

## RESEARCH REPORTS

# Leader Vision and the Development of Adaptive and Proactive Performance: A Longitudinal Study

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In this study, the authors investigated how leader vision influences the change-oriented behaviors of adaptivity and proactivity in the workplace. The authors proposed that leader vision would lead to an increase in adaptivity for employees who were high in openness to work role change. In contrast, they proposed leader vision would be associated with an increase in proactivity when employees were high in role breadth self-efficacy. These propositions were supported in a longitudinal survey of 102 employees who provided self-report data about their leader and their work behaviors. The findings provide insight into the interaction between leaders and followers in responding to a change imperative.

*Keywords:* leadership, adaptivity, proactivity, self-efficacy, openness to work role change

In the face of organizational change, not all forms of work performance are equally effective or desirable (Howard, 1995). In particular, change-oriented behaviors in which individuals adapt to changing conditions and proactively act to anticipate new challenges can be more important than proficient and predictable behaviors (Griffin, Neal, & Parker, 2007; Pulakos, Arad, Donovan, & Plamondon, 2000). Leaders clearly play an important role in creating and sustaining transformational change (Bass & Avolio, 1994), but the role of leaders in developing change-oriented behaviors such as proactivity and adaptivity is not well understood. Studies of leadership rarely test how leadership affects different types of performance, especially those work behaviors that are important during times of change.

Change-oriented behaviors such as adaptivity and proactivity have been considered an emergent form of behavior because their content is difficult to standardize, pre-specify, or describe in terms of specific actions (Griffin et al., 2007). These behaviors are typically initiated by individuals rather than directed or imposed by others (Grant & Ashford, 2008; Van Dyne & Cummings, 1995). Therefore, it is difficult, if not counterproductive, for leaders to provide specific direction about the way employees should be more proactive or adaptive. In this study, we suggest that leaders can support change-oriented behaviors by creating the context in which these behaviors are more likely to emerge. We propose that leader vision, a key component of transformational leadership, creates a facilitating context to increase adaptive and proactive

behaviors for those individuals with an individual propensity to engage in these behaviors.

Because adaptivity and proactivity are emergent forms of behavior, in the current study we focus on how these behaviors develop over time. Leadership research tends to be either cross-sectional in nature (see Judge & Piccolo, 2004) or, when longitudinal designs are used, focused on demonstrating that improved leadership causes improved performance (e.g., Dvir, Eden, Avolio, & Shamir, 2002). In our study, we are concerned with how leadership at one point in time can promote higher levels of performance at a later time.

We use cognitive affective system theory (CAPS; Mischel & Shoda, 1995, 1998) to propose how perceptions of a leader's behavior interact with individuals' beliefs about themselves to predict behavior. Specifically, we differentiated individuals' judgments about their leader's vision (perceptions of the situation) from (a) individuals' beliefs about their own openness and role breadth self-efficacy (perceptions of the self) and (b) their self-ratings of adaptivity and proactivity (perceived behavior). Cognitive affective system theory proposes that behavior arises from an interaction between the self and the environment in which individuals enact relatively stable if . . . then situation-behavior relationships (Mischel & Shoda, 1995). Relatively stable differences between individuals emerge by considering interactions among active psychological features of the person, the situation, and the behaviors (Vansteelandt & Van Mechelen, 1998).

From the perspective of cognitive affective system theory, situations differ in the extent to which they provide psychological cues for the expression of particular behaviors (Tett & Burnett, 2003), and individuals react differently to similar cues because of systematic differences in the way they encode and respond to information from the environment (Mischel & Shoda, 1995). Our focus on the expression of the change-related behaviors of adaptivity and proactivity led us to consider situations that denote a need for change and to incorporate person characteristics that are relevant to understanding and

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responding to organizational change. In terms of situations that denote a need for change, we focus on leader vision because a key element of vision is that it is discrepant from the status quo and identifies a need for change (Conger & Kanungo, 1987).

In terms of the person characteristics that are relevant to understanding organizational change, we focus on openness to work role change and role breadth self-efficacy. These individual self-beliefs influence how individuals interpret, encode, and respond to change-related cues in the environment. In the language of CAPS, if individuals see themselves as accepting and open to work role change, then they will be more likely to engage in adaptive behaviors when they perceive a strong leader vision. However, if individuals who feel confident in their capabilities to take on new tasks perceive strong leader vision, then they will pursue change through proactive behaviors.

Next, we elaborate the nature of change-related work behaviors. We then develop our reasoning as to how different types of change-related work behaviors arise from combinations of the situation (perceptions of leader vision) and individuals' self beliefs about their role breadth self-efficacy and their openness to work role change.

### Change-Related Work Behaviors

Researchers using theories of work performance seek to identify those behaviors that not only contribute to individual task effectiveness but that also enhance the effectiveness of groups and organizations over time (Borman & Motowidlo, 1993; Campbell, McCloy, Oppler, & Sager, 1993; Ilgen & Pulakos, 1999). Based on the integration of previous performance theories, Griffin et al. (2007) developed a model of work performance that distinguishes three different forms of work behavior: proficiency, adaptivity, and proactivity. They found that the different forms of work behavior were empirically distinct and were related to different motivational antecedents.

Proficient behaviors contribute to effectiveness when work requirements can be anticipated. Much existing research has focused on proficiency, such as the concept of task performance (Borman & Motowidlo, 1993). Proficiency reflects the degree to which the individual carries out activities that, on an a priori basis, are expected to make him or her more effective in his or her role as an individual in the organization. These tasks are commonly specified in formal job descriptions. In more predictable environments, effectiveness can be enhanced by increasing proficiency.

In contrast to proficiency, adaptivity and proactivity are emergent, change-oriented behaviors that are important when work requirements cannot be clearly anticipated. When uncertainty is high, work roles cannot simply be formalized using detailed job descriptions (Wall, Cordery, & Clegg, 2002), it is not possible to anticipate all contingencies, and it is more difficult to formalize task requirements (Ilgen & Hollenbeck, 1991). In this case, work roles must emerge dynamically in response to changing conditions and demands (Katz & Kahn, 1978). First, adaptive behavior involves individuals responding constructively to unexpected and new circumstances, which is increasingly important for employees working in rapidly changing environments (Ilgen & Pulakos, 1999). Griffin et al. (2007) defined *adaptive performance* as the degree to which individuals cope with, respond to, and/or support changes resulting in more effective contribution in their role as

individuals, team members, or as members of the organization. Second, proactive behavior is a further kind of change-oriented behavior that contributes to effectiveness when work requirements are unpredictable. Illustrative behavioral concepts include proactive problem solving (Crant, 2000; Parker, Williams, & Turner, 2006), taking charge (Morrison & Phelps, 1999), and personal initiative (Frese, Kring, Soose, & Zempel, 1996). All of these behaviors represent self-initiated and future-oriented action that aims to change the situation or oneself (Bateman & Crant, 1993; Crant, 2000; Grant & Ashford, 2008; Parker et al., 2006).

In essence, proactive and adaptive behaviors can be distinguished from proficient behaviors because they are change oriented and have emergent properties. Adaptivity and proactivity are further distinguished from each other in terms of the initiation of change: Proactivity emphasizes self-initiated change to actively change the self or the environment, whereas adaptivity emphasizes successfully accommodating the uncertainties of externally initiated change. The change-oriented behaviors of proactivity and adaptivity are consistent with the distinction made in the coping literature between primary and secondary control, respectively (Morling & Evered, 2006). *Primary control* refers to attempts to alter the external environment so that it fits with individual needs (Rothbaum, Weisz, & Snyder, 1982): The self is the agent, the self's actions or behaviors are the means, and change in the social or physical environment is the outcome (Skinner, 1996). *Secondary control* has been more difficult to define but is typically viewed as an adaptive response involving an adjustment of the self to accommodate a changing environment (e.g., Heckhausen, 1997). In the context of change, secondary control is about accepting the change and adapting oneself to it.

Next, we discuss how leader vision might interact with individual factors to predict the behaviors of adaptivity and proactivity.

### Situation and Person Interactions: Leader Vision and Self-Perceptions

*Leader vision* is defined as the expression of an idealized picture of the future based around organizational values (Rafferty & Griffin, 2004, p. 332). The articulation of a vision is typically seen as the starting point for any leader effort to create change in organizations (Awamleh & Gardner, 1999). A key feature of an organizational vision is that it is discrepant from the current organizational state (Conger & Kanungo, 1987). A transformational vision of the future, therefore, can generate contrasting motivations. On the one hand, the vision acts a source of goals that motivates effort toward the future articulated in the vision (Berson, Shamir, Avolio, & Popper, 2001; Shamir, House, & Arthur, 1993). On the other hand, the challenge of change can be threatening and stressful, and much research on organizational change identifies negative reactions to change (Dent & Goldberg, 1999). Little research has addressed how more positive responses to change at work such as proactivity and adaptivity might emerge.

We first propose that leader vision will be associated with an increase in adaptivity when followers are open to change in their work role. Openness to work role change describes the extent to which individuals feel positive about change in their work environment (Miller, Johnson, & Grau, 1994; Schwartz & Bilsky, 1990). In general, individuals with lower openness to change show a preference for more stable environments and task patterns

(Lieberman, Idson, Camacho, & Higgins, 1999). Related constructs such as defensive rigidity have also been shown to reduce adaptability (Mumford, Baugham, Threlfall, Uhlman, & Costanza, 1993). Individuals who are more positive about change in the organization, on the other hand, are more accepting of new conditions and are more motivated to adapt to changing situations (Griffin et al., 2007).

No researchers have tested whether openness to work role change interacts with leader vision to influence adaptivity, although researchers have found that individual openness to change interacts with transformational leadership behavior to predict individuals' level of commitment (Moss, McFarland, Ngu, & Kijowska, 2007). Based on Mischel and Shoda's (1995) cognitive-affective system theory of personality, individuals who are more open to work role change are likely to respond to a clear and compelling vision by becoming more adaptive. Being adaptive is a type of secondary control; it involves both accepting a situation and adapting oneself to better fit with the situation (Morling & Evered, 2006). When a leader articulates a clear and compelling vision, the need for change is highlighted. Individuals who are open to change will be most likely to accept this change and to adjust themselves to fit with the change. The vision provides a motivating context for change, whereas individual openness to work role change shapes the way an individual encodes, interprets, and ultimately responds to this context. Our hypothesis was as follows:

*Hypothesis 1:* In the presence of a stronger leader vision, individuals high in openness to work role change will report higher adaptivity 1 year later, after we control for present levels of adaptivity.

Second, we proposed that leader vision will be associated with an increase in proactivity when followers have high role breadth self-efficacy. Role breadth self-efficacy describes the level of confidence that an individual has in taking on expanded integrative and interpersonal tasks, such as developing new work procedures or making suggestions for improvement (Parker, 1998, 2000). Self-efficacy is important for proactive behavior because this behavior can involve short-term risks associated with making new things happen (e.g., resistance from others, the possibility of failure) to achieve a longer term gain (Van Dyne & Cummings, 1995). Innovative change in work roles, for example, can create tension for role incumbents as well as others in the workplace (Stryker & Statham, 1985). Self-efficacy is important because individuals who are confident in their capabilities are more likely to judge that their actions will be successful and therefore take the risk to be proactive (Morrison & Phelps, 1999; Parker et al., 2006). Self-efficacy also raises feelings of control and leads people to persist for longer (Lent, Brown, & Larkin, 1986) as well as to choose more difficult goals (Locke & Latham, 1990), all of which are important for bringing about change.

Consistent with these ideas, self-efficacy has been shown to predict proactivity (Frese, Garst, & Fay, 2007). Role breadth self-efficacy in particular has been shown to be a strong predictor of behaviors such as making suggestions (Axtell et al., 2000), proactive performance (Ohly & Fritz, 2007), and proactive problem solving, while not predicting proficient behaviors such as adhering to rules (Parker et al., 2006).

Although research has shown that self-efficacy predicts proactivity, few studies have considered whether and how self-efficacy might lead to an increase in this type of behavior. We proposed that leader vision is an important motivating force that works in combination with self-efficacy to bring about an increase in proactive action. A strong leader vision challenges employees to help change the organization, and employees who have high levels of role breadth self-efficacy respond to this challenge by actively helping to bring about the change. Thus, leader vision creates the impetus for change by presenting a compelling vision of the future, and individuals with a strong sense of self-efficacy respond to this situation not by accommodating to the situation but by taking charge and changing the situation. We proposed the following:

*Hypothesis 2:* In the presence of a stronger leader vision, individuals high in role breadth self-efficacy are likely to report higher proactivity 1 year later, after we control for present levels of proactivity.

In contrast to the change-related behaviors of adaptivity and proactivity, we did not expect that the combination of leader vision and individual differences would bring about higher levels of proficiency. Proficiency is not future oriented or emergent. A leader vision presents an inspiring but discrepant view of the future that cannot be achieved by simply doing more of the same. To verify the difference between proficiency and change-related behaviors, we included the individual-difference measure of conscientiousness, which has consistently been shown to predict proficient behaviors. Conscientious individuals are hard working and resourceful as well as dependable and thorough (Roberts, Chernyshenko, Stark, & Goldberg, 2005). We did not expect that leader vision would be associated with an increase in proficiency, even among highly conscientious followers.

## Method

### Organizational Context

The study was carried out in a large public sector organization in Australia, consisting of approximately 1,800 employees. The organization was responsible for the provision of scientific and technical services within the state's health sector. This organization was undergoing a transformational change in order to compete with private sector providers for business. The change included a restructure in which specialized services were being centralized. A new central laboratory was created, and some smaller laboratories were closed, resulting in the redesign of many jobs and the relocation of some employees. Information systems were also being redesigned to increase the timeliness of services, and work units were being held accountable for achieving increased customer satisfaction. Thus, employees were required to adapt to new work roles and new work processes, at the same time as initiating improvements in the delivery of services. This within-organization change process was happening simultaneously with a whole-sector centralization of human resources functions, which meant that many of the organization's payroll and human resources employees were relocated to a central government agency.

## Sample

The survey was initiated by the organization in order to monitor employee well-being during the change process. All employees within the organization were invited to participate in a survey at Time 1 and at Time 2 one year later. Although the survey was confidential, participants were invited to record their employee identification number so that individual responses could be matched over time by the research team. The present study was based on those respondents who recorded their employee number on both occasions. At Time 1, there were 1,132 responses to the survey (representing a 61% response rate), and 297 of these responses included an employee identification number. At Time 2, there were 770 responses to the survey (representing a 41% response rate), and 268 of these responses included an employee identification number. After deletion of cases with missing values, the full sample at Time 1 was 1,026 and the full sample at Time 2 was 763. Within these samples, there were 102 employees who completed both surveys and included their employee identification number at both times. The final longitudinal sample of 102 employees is compared with other respondents below.

## Measures

We assessed the measures of adaptivity, proactivity, and proficiency with three items from scales developed by (Griffin et al., 2007). Individual task adaptivity asked respondents to describe how often in the past month they had adapted to change, such as how often “have you coped with changes to the way you have to do your core tasks.” Individual task proactivity asked how often they actively initiated change, such as how often “have you come up with ideas to improve the way in which your core tasks are done.” Individual task proficiency asked respondents about completing their core job, such as how often “have you completed your core tasks well using the standard procedures.” Responses ranged from 1 (*very little*) to 5 (*a great deal*). Griffin et al. (2007) showed these scales were structurally distinct from each other as well as predicted by different antecedents.

We assessed role breadth self-efficacy with six items developed by Parker (1998). Role breadth self-efficacy refers to employees' perceived capability of carrying out a broader set of work tasks. Employees were asked how confident they would feel carrying out a range of interpersonal and integrative tasks beyond their technical job, such as contacting people outside the company (e.g., customers and suppliers) to discuss problems, analyzing a long-term problem to find a solution, and designing new procedures for the work group. The response scale ranged from 1 (*not at all confident*) to 5 (*very confident*). This scale has been shown to be distinct from related individual difference measures such as self-esteem and proactive personality, and it distinguishes employees from different jobs in the expected ways (Parker, 1998). Role breadth self-efficacy is a statelike concept (Luthans, Avolio, Avey, & Norman, 2007) that is more stable than moods but more malleable than personality (Parker, 1998, 2003). In the current study, role breadth self-efficacy was highly correlated over the two time periods ( $r = .75, p < .001$ ).

We assessed openness to work role change with five items adapted from a measure of openness to change (Miller et al., 1994) that asked participants to report their self-beliefs about change. We

adapted the measure to make it more specifically focused around work role change. Illustrative items are: “I consider myself to be ‘open’ to work unit changes” and “I am reluctant to consider changing the way I do my work” (reverse scored). Responses ranged from 1 (*strongly agree*) to 5 (*strongly disagree*). Like role breadth self-efficacy, openness to work role change is a statelike concept that is more stable than momentary affective states but is also potentially malleable. The correlation of the measure across time periods was high ( $r = .66, p < .001$ ).

We assessed leader vision using the three highest loading items from House (1998) that were all positively worded. They asked if the leader “creates an exciting and attractive image of where the organization is going,” “has a clear understanding of where the organization is heading in the future,” and “expresses a clear direction for the future of the unit.” Responses ranged from 1 (*strongly agree*) to 5 (*strongly disagree*). The measure was distinct from other leader behaviors such as intellectual stimulation (please contact Mark A. Griffin for further details).

## Measurement Properties and Sample Differences

Correlations among the scales for the longitudinal sample are reported in Table 1. To investigate the measurement properties of the scales, we first conducted a confirmatory factor analysis of the 28 items from seven scales at Time 1 and Time 2. We based these analyses on the full sample rather than on the longitudinal sample to make use of the larger number of participants. The confirmatory factor analysis was estimated using maximum likelihood via the MPlus program (Muthén & Muthén, 2005). A seven factor model was fitted to the covariance matrix at Time 1 and Time 2. The fit of the seven-factor model was reasonable at both Time 1,  $\chi^2(303, N = 1,026) = 1,895.65$  (comparative fit index = .93, root-mean-square error of approximation = .06), and Time 2,  $\chi^2(303, N = 763) = 1,388.32$  (comparative fit index = .92, root-mean-square error of approximation = .06).

Our sample is susceptible to active nonresponse bias (Rogelberg & Stanton, 2007) because only those who identified themselves were part of the longitudinal sample. Bias can occur when the reasons for nonresponse are related to the substantive measures of the study and can occur in both the means of measures and the relationships among measures (Schafer & Graham, 2002). To explore potential nonresponse bias, we compared the longitudinal sample ( $n = 102$ ) with the larger cross-sectional samples ( $N = 1,026$  at Time 1 and  $N = 763$  at Time 2). In Table 2, we compare the mean responses at both time periods. Three of the 14 comparisons were significantly different, and all differences occurred at Time 1. The longitudinal sample reported higher leader vision  $t(1,020) = 2.57, p < .01, d = 0.28$ , openness to work role change  $t(1,020) = 2.75, p < .001, d = 0.28$ , and role breadth self-efficacy  $t(1,020), p < .05, d = 0.23$ , at Time 1. To compare the intercorrelations among measures for the longitudinal and full sample, we tested the equality of correlation matrices as outlined by Green (1992). The correlation matrices were not significantly different at either Time 1,  $\chi^2(15, N = 1,026) = 19.74, p > .05$ , or Time 2,  $\chi^2(15, N = 763) = 8.02, p > .05$ . Based on comparisons between the two samples, these results show evidence of some bias in the mean levels of three relevant measures at Time 1 but not Time 2 and no evidence of bias among the relationships in the study.

Table 1  
Correlations Between All Measures for the Longitudinal Sample ( $n = 102$ )

Measure	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Time 1													
1. Proficiency	<b>.88</b>													
2. Adaptivity	.23	<b>.90</b>												
3. Proactivity	.23	.50	<b>.91</b>											
4. Conscientiousness	.59	.23	.09	<b>.72</b>										
5. Openness to work role change	.14	.57	.34	.15	<b>.74</b>									
6. Role breadth self-efficacy	.16	.30	.56	.17	.41	<b>.91</b>								
7. Vision	.07	-.09	-.10	.06	.02	.03	<b>.89</b>							
	Time 2													
8. Proficiency	.74	.27	.16	.59	.22	.20	.12	<b>.89</b>						
9. Adaptivity	.35	.48	.31	.28	.36	.22	-.02	.47	<b>.89</b>					
10. Proactivity	.21	.27	.40	.23	.21	.36	-.03	.31	.46	<b>.90</b>				
11. Conscientiousness	.52	.22	.08	.73	.09	.03	.06	.61	.36	.27	<b>.70</b>			
12. Openness to work role change	.18	.45	.27	.20	.66	.18	-.09	.23	.48	.19	.22	<b>.75</b>		
13. Role breadth self-efficacy	.03	.19	.41	.05	.32	.75	.01	.07	.18	.36	.02	.22	<b>.91</b>	
14. Vision	.08	.12	.09	.07	.04	.06	.03	.03	.12	.08	.03	.06	.09	<b>.89</b>

Note. Alpha reliabilities appear in boldface along the diagonal. For correlations greater than .20,  $p < .05$ ; for correlations greater than .28,  $p < .01$ ; and for correlations greater than .35,  $p < .001$ .

## Results

To test the hypotheses, we assessed three hierarchical moderated regression models. The dependent variables were the Time 2 measures of individual adaptivity, proactivity, and proficiency, respectively. For each dependent variable, we entered the corresponding self-report performance measure at Time 1. In the first step, we also entered the Time 1 leader vision measure and the three self-perception measures of openness to work role change, role breadth self-efficacy, and conscientiousness. In Step 2, we entered the interaction between leader vision and the three self-perception measures. The results of these analyses are shown in Table 3.

Hypothesis 1 was supported. Leader vision and openness to work role change at Time 1 interacted to predict adaptivity at Time 2 after we controlled for the corresponding behavior and all three self-perceptions at Time 1 ( $B = .24$ ,  $SE = .12$ ,  $p < .05$ ). A test of simple slopes showed openness to work role change at Time 1 was positively related to adaptivity at Time 2 for those people reporting

higher leader vision ( $B = .34$ ,  $SE = .17$ ,  $p < .05$ ) but not for people reporting lower levels of leader vision ( $B = -.08$ ,  $SE = .18$ ,  $p > .05$ ). The interaction is plotted in Figure 1a using the procedures recommended by Aiken and West (1991).

Hypothesis 2 proposed that leader vision and role breadth self-efficacy at Time 1 would interact to predict proactivity at Time 2. Table 3 shows that the proposed interaction was significant ( $B = .28$ ,  $SE = .11$ ,  $p < .05$ ), whereas the two additional interactions were not significant. A test of simple slopes showed role breadth self-efficacy at Time 1 was positively related to proactivity at Time 2 for those people reporting higher levels of leader vision ( $B = .48$ ,  $SE = .16$ ,  $p < .05$ ) but not for people reporting lower leader vision ( $B = -.03$ ,  $SE = .16$ ,  $p > .05$ ). The interaction is plotted in Figure 1b.

Contrary to expectations, the graphs suggest that individuals with low role breadth self-efficacy and low openness to work role change might show less proactivity and adaptivity when there is

Table 2  
Comparison of Means for Longitudinal Sample and Full Sample at Time 1 and Time 2

Measure	Time 1				Time 2			
	Longitudinal sample ( $n = 102$ )		Other responses ( $n = 924$ )		Longitudinal sample ( $n = 102$ )		Other responses ( $n = 661$ )	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Proficiency	4.24	0.56	4.33	0.57	4.15	0.65	4.26	0.59
Adaptivity	3.79	0.75	3.84	0.78	3.75	0.80	3.74	0.77
Proactivity	3.35	0.88	3.33	0.92	3.25	0.89	3.34	0.93
Conscientiousness	4.13	0.61	4.12	0.61	4.16	0.61	4.09	0.59
Openness to work role change	3.84 <sup>a</sup>	0.64	3.66	0.66	3.76	0.60	3.64	0.65
Role breadth self-efficacy	3.84 <sup>a</sup>	0.77	3.66	0.85	3.82	0.82	3.71	0.82
Leader vision	3.44 <sup>a</sup>	0.91	3.17	0.99	3.28	1.02	3.12	1.02

<sup>a</sup> Significant difference at .05 probability level between longitudinal sample and full sample for that time period.

Table 3  
Prediction of Performance Measures at Time 2 by All Predictors at Time 1

Measure	Predicting adaptivity						Predicting proactivity						Predicting proficiency					
	Step 1		Step 2		Step 1		Step 2		Step 1		Step 2		Step 1		Step 2			
	B	SE	β	B	SE	β	B	SE	β	B	SE	β	B	SE	β			
Adaptivity T1	.39***	.12	.37	.43***	.12	.41	Step 1											
Proactivity T1							.30***	.12	.30	.38***	.12	.38	.69***	.10	.60	.66***	.11	.57
Proficiency T1													.22*	.09	.20	.27**	.10	.25
Conscientiousness T1	.24	.13	.18	.26*	.13	.20	.26	.14	.18	.35*	.14	.24	.06	.09	.06	.06	.09	.06
Openness to work role change T1	.14	.15	.11	.13	.14	.11	.03	.14	.02	-.01	.04	-.01	.06	.09	.06	.03	.08	.04
RBSE T1	.04	.11	.04	-.01	.10	-.01	.18	.13	.16	.14	.13	.13	.06	.07	.03	.03	.08	.04
Vision T1	.01	.07	.01	.01	.08	.01	.01	.08	.02	-.03	.09	-.03	.04	.05	.06	.05	.05	.07
							Step 2											
Vision × Conscientiousness				-.22	.14	-.16				-.26	.15	-.13				-.13	.09	-.11
Vision × Openness to Work Role Change				.24*	.12	.20				.01	.14	.01				.01	.08	.01
Vision × RBSE				-.07	.10	-.07				.28*	.11	.27				.03	.06	.04
ΔR <sup>2</sup>	.27***			.05			.22***			.09*			.60***					

Note. B = unstandardized weight; SE = standard error of unstandardized weight; β = standardized weight; T = Time; RBSE = role breadth self-efficacy. \* p < .05. \*\* p < .01. \*\*\* p < .001.

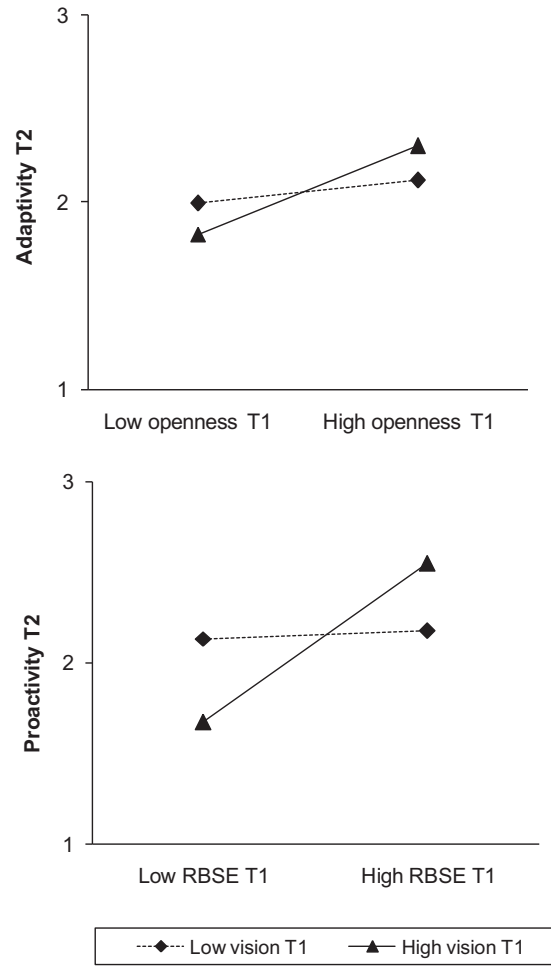


Figure 1. Plot of interactions predicting adaptivity and proactivity at Time (T) 2 after we controlled for adaptivity and proactivity, respectively, at Time 1. RBSE = role breadth self-efficacy.

high leader vision. This result suggests a potential negative consequence of leader vision for individuals who have low self-perceptions in relation to change.

As expected, conscientiousness did not interact with leader vision to predict proficiency or the change-oriented behaviors of adaptivity and proactivity. Conscientiousness at Time 1 did show a positive main effect on proficiency at Time 2 ( $B = .22, SE = .09, p < .05$ ) consistent with previous studies that show a direct relationship between conscientiousness and core task performance (Barrick & Mount, 1993).

To investigate whether nonresponse bias might have influenced the main findings, we repeated the above analyses using maximum likelihood estimates of the parameters based on all cross-sectional data for Time 1 and Time 2. Although this analysis could not include new longitudinal data, we used additional cross-sectional data to estimate means and covariances at Time 1. We also incorporated auxiliary variables of age and gender to evaluate whether the parameters changed (Enders, 2006). The hypothesized effects and interactions remained statistically significant and produced the same pattern of results in these additional analyses.

## Discussion

Few researchers have considered how to promote increases in employees' adaptivity and proactivity, which are especially important behaviors during transformational change. However, both adaptivity and proactivity represent somewhat of a dilemma. Being emergent, they cannot readily be prescribed. For example, leaders cannot simply instruct their employees to be more proactive and then expect those employees to start challenging the status quo, especially if they lack the self-efficacy to engage in what is often personally risky behavior. Likewise, simply adding "adapt well to change" to a job description is unlikely to promote greater adaptivity.

Rather, our findings suggest that leaders can motivate more proactivity and adaptivity among those individuals with a propensity for these behaviors by presenting a clear, compelling, and discrepant view of the future. In the presence of a strong vision, adaptivity increased for individuals high in openness to work role change, and proactivity increased for those who were high in role breadth self-efficacy. These findings converge with the ideas of Hackman and colleagues (Hackman, 2002; Hackman & Wageman, 2005), who argued that leaders are most effective when they play an enabling role by setting a compelling direction and building a supportive context. In an environment of organizational change, leaders seek employees' acceptance and engagement in new ways of working (Bass, 1990; House & Shamir, 1993; Podsakoff, MacKenzie, Moorman, & Fetter, 1990). A strong leader vision presents a different view of the future that requires behaviors other than doing more of the same (Shamir et al., 1993). Our findings support the idea that the discrepancy implicit in a compelling vision motivates employees who have the openness and confidence to do so to be more adaptive and proactive, respectively.

The above interpretation is primarily based on the significant positive slope for self-perceptions (role breadth self-efficacy and openness to work role change) predicting later behavior (proactivity and adaptivity, respectively) only when vision is high. The pattern of results depicted in Figure 1 also suggests that there might be negative consequences of a strong leader vision for individuals lower in self-perceptions of openness to work role change and role breadth self-efficacy. For example, individuals with low role breadth self-efficacy, who lack confidence in going beyond their technical core, are likely to be threatened by a strong leader vision in which an imperative for new behavior is highlighted. Such individuals might thus experience even less motivation to behave proactively than those with higher self-efficacy and lower leader vision. However, this specific interpretation of the graphs in Figure 1 depends on the response range of the measures in the study. There was some evidence that the longitudinal sample showed higher levels of both self-perception measures at Time 1, and future researchers should examine the consequences of responses across the full spectrum of self-perceptions and leader vision.

These findings highlight the important role that leader vision can play in bringing about behavior change. Lewin (1951) suggested that driving and restraining forces maintain a dynamic equilibrium of the status quo, so to achieve change in behavior, these forces must be disturbed. Kotter (1995) likewise argued that the momentum of performance improvement during change will be lost "if the urgency level is not intense enough, the guiding

coalition is not powerful enough, and the vision is not clear enough" (p. 66). Our findings refine these ideas, suggesting that vision is most important in prompting change in emergent behaviors. By providing a discrepant view of the future, a strong vision disturbs the equilibrium and motivates behaviors necessary for achieving a different end state. Achieving a different end state requires individuals to adjust well to changes initiated by others (adaptivity) and individuals to initiate changes themselves (proactivity). In contrast, vision is less important for motivating an increase in proficiency, which is likely because proficiency is neither oriented toward change nor oriented toward achieving a different future.

Importantly, our study suggests that vision is unlikely to be sufficient on its own in prompting adaptivity and proactivity. An inspiring vision might not lead people to act out of character. Rather, when relevant situational features are present—in this case, leader vision—processes linked to self-beliefs around efficacy and change receptivity become activated. This process then gives rise to the question as to whether and how one can build greater openness to change in work roles or greater self-efficacy. We argued that both concepts are statelike, with these sets of beliefs being potentially malleable. Evidence shows, for example, that role breadth self-efficacy can be enhanced over the long term through, for example, enriched work design (Parker, 1998). Although we are not aware of any similar findings in regard to openness to work role change, research in the area of resilience suggests that openness might be developed through organizational supports such as information and participation (Wanberg & Banas, 2000).

Our study also supports greater differentiation among performance constructs in the study of work performance. Much research focuses on task proficiency, or carrying out behaviors beyond the core task that are relatively stable or passive. In recent years, researchers and practitioners alike have argued for expanded performance constructs to capture all aspects of behavior that have value for the organization. The current study supports the distinctiveness of proficient behaviors, such as task performance, relative to emergent behaviors, such as adaptivity and proactivity, and shows that different processes motivate these behaviors.

Finally, our study has implications for research on personality at work. Mischel and Shoda (1995) argued that the CAPS approach helps to identify diagnostic situations in which individual differences are likely to be most visible. Our study suggests that during organizational change, the situation of leader vision makes differences in openness to change and role breadth self-efficacy especially salient. In essence, the CAPS approach encourages researchers to view organizational contexts in terms of the features that activate particular personal characteristics (Tett & Burnett, 2003). We encourage further research in this direction, particularly research that focuses on the underlying dynamics of these relationships, such as how the self-beliefs surrounding efficacy and change adaptation relate to affective processes, goals, and values, and thereby influence behavior.

The implications of our study need to be considered in the context of its limitations. One issue is the sample, which was a subsample from a broader set of employees who elected to be identified and who also were more open and efficacious and who perceived a clearer vision. This process resulted in a relatively high level of nonresponse, and the findings might only apply to more

trusting, engaged employees. Our results are unbiased only if nonresponders were missing completely at random or missing at random (MAR; Enders, 2006; Rubin, 1976). MAR would apply in our data set if responding at Time 2 was related to Time 1 variables but not Time 2 variables. It is generally not possible to test directly whether MAR holds in a data set (Schafer & Graham, 2002). However, our results showed no difference in mean values for respondents versus nonrespondents at Time 2 and no difference in correlations; our results were consistent under different analysis strategies. Collins, Schafer, and Kam (2001) found that assuming MAR was appropriate in many cases and resulted in little bias in estimates and standard errors.

A further limitation is the use of all self-report measures. Although self-report assessments are probably best for the independent and moderator variables, other-ratings of job behavior are preferable. Nevertheless, the longitudinal research design helps to overcome typical problems associated with self-reports. As noted by Zapf, Dormann, and Frese (1996), examining change over time controls for stable third variables that might influence self-report perceptions. Moreover, our studies showed that change was predicted by an interaction between vision and an individual-difference variable, and these interactions, unlike main effects, are unlikely to be explained by common method bias (Evans, 1985).

A final issue is that we did not test the underlying mechanisms by which leader vision and employee self-beliefs prompt expanded adaptivity and proactivity. We have assumed that vision is important because it provides a discrepant view of the future, but this is an assumption that warrants testing. For example, perhaps vision inspires adaptivity and proactivity via some other mechanism, such as by boosting optimism about the future. Investigating the mechanisms would provide greater insight into why vision is important and why and how it interacts with self-beliefs.

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Received June 2, 2008

Revision received April 21, 2009

Accepted April 28, 2009 ■