupational choice; just as politicians and actors score higher than average on self-monitoring (Snyder, 1979), consumer advocates, entrepreneurs, and investigative journalists might score higher than average on the proactive dimension. Within a given organization, high proactives may exhibit higher levels of a broad array of behaviors including problem finding, idea championing (McCall and Kaplan, 1985), innovation and intrapreneurship, ‘voice’ (Hirschman, 1970), whistleblowing (Near and Miceli, 1987), courageous acts (Hornstein, 1986), certain types of organizational citizenship behaviors (Organ, 1988), task revision (Staw and Boettger, 1990), and strategic prospecting (Miles and Snow, 1978) and other forms of opportunity identification. At a personal level, high proactives are expected to exhibit more feedback seeking (Ashford and Cummings, 1985) and problem-focused (as opposed to emotional) strategies for coping with stress (Lazarus, 1984).

## Conclusion

Proactive behaviors are, of course, multiply caused. Our dispositional focus in this study is not to suggest that situational, historical, and psychological factors do not operate in the manifestation of proactive behavior. Moreover, the study reported here does not longitudinally explore the development of the proactivity disposition or reciprocal causality among the person, behavior, and environment (Bandura, 1986). But it does investigate and yield some understanding of one subsystem of reciprocal determinism (Bandura, 1986) that had been relatively neglected empirically. We started from the premise that persons influence their environments, and with the observation that the extant empirical literature considers this influence in limited fashion: It is nonbehavioral, in the case of cognitive restructuring, or the behavioral domain is limited to situational entry and exit (the selection perspective) or to the interpersonal environment (the evocation and manipulation perspectives). We then proposed the existence of a personal disposition toward proactive behavior as a general construct that predicts behaviors intended to effect change.

The present study harkens back to the tradition of the ‘trait’ studies, which presumed that enduring traits were consistent across situations and directly predictive (as ‘main effects’) of behavior. Consistent with that tradition, this study was simple in design, assessing primarily

bivariate effects. Although personality researchers currently are committed to more complex interactional designs, the direct-effects approach is still appropriate when the dispositional construct is a central variable presumed to have a direct influence on the criterion variables (Weiss and Adler, 1984), as it was here. The present results were significant without considering situational factors. But as more interactionist designs are employed, predictive power may increase even further. Such findings would further support not only the proactive disposition as a valid individual difference construct, but the validity of the interactionism premise that people can and do intentionally alter their environments.

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