

## PERSONALITY AND CHARISMATIC LEADERSHIP IN CONTEXT: THE MODERATING ROLE OF SITUATIONAL STRESS

SHAUL OREG

The Hebrew University of Jerusalem

YAIR BERSON

Bar-Ilan University

We adopt an interactionist perspective and extend previous work on personality and charismatic leadership by considering the relationship between them across contexts. Based on Gray's reinforcement sensitivity theory, we expected the relationships between approach-oriented dispositions and charisma to diminish under conditions of high workload-induced stress. In a large-scale lab study with 201 groups (Study 1,  $N = 721$  participants), we manipulated conditions of stress and tested the interaction of stress with leaders' extraversion and openness to experience in predicting their charismatic behaviors. We then tested, in a field study of 71 executives (Study 2,  $N = 256$  participants), the interaction of employees' reported stress with leaders' stimulation values in predicting their charismatic behavior. In support of our hypotheses, the relationships between approach-oriented dispositions and charisma were significantly weaker when stress was high. We discuss theoretical and practical implications of this finding, in particular given that it is in stressful conditions under which charismatic leadership is said to be most important.

Charismatic leaders are said to motivate and inspire followers through their strong convictions in their beliefs and ideals, their display of confidence and positive emotions, and the imaginative vision they provide (e.g., Conger & Kanungo, 1998; House, 1977; Shamir, House, & Arthur, 1993). Given the impact that charismatic and transformational leadership (i.e., neocharismatic approaches, House & Aditya, 1997) has on employees (e.g., Dvir, Eden, Avolio, & Shamir, 2002; Erez, Lepine, & Elms,

---

This research was partially funded by the Israel Science Foundation (Grant No. 916/07). We thank Colin DeYoung for his very helpful insights about an earlier version of our work, Alex Zibenberg and Irena Nutenko for their help in running the experiment in Study 1, Daisy Chang and Russell Johnson for their advice in the revision process, and Amir Erez, Nir Halevy and the journal's review team for their helpful comments on a previous version of this manuscript. [Correction added on 10 March 2014, after first online publication: Edits made to acknowledgement].

Correspondence and requests for reprints should be addressed to Shaul Oreg, School of Business Administration, Mt. Scopus, Jerusalem, 91905, Israel; oreg@huji.ac.il.

2002) and organizational outcomes (e.g., Waldman, Ramirez, House, & Puranam, 2001), much effort has been directed toward predicting charismatic leadership. Early on, personality has taken center stage in the study of such leadership (House, 1977), with numerous studies aiming to characterize charismatic leaders in terms of their values (Sosik, 2005) and traits (e.g., Resick, Whitman, Weingarden, & Hiller, 2009).

Without undermining the dispositional approach, it is by now well established that a more complete prediction of behavior should consider person X situation interactions (Mischel, 1977; Mischel & Shoda, 1999). Calls for such an interaction approach in the organizational field have been recurring, yet the number of interaction studies remains very limited (e.g., Endler, 1973; House, Shane, & Herold, 1996; Oswald & Hough, 2011). With respect to research on charisma, an interaction approach entails that, rather than considering merely the characteristics of leaders who are charismatic, one should consider differences across contexts in the relationships between leaders' personality and charismatic behaviors. As we explain below, the interaction between the context of situational stress and approach-related personality dispositions may be particularly meaningful for understanding and predicting leaders' charisma.

We incorporate Gray's (1982; Gray & McNaughton, 2000) reinforcement sensitivity theory to hypothesize about the differential effects that approach-related personality dispositions have on charismatic behaviors across low- and high-stress situations. Specifically, we argue that under situational stress, involving increased workloads and time pressure, the effects of approach-related dispositions (including traits and values) on charisma will diminish in comparison to these relationships under less stressful conditions. Such a finding should offer several contributions: First, it will provide important and novel evidence for the restricted role of approach-related dispositions in stressful situations. More specific to the leadership context, it will extend our understanding of the personality–charisma relationship by establishing boundary conditions for their emergence. Related to this, such a finding could help explain some of the inconsistencies in previous findings that have been highlighted in reviews and meta-analyses of the personality–charisma link (e.g., Bono & Judge, 2004) as we elaborate below. Furthermore, the topic of situational stress has received much attention in the literature on charismatic leadership, albeit only limited conceptual and empirical elaboration. In the present studies we demonstrate the dampening effect that stress can have on the personality–charisma relationship. We aim to establish this effect through a lab experiment and field study of executives. We begin by reviewing the few studies that considered personality–leaderships relationship across contexts.

*Personality–Charisma Relationships Across Contexts*

Both outside and within the field of leadership, researchers are repeatedly advocating the study of personality effects across contexts (Bono & Judge, 2004; House et al., 1996; Oswald & Hough, 2011). In 1996, House, Shane, and Herold noted that “we need to test interactional models that combine situational and dispositional factors. We mirror Endler’s (1973) observations, which, despite the lapse of more than 20 years, appear not to have had an influence on the organizational behavior literature” (p. 220). Eighteen years later, the field has shown only limited progress in this respect.

As noted above, such an interaction approach could help explain some of the inconsistencies among earlier studies linking personality and neo-charismatic leadership (e.g., Bono & Judge, 2004). For example, the results of Bono and Judge’s (2004) meta-analysis of 26 independent studies indicated substantial variance across studies in the relationship between the Big Five trait of openness to experience and charismatic leadership. Although the overall effect was positive, there were some studies in which the relationship was not significant and even a few in which the relationship was negative. Furthermore, although relationships for other traits, such as extraversion, yielded more consistent effects, even these have shown variance across studies that could be potentially explained by the characteristics of the contexts in which these studies were conducted. It is possible that some of the contexts in which these relationships were tested were more conducive to the effects of personality than others (Bono & Judge, 2004).

To date, there have been only a handful of studies in which personality–leadership relationships were considered across contexts (De Hoogh, Den Hartog, & Koopman, 2005; Grant, Gino, & Hofmann, 2011; Ng, Ang, & Chan, 2008; Ployhart, Lim, & Chan, 2001). Two of these are particularly relevant and focus on person  $\times$  situation interactions for predicting either charismatic or transformational leadership (De Hoogh et al., 2005; Ployhart et al., 2001). In the first, personality–charisma relationships tended to be in opposite directions in contexts that were perceived as dynamic versus stable. Openness to experience, for example, had a positive relationship with charisma among managers who perceived their work environment as dynamic (e.g., promoting change) yet negative among managers who perceived their work environment as stable. In the second study, relationships between military recruits’ personality and transformational leadership ratings differed across two stages of their military career, representing “typical” versus “maximum” performance (Ployhart et al., 2001). Among their findings, Ployhart et al. found that openness to

experience was associated with leadership ratings only under conditions of maximum performance.

Although these two studies make an important step toward incorporating context into our examinations of the personality neocharismatic leadership relationship, neither of them is grounded in an overarching theory about the conditions under which certain types of dispositions (e.g., approach related) are most likely to yield effects on behavior. In the present research we adopt a biopsychological theory of personality (Gray, 1982; Gray & McNaughton, 2000) and adapt it to the context of charismatic leadership in stressful situations. Furthermore, the interaction studies mentioned above suffer from several methodological limitations (e.g., measuring personality and context from the same source, in DeHoogh et al., 2005, not statistically testing the interaction effect in Ployhart et al., 2001), most of which can be overcome by conducting multiple studies with alternative designs (e.g., lab and field).

More importantly, given the very limited amount of research on such interactions, and given their centrality for understanding the personality–charisma relationship, there is much room for additional theory and research on the topic. In these studies we build on Gray’s reinforcement sensitivity theory (RST, Gray 1982; Gray & McNaughton, 2000) to formulate predictions about the effects of approach-related personality dispositions and the moderating role of situational stress. RST provides a compelling framework for reconsidering previous findings about personality and (e.g., the Big Five) charismatic leadership. To test our formulations we combine a lab experiment and a field study to capitalize on the advantages, and overcome the limitations, of each.

The choice of stress as a contingency is especially relevant given the important role that stress receives in the neocharismatic literature. It is well accepted that times of stress and crisis are when charismatic leaders matter most (Shamir et al., 1993). It is nevertheless not clear how or to what degree dispositions that are typically associated with charismatic leadership are behaviorally expressed at these times. As we aim to demonstrate, some of the personality dispositions that have been associated with charismatic leadership may have weaker effects when situational stress is high.

### *Stress as a Moderator of Personality–Charisma Relationships*

Theoretical formulations of charisma often highlight the role that stress can have in the charismatic leadership process (Bass, 1985; Conger & Kanungo, 1998; House, 1977). For instance, in their theory of charismatic leadership, Conger and Kanungo (1998) suggested that leaders tend to emerge as charismatic in particular when followers experience psychological distress (Conger & Kanungo, 1998, p. 66). Others suggest

that the essence of charismatic leadership may involve the process of turning (stress-inducing) threats into motivating visions (Jackson & Dutton, 1988). Indeed, some research has demonstrated that under conditions of stress and crisis leaders' behaviors were more charismatic in comparison to leaders in nonstressful situations (e.g., Halverson, Murphy, & Riggio, 2004; Pillai, 1996). As we explain below, we suggest that especially in stressful situations, in which the requirement for charismatic leadership is most pronounced, some individual differences in personality may be least relevant for predicting such leadership.

### *Gray's Reinforcement Sensitivity Theory*

Two systems which lie at the heart of Gray's RST are those of *behavioral activation* (behavioral activation system, BAS) and *behavioral inhibition* (behavioral inhibition system, BIS). The former is responsible for approach behavior and is activated by stimuli indicating the possibility of attaining a reward. The latter is responsible for avoidance behavior. It maintains the organism's vigilance for conflict and resolves it by inhibiting ongoing action (Berkman, Lieberman, & Gable, 2009). It becomes activated when danger or a risk for loss are present and serves to protect the organism by mobilizing the organism's attention and energy toward dealing with the obstacle at hand. Such protection often occurs while the organism is engaged in approach behavior, in which case situational risks or threats activate the BIS, which in turn inhibits the approach behavior (DeYoung, 2010; DeYoung & Gray, 2009). In other words, activation of the BIS leads to the deactivation of the BAS. Accordingly, we propose that personality dispositions that are associated with approach behavior should lose their effects when the situation calls for vigilance.

Conceptually, personality dispositions that are strongly associated with the chronic activation of the BAS are the extraversion and openness traits and stimulation values (e.g., DeYoung et al., 2011; Mitchell et al., 2007; Smits & Boeck, 2006), all of which reflect a strong approach orientation. Extraversion has to do with the quantity and intensity of energy directed outwards into the social world (Costa & McCrae, 1992; McCrae & Costa, 1999), with extraverted individuals being characterized by a dominant, assertive, and positive disposition. In a meta-analysis (Bono & Judge, 2004) of the relationships between the Big Five (Digman, 1990) and charismatic leadership, extraversion was the most consistent predictor.

Another approach-oriented trait linked with charismatic leadership, although with far less consistency across studies, is that of openness to experience (Bono & Judge, 2004). Individuals high on openness are said to be imaginative, curious, and broad-minded (Barrick & Mount, 1991). They are unconventional in their thinking and behavior, and seek out new

experiences and ideas. Both extraversion and openness are involved with approach behaviors in the form of exploration: extraversion involving behavioral exploration and openness cognitive exploration. They are consistently correlated with each other and form a higher-order factor called *beta* (Digman, 1997), *plasticity* (Hirsh, DeYoung, & Peterson, 2009) or *engagement* (Olson, 2005). Individuals who are high on such engagement are thus predisposed toward approach/exploratory behavior and could be said to have their BAS chronically activated.

Empirically, extraversion and openness are the only Big Five traits to have shown positive and significant correlations with the BAS (e.g., Keiser & Ross, 2011; Smits & Boeck, 2006). In contrast, the other three Big Five traits (neuroticism, agreeableness and conscientiousness), and neuroticism in particular, have shown positive relationships with the BIS (Mitchell et al., 2007; Smits & Boeck, 2006). This corresponds with the higher-order conceptualization of the Big Five, as noted above (e.g., Hirsh et al., 2009), into the two factors of engagement (extraversion and openness) versus self-control (neuroticism, agreeableness, and conscientiousness). Engagement represents a chronic activation of the BAS, and self-control, and neuroticism in particular, represents a chronic activation of the BIS.

Similar to extraversion and openness, one could also consider other approach-related personality dispositions that relate to engagement yet are distinct from traits. One such disposition is that of stimulation values, from Schwartz's (1992) system of personal values. Personal values are considered an important aspect of personality, alongside a range of dispositions including traits and stable motives (McAdams & Olson, 2010). Values consist of "enduring beliefs that a specific mode of conduct is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence" (Rokeach, 1973, p. 5). They embody personal, transsituational, and temporally stable sets of priorities that act as guiding principles in people's lives (Hitlin & Piliavin, 2004; Schwartz, 1992). The theory specifies the relationships among 10 types of values, each of which expresses a distinct motivational goal. Like traits, values too represent aspects of people's personality and have been shown to predict people's attitudes and behaviors (Bardi & Schwartz, 2003; Meglino & Ravlin, 1998), including charismatic leadership (Sosik, 2005). As such, values constitute an aspect of personality that complements traits (Roccas, Sagiv, Schwartz, & Knafo, 2002).

Among the 10 values, stimulation values are defined as representing individuals' preference for excitement and novelty. They "derive from the presumed organismic need for variety and stimulation in order to maintain an optimal level of activation" (Schwartz, 1992, p. 7) and as such pertain directly to the BAS. Indeed, several researchers have linked novelty seeking, a defining characteristic of stimulation values, with the

BAS (e.g., Carver & White, 1994; Cloninger, 1987). Correspondingly, stimulation is both conceptually and empirically related to extraversion and openness to experience (Haslam, Whelan, & Bastian, 2009). As such, all three dispositions (i.e., extraversion, openness and stimulation values) reflect aspects of engagement, and thus, they each represent a chronic activation of the BAS.

As we explained above, individuals' BAS should become deactivated in the presence of conditions that require vigilance. Through the activation of the BIS, such conditions will override these individuals' approach-related dispositional tendencies, thus diminishing the expression of approach related behaviors. Put differently, relationships of these dispositions with behavior (e.g., charismatic leadership behaviors) should be weaker under conditions that require vigilance, such as when situational stress is high.

Situational stress involves conditions in which people are unsure about whether their abilities and resources meet their demands and responsibilities (Cohen, Kessler, & Gordon, 1995). In the work context, several researchers elaborate on the noxious conditions that typically characterize stressful work situations, such as high time pressure, work overload, and aversive working conditions, such as noise (Sonnetag & Frese, 2013).<sup>1</sup> Therefore, with respect to the prediction of charismatic leadership behaviors, RST suggests that relationships between chronic approach-related dispositions and charisma will be weaker when situational stress is high. We expect this pattern of effects for the three representations of a chronic approach orientation discussed above: extraversion, openness to experience, and stimulation values. We therefore hypothesize:

*Hypothesis 1:* Stress will moderate the positive relationship between extraversion and leaders' charismatic behaviors, such that under low-stress conditions the relationship will be stronger, as compared with this relationship under high-stress conditions.

*Hypothesis 2:* Stress will moderate the positive relationship between openness to experience and leaders' charismatic behaviors, such that under low-stress conditions the

---

<sup>1</sup>Lazarus and Folkman (1984) distinguish between two forms of stress appraisals: threat and challenge. Whereas each appraisal has been shown to yield different styles of coping and different outcomes, both involve an increase in the individual's vigilance (e.g., Folkman, 1984). Furthermore, appraisal types are not mutually exclusive, and in most situations individuals will make both types of appraisals to a given stressor (Folkman, 1984; Folkman & Lazarus, 1985). Thus, given RST's implications, we would expect the diminishing expression of approach related behaviors across a broad variety of stressful situations.

relationship will be stronger, as compared with this relationship under high-stress conditions.

*Hypothesis 3:* Stress will moderate the positive relationship between stimulation values and leaders' charismatic behaviors, such that under low-stress conditions the relationship will be stronger, as compared with this relationship under high-stress conditions.

### *The Present Research*

To test our conceptual framework we conducted two studies. Study 1 was a laboratory experiment, with multisource data, in which we manipulated situational stress and tested the effects of the first two approach-related dispositions (extraversion and openness) on leaders' charisma across low and high stress. We then conducted Study 2, with multisource field data of senior executives, in which we tested the moderating effect of situational stress on the relationship between stimulation values and charismatic leadership.

#### *Study 1*

##### *Method*

*Participants and procedure.* Seven hundred and sixty-seven undergraduates participated in this study, of which we obtained 721 usable responses. Students were recruited for the experiment and were paid an equivalent of approximately \$20 for their participation. Sixty-nine percent of participants were female, and the mean age was 23.48 ( $SD = 2.40$ ).

The task we used was an elaboration of the "desert survival situation" (Lafferty & Pond, 1974), which has been used extensively to examine leadership emergence and behaviors in experimental settings (e.g., Haslam et al., 1998; Hoyt, Murphy, Halverson, & Watson, 2003; Riggio, Riggio, Salinas, & Cole, 2003) and has also been used to manipulate stress in a leadership-oriented task (Halverson et al., 2004). Participants are asked to individually rank order 20 items (e.g., water, compass) with respect to their value for survival. They are then given 40 minutes to arrive at a group solution. The entire exercise lasts approximately an hour.

The experimental procedure involved two stages. In Stage 1, students completed a personality questionnaire. In Stage 2, 2–4 weeks following the completion of Stage 1, students were randomly assigned to three- or four-person groups. This formed 201 groups, which we randomly assigned



to the high- and low-stress conditions, with a member in each group being randomly assigned to the role of leader. The experimenter then explicitly stated that leaders are responsible for their groups' solutions. To increase engagement, participants were informed that a monetary prize of \$250 will be awarded to the top two performing groups.

To manipulate stress we incorporated a number of procedures used in previous experimental work on stress, specifically designed to create information and task overload (Braunstein-Bercovitz, Dimentman-Ashkenazi, & Lubow, 2001; Chajut & Algom, 2003; Driskell, Salas, & Johnston, 1999). We combined four techniques for creating stress: First, in the high stress condition, 10 minutes into the exercise, participants were provided with a list of five additional items that were salvaged from the plane crash, which they needed to incorporate into their ranking solution. Second, participants were told that they need to complete the task 10 minutes before the time initially allotted. Third, a clock was placed in the room where the high-stress groups participated. Finally, based on the notion of auditory distraction as a source of stress (Driskell et al., 1999), loud construction noise was introduced during the high-stress group activity.

All of these procedures have been shown to effectively increase levels of stress in previous studies. To further enhance the differences in stress between the high- and low-stress conditions, the high-stress groups performed their task in a bomb shelter, whereas low-stress groups were placed in a small departmental library. In line with the conservation of resources (Hobfoll & Freedy, 1993) and terror management (Greenberg et al., 1990) theories, the threat associated with the bomb shelter should further drain the cognitive resources that are available to the individual, in comparison to those who participated in the library, and thus creates further overload (Arndt, Greenberg, Pyszczynski, & Solomon, 1997; Hobfoll, 2002). Together, these manipulations involve both hindrance stressors—having to do with excessive or undesirable job demands or work circumstances—and challenge stressors—involving challenging job demands (e.g., Cavanaugh, Boswell, Roehling, & Boudreau, 2000; LePine, Podsakoff, & LePine, 2005).

At the end of the exercise, students filled out a postexercise questionnaire, were debriefed, and were thanked for their participation.

*Measures.* Extraversion and openness to experience were measured with 72 items (36 each) from the International Personality Item Pool NEO scale (Goldberg, 1999). The measure is used extensively for measuring the Big Five (e.g., Ashton, Lee, & Goldberg, 2004; Roberts, Chernyshenko, Stark, & Goldberg, 2005). Respondents are asked to rate the extent to which they agree or disagree with a series of statements about themselves, on a scale ranging from 1 = *entirely disagree* to 7 = *entirely agree*.

Reliabilities (Cronbach's alpha) in this study for extraversion and openness to experience were .89 and .84, respectively.

Charismatic leadership behaviors were assessed with 15 items from the Conger and Kanungo (1998) scale of charismatic leadership. Given our focus on charismatic *behaviors*, we focused on items that directly and explicitly address actions that have been undertaken by the leader. Furthermore, a small number of items that were not appropriate for a laboratory setting were removed, and a few others were slightly modified to fit the nonwork setting of the study. This left us with 15 items (see the Appendix). Participants were asked to rate the degree to which they agreed that their leader demonstrated the behaviors described in the scale items on a scale ranging from 1 = *strongly disagree* to 7 = *strongly agree*. The reliability of the scale in this study was  $\alpha = .83$ .

To test the effectiveness of our experimental manipulations, we asked participants in the postexperiment questionnaires to rate the degree of stress they experienced during the exercise using an eight-item version of a perceived stress scale (Drach-Zahavy and Erez, 2002). Response options ranged from 1 = *not at all* to 7 = *very much*. A sample item from this scale is "To what extent did you experience work overload while performing the task?" The reliability of the scale was  $\alpha = .90$ .

Given extensive research linking individual differences in both age and cognitive ability to leadership concepts (e.g., Gilbert, Collins, & Brenner, 1990; Judge, Colbert, & Ilies, 2004), we wished to include them as controls in our analyses. We therefore used participants' reported age and scores on a standardized test used for university admission (equivalent to SAT scores), which have been shown to constitute a close proxy for general cognitive ability (e.g., Beaujean et al., 2004; Frey & Detterman, 2004).

### *Results and Discussion*

Given that our focus was on group leadership, all of our variables are at the group level. The independent variables consisted of leaders' self-reported personality and the degree of situational stress (high vs. low), and dependent variables consisted of the aggregated leadership ratings provided by group members, excluding leaders' self-ratings. Means, standard deviations, and correlations among study variables are presented in Table 1.

To test whether our experimental manipulation was effective, we compared leaders' ratings of the amount of stress they experienced across the two experimental conditions. As expected, perceived stress was significantly ( $F[1,199] = 59.21, p < .001$ ) higher in the high-stress groups (mean = 3.83) than in the low-stress groups (mean = 2.58).

TABLE 1  
*Means, Standard Deviations, and Correlations Among Study 1 Variables  
 (N = 201)*

Variables	Mean	SD	1	2	3	4	5
1. Age	23.48	2.40					
2. Psychometric test scores	642.34	59.95	.20**				
3. Stress (0 = low, 1 = high)	.50	.50	-.00	-.10			
4. Extraversion	4.63	.72	-.16*	-.04	-.02		
5. Openness to experience	4.82	.53	.02	.09	.05	.32**	
6. Mean charisma ratings	4.08	.50	.17*	.34**	-.13	.17*	.09

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

TABLE 2  
*Interaction Analysis for Extraversion and Stress Predicting Charismatic  
 Leadership (Study 1, N = 201)*

Variables	Model 1		Model 2	
	$\beta$	Std. err	$\beta$	Std. err
Age	.13	.02	.15*	.02
Cognitive ability	.30**	.00	.31**	.00
Extraversion	.18*	.03	.32**	.05
Stress (0 = low, 1 = high)	-.11	.07	-.12	.07
Extraversion $\times$ stress			-.20*	.07
Total $R^2$		.16		.18

Note.  $\beta$  = beta; Std. err = standard error.

\*  $p \leq .05$ . \*\*  $p < .01$ .

Before testing our hypotheses we aggregated followers' ratings of their leaders' charismatic leadership behaviors. We calculated the ICC(1) and ICC(2) (Bliese, 2000) and the  $r_{wgs}$  (James, Demaree, & Wolf, 1993) for the charisma scale. The ICC(1) was .20, and the ICC(2) was .40. The mean  $r_{wg}$  was .94, with less than 2% lower than the required .7 threshold. Both the ICC(1) and  $r_{wgs}$  justify the aggregation of the leadership ratings to the group level (Bliese, 2000; James et al., 1993). Although the ICC(2) is lower than the .7 level, this is not surprising given the relatively small number of raters in each group (the mean number of raters, excluding the leaders themselves, was 2.59; Klein & Kozlowski, 2000).

*Hypothesis tests.* To test Hypotheses 1 and 2, we examined the interaction effects of each trait with stress for predicting charismatic leadership using moderated multiple regression (MMR) analyses (Aiken & West, 1991, see Tables 2 and 3). To test Hypothesis 1, we regressed charismatic leadership behaviors on extraversion, the stress condition, and their

TABLE 3  
*Interaction Analysis for Openness to Experience and Stress Predicting Charismatic Leadership (Study 1, N = 201)*

Variables	Model 1		Model 2	
	$\beta$	Std. err	$\beta$	Std. err
Age	.10	.02	.10	.02
Cognitive ability	.30**	.00	.28**	.00
Openness to experience	.08	.04	.29**	.05
Stress (0 = low, 1 = high)	-.12	.07	-.13	.07
Openness $\times$ stress			-.29**	.07
Total $R^2$	.14		.18	

Note.  $\beta$  = beta; Std. err = standard error.

\*\* $p < .01$ .

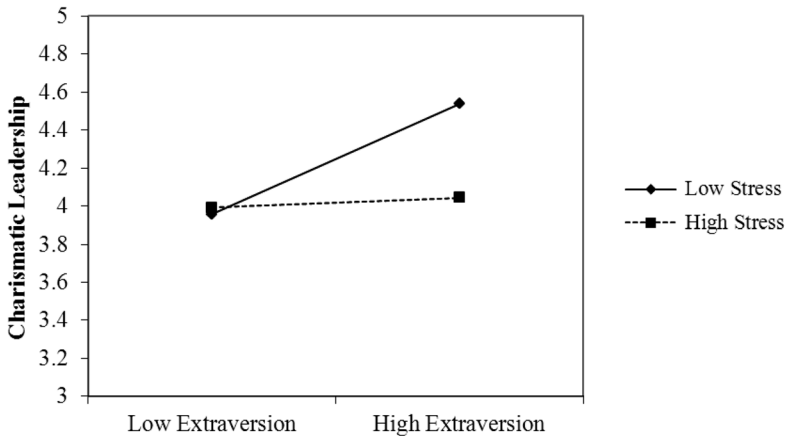


Figure 1: **Interaction Analysis for Extraversion and Stress Predicting Charismatic Leadership (Study 1).**

interaction, controlling for leaders' cognitive ability and age. The interaction term was significant ( $\beta = -.20, p = .05$ ). We then followed the same procedure with openness, to test Hypothesis 2. Here too, the interaction term was significant ( $\beta = -.29, p < .05$ ).

As hypothesized, for both extraversion and openness the relationship with charisma was stronger (and more positive) in the low-stress condition. Graphs (see Figures 1 and 2) of the relationships between traits and charisma across low and high stress, with simple slope analyses, indicated that for both traits the relationship with charisma was significant only in the low stress condition (simple slope for extraversion in low

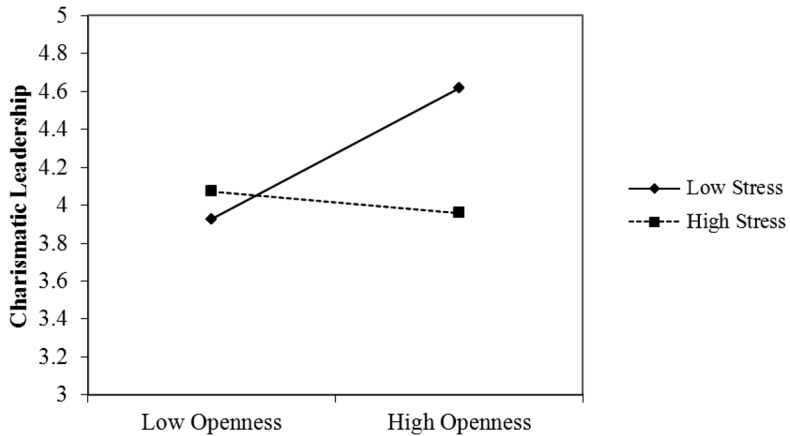


Figure 2: Interaction Analysis for Openness to Experience and Stress Predicting Charismatic Leadership (Study 1).

stress = .16,  $t[180] = 2.9, p < .01$ , simple slope for openness in low stress = .14,  $t[180] = 3.2, p < .01$ ).

To further support the conceptual framework through which we hypothesized about the moderating effect that stress has, specifically on BAS-related dispositions, we also tested the moderating effect of stress for a BIS-related trait. Specifically, we had data on leaders' other Big Five traits, of which neuroticism most strongly represents the BIS (e.g., DeYoung & Gray, 2009; Smits & Boeck, 2006). As we would predict, the interaction effect of stress and neuroticism in predicting charisma was not significant ( $\beta = .056, ns$ ). Consistent with previous research on the link between neuroticism and charisma, the main effect for neuroticism was significant ( $\beta = -.16, p < .05$ ). In other words, whereas the main effects that have been shown between Big Five traits and charisma diminish when stress is high for extraversion and openness, it is maintained for neuroticism.

Our findings therefore support our hypotheses and demonstrate the moderating effect of stress on the relationship between BAS-related traits and charismatic leadership behaviors. Nevertheless, alongside the advantages of using a controlled lab setting, the lab context and student sample restrict the external validity of our findings. It is certainly not the same to take part in a hypothetical exercise, detached from one's real life, and rate an arbitrarily determined temporary leader, as it is to actually be led by a manager in one's workplace. To address this point we conducted Study 2, with executives and their subordinates, in which we tested Hypothesis 3.

*Study 2**Method*

*Participants and procedure.* Data for this study were part of a broader dataset, collected for a large research project, with additional variables and hypotheses not related to our current interests (see Berson, Oreg, & Dvir, 2008, for another article that resulted from these data). The data we used here were collected from 26 publicly traded companies. Of the 256 participants from whom we collected data, 71 were executives in the role of senior vice presidents and the remaining 185 employees were direct reports of these executives (5–9 per company). The average number of employees in the organizations was 390 ( $SD = 450$ ). Executives reported their values, and their subordinates provided charismatic leadership ratings and ratings of the level of stress that organization members experienced. Although it is *leaders'* stress we were interested in, we preferred to collect data on our two predictors (i.e., personality and stress) from different sources, which is why we collected stress assessments from followers. We therefore used the aggregated stress ratings, which provide an assessment of the amount of stress experienced in the organization, as a proxy for the amount of stress the leader experienced. We used the aggregated leadership ratings as the dependent variable in our analyses.

*Measures.* We measured stimulation values using the three stimulation items from Schwartz's personal values scale (Schwartz, 1992). Schwartz's value scales have been used extensively, including in the leadership context (e.g., Oreg & Berson, 2011; Sosik, 2005), and have been shown to be reliable and valid. With respect to each item, respondents are asked to rate the degree to which they view the value represented in the item as a guiding principle in their lives. Response options ranged from  $-1 = \textit{opposite to my values}$  through  $0 = \textit{unimportant to me}$  to  $7 = \textit{of utmost importance to me}$ . Items include values such as daring, a varied life, and an exciting life. To control for individual differences in response style, we adopted Schwartz's (1992) guidelines and ipsatized respondents' stimulation values by subtracting each respondent's average response to all of the value items on the complete values scale from their mean response to stimulation items (see Schwartz, 1992). The alpha coefficient for this scale was .69.

We used the two items from Pillai and Meindl's (1998) measure of crisis (defined as "work situations causing stress and anxiety," p. 653) that explicitly refer to aspects of stress relating to increased workload and time pressure. The items were "To what extent did members of your organization experience time pressure in resolving work situations causing stress and anxiety," and "In what frequency did members of your

TABLE 4  
*Means, Standard Deviations, and Correlations for Study 2 Variables (N = 71)*

Variables	Mean	SD	1	2	3	4	5
1. Executives' age (in years)	46.70	8.02					
2. Executives' job tenure (in years)	4.16	4.28	.32**				
3. Executives' managerial experience (in years)	2.05	.98	.46**	.02			
4. Stimulation values	-.29	1.09	.01	-.18	.22		
5. Stress	3.32	.46	.07	-.32	.02	-.03	
6. Charismatic leadership	2.66	.50	.03	-.07	-.09	.09	-.05

Note. \*\* $p < .01$ .

organization cope with work situations causing stress and anxiety.” Responses to these items ranged from 1 = *to a very little extent/not at all* to 5 = *to a very high extent*. The scale’s Cronbach alpha was .81.

Charismatic behaviors were measured with the 12 items of the three Multifactor Leadership Questionnaire (MLQ; Bass & Avolio, 1997) scales that measure charismatic leadership, comprising charismatic behaviors, charismatic attributions, and inspirational motivation. The measure is considered the most commonly used measure of leader charisma (House & Aditya, 1997). Items consisted of statements about respondents’ supervisor’s behavior, and respondents were asked to report the degree to which they agreed with each statement on a scale ranging from 1 = *not at all* to 5 = *frequently, if not always*. The reliability (alpha) coefficient for the scale in this study was .91.

We controlled for participants’ tenure on the job, their experience as managers, and their age, all of which have been shown to correlate with leadership concepts and are common controls in studies of executives (e.g., Ling, Simsek, Lubatkin, & Veiga, 2008).

*Results and Discussion*

Means, standard deviations, and correlations among the variables in this study are reported in Table 4. To determine whether individuals’ responses justified aggregation to the leader level, we calculated the ICCs (Bliese, 2000) and  $r_{wgS}$  (James, Demaree, & Wolf, 1984, 1993) for both charisma and stress. The ICC(1) values were .24 and .19, and ICC(2) values were .44 and .38 for charisma and stress, respectively. The median  $r_{wg}$  values were .96 and .86 for charisma and stress, respectively. The ICC(1) and  $r_{wg}$  values justify aggregation (Bliese, 2000; James et al., 1984, 1993). As in Study 1, the average number of raters within groups was relatively small (2.53), which could explain the low ICC(2) values.

TABLE 5  
*Moderated Regression Analysis of Stimulation Values and Stress Predicting Charismatic Leadership (Study 2, N = 71)*

Variables	Model 1		Model 2	
	$\beta$	Std. err	$\beta$	Std. err
Executive's age	.15	.01	.23	.01
Executive's job tenure	-.13	.00	-.14	.00
Executive's managerial experience	-.23	.07	-.24	.07
Stimulation values	.06	.07	.21	.07
Stress	-.09	.14	-.17	.14
Stimulation $\times$ stress			-.32**	.12
Total $R^2$	.05		.12	

Note.  $\beta$  = beta; Std. err = standard error.

\*\* $p < .05$ .

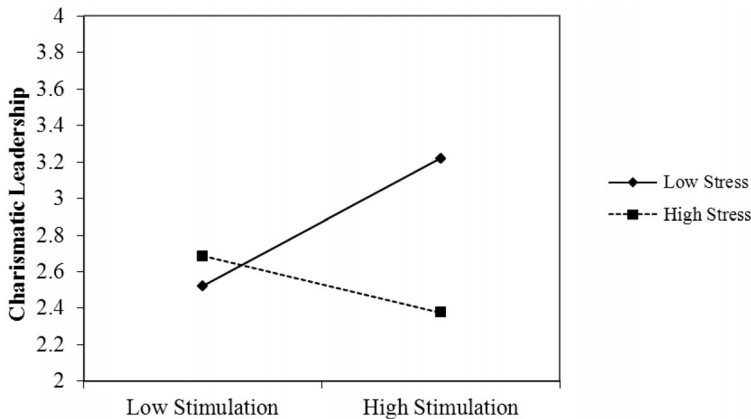


Figure 3: Interaction Analysis for Stimulation Values and Stress Predicting Charismatic Leadership (Study 2).

Next, as in Study 1, we used MMR analyses (Aiken & West, 1991) to test the hypothesized (Hypothesis 3) interaction effect between stimulation values and stress in predicting charismatic leadership while controlling for executives' age, managerial experience, and job tenure. The results of this analysis are presented in Table 5. As expected, stress moderated the relationship between leaders' stimulation values and subordinates' charismatic leadership ratings. Specifically, we found that stimulation had a significant positive effect on charisma only when stress was low (simple slope  $\beta = .35$ ,  $t[59] = 2.1$ ,  $p < .05$ , see Figure 3). The effect of stimulation on charisma in the high-stress condition was negative and not significant.



As in Study 1, we complement these analyses with a similar test of moderation, this time using values that represent the BIS. Specifically, tradition values, which involve conservation and express the motivation to preserve the status quo, nicely represent the BIS. Empirically, it is the only value in Schwartz's (1992) model to show a significant positive correlation with neuroticism (Haslam et al., 2009). As we would predict, the interaction effect of stress and tradition in predicting charisma was not significant ( $\beta = .12, ns$ ).

Our findings thus correspond with our findings from Study 1 and further demonstrate the moderating role of stress in the relationship between approach-related dispositions and charismatic leadership. Namely, the degree to which leaders value excitement, high levels of energy, and new experiences is associated with how charismatic they are perceived to be but only when the degree of stress to which they are exposed is relatively low.

### *General Discussion*

In these studies we demonstrated the moderating effect of situational stress on the relationship between approach-related personality dispositions and charisma. In both a laboratory and field study we found that, when situational stress was high, the relationship between BAS-related dispositions and charismatic leadership behavior was weaker than that found when situational stress was low. Specifically, extraversion, openness to experience, and stimulation values yielded significant positive effects with charisma only when situational stress was low. After establishing this finding for extraversion and openness in the controlled lab setting, in which we could isolate the effect of situational stress, we established it with stimulation values among executives from real-world companies.

By incorporating the concept of situational stress, our purpose was to bring forward a more complex depiction of the role that personality has in explaining charismatic leadership than has been typically considered. Despite the highly acknowledged notion that behavior is the joint outcome of person and situation (Lewin, Heider, & Heider, 1936), person-situation interactions are insufficiently employed in extant research (House et al., 1996; Johns, 2006). This omission is particularly surprising considering that leadership is often defined as involving leader personality in context (House & Aditya, 1997) and considering that there was a time when contingency theories took center stage within the field of leadership (e.g., Fiedler, 1967).

Indeed, only recently have researchers begun to integrate situational (i.e., contingency) and trait approaches to leadership, with very few studies (e.g., DeRue, Nahrgang, Wellman, & Humphrey, 2011; Grant et al., 2011;

Ployhart et al., 2001) to have empirically advanced such integration. In this research we join these few works in demonstrating how the context of workload stress can influence the impact that personality has on behavior in general and on leaders' behavior in particular. Our findings support the notion that relationships between approach-related personality dispositions and charisma will diminish under conditions of high situational stress. Specifically, they demonstrate that when stress involving increased work demands is high, individual differences in leaders' engagement and exploratory tendencies, as represented in extraversion, openness to experience and stimulation values, have little importance in determining the extent to which leaders will be perceived as charismatic. This is in contrast to BIS-related dispositions (i.e., neuroticism and tradition values), for which stress did not moderate the effect. In line with previous research (e.g., Bono & Judge, 2004), we too found that neurotic individuals are less likely to be perceived as charismatic. Yet unlike the hypothesized pattern of relationships for BAS-related dispositions, the negative effect of neuroticism (i.e., chronic BIS) was not mitigated by stress.

Beyond integrating person and situation explanations of charisma, our findings also empirically establish, more broadly, the impact that workload stress has on the behavioral expression of BAS-related dispositions. Corresponding with recent elaborations of Gray's RST (DeYoung, 2010), our findings show that situations that require vigilance, in the form of workload-related stress, may override the influence of approach-related personality dispositions. According to the theory, the vigilance that stress elicits activates the BIS, which in turn deactivates the BAS. An alternative lens through which one could view this effect is that of the trait-activation approach (Tett & Burnett, 2003; Tett & Guterman, 2000). According to trait-activation theory, situations activate the expression of personality dispositions. Accordingly, in this study one could argue that rather than high stress inhibiting the manifestation of individuals' chronic approach orientation, it is low-stress that activates their manifestation. For example, it may be that some of the features of the low-stress situation, such as greater leeway for being creative instead of emphasizing the need to meet tight deadlines (e.g., Talbot, Cooper, & Barrow, 1992), activate dispositions such as openness to experience and thus yield a stronger effect on charismatic leadership in comparison to high-stress situations. Future research should be conducted to determine the precise mechanisms that underlie the effects we established here.

The moderating effect of stress on openness to experience offers one possible explanation for the inconsistent effect of openness in Bono and Judge's (2004) meta-analysis, which included several studies in which openness did not predict charisma. It may be that the context in which those studies were conducted involved higher levels of situational stress.

Even with respect to extraversion, which has been shown to be the most consistent predictor of charismatic leadership from among the Big Five, there has still been variance in its effect, with some studies yielding nonsignificant relationships (e.g., Church & Waclawski, 1998). As in the case of openness, it is possible that, in line with our findings, the contexts in which the effects of extraversion were weaker were characterized by increased work demands.

As noted in our Method section in Study 1, our experimental manipulation involved stressors that could be classified as both hindrance and challenge stressors. Accordingly, both threat and challenge stress appraisals (Lazarus & Folkman, 1984) were likely evoked among participants. As noted above, RST implies that both types of stress appraisal should ultimately lead to the deactivation of the BAS because both kinds of appraisal increase individuals' vigilance. Nevertheless, one could imagine that the degree of vigilance and arousal evoked in response to a threat appraisal would be more substantial than those evoked in response to a challenge appraisal. Future research could compare the effects that different types of stressors, and accordingly different types of appraisals, have on the relationship between individuals' personality and behavior in general and on leaders' personality and charismatic behaviors in particular.

An interesting pattern in our results was the negative relationship that openness and stimulation had with charisma in the high stress condition. Although these relationships were not statistically significant, the fact that the same pattern emerged in both studies suggests that it may nevertheless reflect a "true" trend. The negative relationship suggests that when workload is particularly high, individuals who emphasize novelty (an aspect represented both in openness to experience and stimulation values) are seen as less charismatic than their counterparts. It may be that when workloads and time pressure are high, employees look to their leaders for practical, even if dull and routine, solutions to the immediate problems at hand rather than new, creative, and future-oriented ideas. This resonates with Fiedler's (1995) cognitive resource theory, according to which the relationship between leaders' intellect and performance is negative when job stress is high. Under these conditions, followers require their leaders to be more directive and to rely on their experience rather than their intelligence.

Both this finding and more generally the dampening effect that stress has on the role of approach-related dispositions in explaining charisma are interesting given that it is in stressful conditions under which charismatic leadership is said to be most important. Although there have been some findings to the contrary (e.g., Pillai & Meindl, 1998), both in Weber's original formulations of charisma, as well as in several empirical studies, stressful conditions (i.e., crises) are said to be a prerequisite for

charismatic leadership to emerge (e.g., Halverson et al., 2004; House, 1991; Pillai, 1996). Our findings suggest that when charisma is most influential, the expectation that some individuals will stand out in their charisma because of their high levels of personal engagement will not be met. We should emphasize, however, that our findings do not suggest that stress diminishes charisma, individual differences in charisma, or the relationship between charisma and organizational outcomes. Rather, they suggest that when stress is high, individual differences in charisma are mainly attributed to factors other than approach-related dispositions. Indeed, in the supplemental analysis we conducted in Study 1, neuroticism maintained its significant negative effect on charisma across stress conditions. In addition, such factors could involve a variety of situational variables that have been shown to predict charisma, such as the organizational and work-group culture and structure (e.g., Pawar & Eastman, 1997; Pillai & Meindl, 1998), as well as their network position within the organization (e.g., Balkundi, Kilduff, & Harrison, 2011).

Beyond the impact of stress, future studies should examine other contextual moderators of the personality–charisma relationship. For example, organizational culture and structure, both of which have been conceptually linked with charisma (Pawar & Eastman, 1997), may also moderate the relationship between personality and charisma. An individual who is charismatic in one organizational setting may not necessarily be seen as charismatic in another. In addition, in line with recent studies on follower personality as a moderator of the leadership–performance relationship (e.g., Grant et al., 2011), followers’ personality could just as well prove to be a meaningful moderator of personality–charisma relationships. An even more elaborate framework would include both the organizational context and employees’ characteristics as moderators. This would correspond with Klein and House’s argument that “Charisma resides not in a leader, nor in a follower, but in the relationship between a leader who has charismatic qualities and a follower who is open to charisma, within a charisma-conducive environment” (Klein & House, 1995, p. 183).

### *Limitations*

Each of our two studies suffers from certain limitations. First, as noted in our discussion of Study 1, the task participants performed and the sterile lab setting restrict the external validity of the findings. Similarly, the student sample does not represent the working population, to which we would like to generalize our findings. In addition, although our manipulation check indicated that we successfully manipulated stress, it is possible that other factors beyond stress, such as groups’ performance, were influenced by our manipulation. Contrarily, the fact that stress in Study 2 was

measured rather than manipulated restricts our confidence in the causal influence we would like to establish for stress. Furthermore, data for both charismatic leadership and perceived stress in Study 2 were provided by the same participants (single-source data).

At the same time, each study compensates for most of the limitations of its counterpart. The fact that our hypotheses were supported in both the controlled lab setting and real world organizations, with independent and diverse samples, and different measures of personality and of charismatic leadership, increases our confidence in the overall validity of our findings. With respect to leadership and stress data being collected from the same source, a single-source/mono-method bias is not likely to be the cause of our findings, given that the effect sought was an interaction effect (Siemsen, Roth, & Oliveira, 2010). As Siemsen et al. (2010) indicated, interaction effects cannot be artifacts of common-method variance, and if anything, the common-method actually deflates the observed interaction effect, thus making our finding a conservative assessment of the actual moderating effect of stress. We nevertheless acknowledge that in both studies our assessment of leaders' stress was not independent of followers' stress (in Study 1 leaders and followers were subjected to the same conditions and in Study 2 assessments of stress were provided by the followers). Additional research is therefore required to determine the role of followers' stress and its possible impact on the relationship between leaders' personality and charismatic behavior.

Beyond these points, although our findings in Study 2 are consistent with those of Study 1, the fact that we did not use the same personality constructs in both studies makes it harder to compare the findings of each. Nevertheless, the three dispositions we assessed constitute alternative representations of the broader concept of a chronic BAS orientation. Accordingly, the overlap among concepts is substantial, in particular with respect to how they each represent approach behaviors in the form of exploration. The replicative aspects in Study 2 should therefore be taken as evidence for the robustness of our findings with respect to approach-related dispositions in general rather than for the specific traits of extraversion and openness to experience.

In addition, despite the support we obtained for our theory, there may be other processes that could explain the moderating effect of stress that we obtained. For example, one could argue that rather than stress inhibiting leaders' approach-oriented behaviors, it may inhibit followers' perceptions of these behaviors, as would be advocated by a social information processing perspective (e.g., Lord & Maher, 1993; Offermann, Kennedy, & Wirtz, 1994). Such a limitation pertains to most extant research on leaders' behaviors, given that the most prevalent assessment of these behaviors consists of asking followers about their perceptions

of their leaders' behaviors. To rule out such an alternative explanation, researchers could use direct observations of actual leader behaviors when testing such effects.

### *Practical Implications*

Our findings have a number of practical implications for organizations and their members. Most broadly, acknowledging that individuals' approach-related tendencies are attenuated in times of stress can relieve some of the confusion and possible frustration that people experience when their coworkers do not behave as they expect them to do. From the organization's perspective, employees are often selected into organizations based on their personalities. For many jobs and organizations, the characteristics sought involve approach-related tendencies with the aim of yielding behaviors such as creativity and innovation. As a start, our findings help organizations set expectations for such behaviors when the setting is stressful, increasing awareness to the fact that some selection practices may be less valid when predicting behavior in times of stress. Our findings further suggest that if organizations are to capitalize on the approach-related attributes of their employees, they should consider the workload that is administered, beyond other implications that a given workload may have.

Also with respect to selection, our findings suggest that greater specificity is required in designing selection tests to account for the impact of context. This resonates with arguments in the broader organizational context that the performance-related impact of personality in organizations' selection procedures is frequently contingent on other variables that are part of the organizational and job context (Morgeson et al., 2007). Specifically, recent evidence shows that organizations can improve the validity of personality selection tests if they take into consideration contextual factors, for example by designing items to be work specific (Shaffer & Postlethwaite, 2012). Our findings suggest that among the contextual factors to be accounted for in selection items, organizations should consider incorporating the context of stress (or lack thereof) when aiming to select approach-related attributes. To increase the validity of such tests, items may need to explicitly refer to a routine, nonstressful, work environment. Whether or not this indeed increases the validity of personality tests is of course an empirical question, yet to be tested.

Our findings also have implications for leaders. Leaders should learn to distinguish between the contexts in which their personality characteristics are more or less effective for inspiring followers. This ability to distinguish between environments is part of the more general requirement from

charismatic leaders to “be capable of making realistic assessments of the environment” (Conger & Kanungo, 1998, p. 122). As such, they should reconsider the route they take to motivating followers during periods of increased workload. Specifically, approach-oriented leaders should acknowledge that what comes naturally to them when motivating followers under regular conditions may not prove effective in times of stress. They should therefore consider in these times other, perhaps more mechanistic and directive (e.g., Fiedler, 1995), means of motivating followers. Accordingly, mentoring and leadership development programs should highlight leaders’ awareness of their environment, with special attention to the amount of vigilance it requires and the implications of such vigilance on their actions vis-à-vis their followers.

## REFERENCES

- Aiken LS, West SG. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Arndt J, Greenberg J, Pyszczynski T, Solomon S. (1997). Subliminal exposure to death-related stimuli increases defense of the cultural worldview. *Psychological Science*, 8, 379–385.
- Ashton MC, Lee K, Goldberg LR. (2004). A hierarchical analysis of 1,710 English personality-descriptive adjectives. *Journal of Personality and Social Psychology*, 87, 707–721.
- Balkundi P, Kilduff M, Harrison DA. (2011). Centrality and charisma: Comparing how leader networks and attributions affect team performance. *Journal of Applied Psychology*, 96, 1209–1022.
- Bardi A, Schwartz SH. (2003). Values and behavior: Strength and structure of relations. *Personality and Social Psychology Bulletin*, 29, 1207–1220.
- Barrick MR, Mount MK. (1991). The Big Five personality dimensions and job performance: A meta-analysis. *PERSONNEL PSYCHOLOGY*, 44, 1–26.
- Bass BM. (1985). *Leadership and performance beyond expectations*. New York, NY/ London: Free Press/Collier Macmillan.
- Bass BM, Avolio BJ. (1997). *Full range leadership development: Manual for the multifactor leadership questionnaire*. Palo Alto, CA: Mindgarden.
- Beaujean AA, Firmin MW, Knoop AJ, Michonski JD, Berry TP, Lowrie RE. (2004). Validation of the Frey and Detterman (2004) IQ prediction equations using the Reynolds Intellectual Assessment Scales. *Personality and Individual Differences*, 41, 353–357.
- Berkman ET, Lieberman MD, Gable SL. (2009). BIS, BAS, and response conflict: Testing predictions of the revised reinforcement sensitivity theory. *Personality and Individual Differences*, 46, 586–591.
- Berson Y, Oreg S, Dvir T. (2008). CEO values, organizational culture and firm outcomes. *Journal of Organizational Behavior*, 29, 615–633.
- Bliese PD. (2000). Within-group agreement, non-independence, and reliability: Implications for data aggregation and analysis. In Klein KJ, Kozlowski SWJ (Eds.), *Multilevel theory, research and methods in organizations: Foundations, extensions and new directions* (pp. 349–381). San-Francisco, CA: Jossey-Bass.

- Bono JE, Judge TA. (2004). Personality and transformational and transactional leadership: A meta-analysis. *Journal of Applied Psychology, 89*, 901–910.
- Braunstein-Bercovitz H, Dimentman-Ashkenazi I, Lubow RE. (2001). Stress affects the selection of relevant from irrelevant stimuli. *Emotion, 1*, 182–192.
- Carver CS, White TL. (1994). Behavioral inhibition, behavioral activation, and affective responses to impending reward and punishment: The BIS/BAS scales. *Journal of Personality and Social Psychology, 67*, 319–333.
- Cavanaugh MA, Boswell WR, Roehling MV, Boudreau JW. (2000). An empirical examination of self-reported work stress among US managers. *Journal of Applied Psychology, 85*, 65–74.
- Chajut E, Algom D. (2003). Selective attention improves under stress: Implications for theories of social cognition. *Journal of Personality and Social Psychology, 85*, 231–248.
- Church AH, Waclawski J. (1998). The relationship between individual personality orientation and executive leadership behaviour. *Journal of Occupational and Organizational Psychology, 71*, 99–125.
- Cloninger CR. (1987). A systematic method for clinical description and classification of personality variants: A proposal. *Archives of General Psychiatry, 44*, 573–588.
- Cohen S, Kessler RC, Gordon LU. (1995). *Measuring stress: A guide for health and social scientists*. New York, NY: Oxford University Press.
- Conger JA, Kanungo RN. (1998). *Charismatic leadership in organizations*. Thousand Oaks, CA: Sage.
- Costa PT, McCrae RR. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five Factor Inventory (NEO-FFI) professional manual*. Odessa, FL: Psychological Assessment Resources.
- De Hoogh AHB, Den Hartog DN, Koopman PL. (2005). Linking the Big Five-factors of personality to charismatic and transactional leadership: Perceived dynamic work environment as a moderator. *Journal of Organizational Behavior, 26*, 839–865.
- DeRue DS, Nahrgang JD, Wellman N, Humphrey SE. (2011). Traits and behavioral theories of leadership: An integration and meta-analytic test of their relative validity. *PERSONNEL PSYCHOLOGY, 64*, 7–52.
- DeYoung CG. (2010). Mapping personality traits onto brain systems: BIS, BAS, FFFS and beyond. *European Journal of Personality, 24*, 404–407.
- DeYoung CG, Cicchetti D, Rogosch FA, Gray JR, Eastman M, Grigorenko EL. (2011). Sources of cognitive exploration: Genetic variation in the prefrontal dopamine system predicts openness/intellect. *Journal of Research in Personality, 45*, 364–371.
- DeYoung CG, Gray JA. (2009). Personality neuroscience: Explaining individual differences in affect, behavior, and cognition. In Corr PJ, Matthews G (Eds.), *The Cambridge handbook of personality psychology* (pp. 323–346). New York, NY: Cambridge University Press.
- Digman JM. (1990). Personality structure: Emergence of the five-factor model. *Annual Review of Psychology, 41*, 417–440.
- Digman JM. (1997). Higher-order factors of the Big Five. *Journal of Personality and Social Psychology, 73*, 1246–1256.
- Drach-Zahavy A, Erez M. (2002). Challenge versus threat effects on the goal-performance relationship. *Organizational Behavior and Human Decision Processes, 88*, 667–682.
- Driskell JE, Salas E, Johnston J. (1999). Does stress lead to a loss of team perspective. *Group Dynamics: Theory, Research, and Practice, 3*, 291–302.
- Dvir T, Eden D, Avolio BJ, Shamir B. (2002). Impact of transformational leadership on follower development and performance: A field experiment. *Academy of Management Journal, 45*, 735–744.



- Endler NS. (1973). The person versus the situation: A pseudo issue? A response to Alker. *Journal of Personality*, *41*, 287–303.
- Erez A, Lepine JA, Elms H. (2002). Effects of rotated leadership and peer evaluation on the functioning and effectiveness of self-managed teams: A quasi-experiment. *PERSONNEL PSYCHOLOGY*, *55*, 929–948.
- Fiedler FE. (1967). *A theory of leadership effectiveness*. New York, NY: McGraw-Hill.
- Fiedler FE. (1995). Cognitive resources and leadership performance. *Applied Psychology*, *44*, 5–28.
- Folkman S. (1984). Personal control and stress and coping processes: A theoretical analysis. *Journal of Personality and Social Psychology*, *46*, 839–852.
- Folkman S, Lazarus RS. (1985). If it changes it must be a process: Study of emotion and coping during three stages of a college examination. *Journal of Personality and Social Psychology*, *48*, 150–170.
- Frey MC, Detterman DK. (2004). Scholastic assessment or g? The relationship between the scholastic assessment test and general cognitive ability. *Psychological Science*, *15*, 373–378.
- Gilbert GR, Collins RW, Brenner R. (1990). Age and leadership effectiveness: From the perceptions of the follower. *Human Resource Management*, *29*, 187–196.
- Goldberg LR. (1999). A broad-bandwidth, public domain, personality inventory measuring the lower-level facets of several five-factor models. In Mervielde I, Deary I, De Fruyt F, Ostendorf F (Eds.), *Personality psychology in Europe* (Vol. 7, pp. 7–28). Tilburg, The Netherlands: Tilburg University Press.
- Grant AM, Gino F, Hofmann DA. (2011). Reversing the extraverted leadership advantage: The role of employee proactivity. *Academy of Management Journal*, *54*, 528–550.
- Gray JA. (1982). *The neuropsychology of anxiety: An enquiry into the functions of the septo-hippocampal system*. Oxford, England: Oxford University Press.
- Gray JA, McNaughton N. (2000). *The neuropsychology of anxiety: An enquiry into the functions of the septo-hippocampal system* (2nd ed.). New York, NY: Oxford University Press.
- Greenberg J, Pyszczynski T, Solomon S, Rosenblatt A, Veeder M, Kirkland S, Lyon D. (1990). Evidence for terror management theory II: The effects of mortality salience on reactions to those who threaten or bolster the cultural worldview. *Journal of Personality and Social Psychology*, *58*, 308–318.
- Halverson SK, Murphy SE, Riggio RE. (2004). Charismatic leadership in crisis situations: A laboratory investigation of stress and crisis. *Small Group Research*, *35*, 495–514.
- Haslam A, McGarty C, Brown PM, Eggins RA, Morrison BE, Reynolds KJ. (1998). Inspecting the emperor's clothes: Evidence that random selection of leaders can enhance group performance. *Group Dynamics*, *2*, 168–184.
- Haslam N, Whelan J, Bastian B. (2009). Big Five traits mediate associations between values and subjective well-being. *Personality and Individual Differences*, *46*, 40–42.
- Hirsh JB, DeYoung CG, Peterson JB. (2009). Metatraits of the Big Five differentially predict engagement and restraint of behavior. *Journal of Personality*, *77*, 1085–1102.
- Hitlin S, Piliavin JA. (2004). Values: Reviving a dormant concept. *Annual Review of Sociology*, *30*, 359–393.
- Hobfoll SE. (2002). Social and psychological resources and adaptation. *Review of General Psychology*, *6*, 307–324.
- Hobfoll SE, Freedy J. (1993). Conservation of resources: A general stress theory applied to burnout. In Schaufeli WB, Maslach C, & Marek T (Eds.), *Professional burnout* (pp. 115–129). Washington, DC: Taylor & Francis.
- House RJ. (1977). A 1976 theory of charismatic leadership. In Hunt JG, Larson LL (Eds.), *Leadership: The cutting edge* (pp. 189–207). Carbondale, IL: Southern Illinois University Press.

- House RJ. (1991). The distribution and exercise of power in complex organizations: A meso theory. *Leadership Quarterly*, 2, 23–58.
- House RJ, Aditya RN. (1997). The social scientific study of leadership: Quo vadis? *Journal of Management*, 23, 409–473.
- House RJ, Shane SA, Herold DM. (1996). Rumors of the death of dispositional research are vastly exaggerated. *Academy of Management Review*, 21, 203–224.
- Hoyt CL, Murphy SE, Halverson SK, Watson CB. (2003). Group leadership: Efficacy and effectiveness. *Group Dynamics*, 7, 259–274.
- Jackson SE, Dutton JE. (1988). Discerning threats and opportunities. *Administrative Science Quarterly*, 370–387.
- James LR, Demaree RG, Wolf G. (1984). Estimating within-group interrater reliability with and without response bias. *Journal of Applied Psychology*, 69, 85–98.
- James LR, Demaree RG, Wolf G. (1993).  $R_{wg}$ : An assessment of within-group interrater agreement. *Journal of Applied Psychology*, 78, 306–309.
- Johns G. (2006). The essential impact of context on organizational behavior. *The Academy of Management Review*, 31, 386–408.
- Judge TA, Colbert AE, Ilies R. (2004). Intelligence and leadership: A quantitative review and test of theoretical propositions. *Journal of Applied Psychology*, 89, 542–552.
- Keiser HN, Ross SR. (2011). Carver and Whites' BIS/FFFS/BAS scales and domains and facets of the five factor model of personality. *Personality and Individual Differences*, 51, 39–44.
- Klein KJ, House RJ. (1995). On fire: Charismatic leadership and levels of analysis. *The Leadership Quarterly*, 6, 183–198.
- Klein KJ, Kozlowski SWJ. (2000). From micro to meso: Critical steps in conceptualizing and conducting multilevel research. *Organizational Research Methods*, 3, 211–236.
- Lafferty JC, Pond AW. (1974). *The dessert survival situation*. Plymouth, MI: Human Synergetics.
- Lazarus RS, Folkman S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer.
- LePine JA, Podsakoff NP, LePine MA (2005). A meta-analytic test of the challenge stressor–hindrance stressor framework: An explanation for inconsistent relationships among stressors and performance. *Academy of Management Journal*, 48, 764–775.
- Lewin K, Heider FT, Heider GM. (1936). *Principles of topological psychology*. New York, NY: McGraw-Hill.
- Ling Y, Simsek Z, Lubatkin MH, Veiga JF. (2008). The impact of transformational CEOs on the performance of small-to medium-sized firms: Does organizational context matter? *Journal of Applied Psychology*, 93, 923–933.
- Lord RG, Maher KJ. (1993). *Leadership and information processing: Linking perceptions and performance*. Boston, MA: Unwin Hyman.
- McAdams D, Olson B. (2010). Personality development: Continuity and change over the life course. *Annual Review of Psychology*, 61, 517–542.
- McCrae RR, Costa PT Jr. (1999). A five-factor theory of personality. In Pervin LA, John OP. (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 139–153). New York, NY: Guilford.
- Meglino BM, Ravlin EC. (1998). Individual values in organizations: Concepts, controversies, and research. *Journal of Management*, 24, 351–389.
- Mischel W. (1977). The interaction of person and situation. In Magnusson E, Endler NS (Eds.), *Personality at the crossroads* (pp. 333–352). Hillsdale, NJ: Erlbaum.
- Mischel W, Shoda Y. (1999). Integrating dispositions and processing dynamics within a unified theory of personality: The cognitive-affective personality system. In Pervin LA, John OP (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 197–218). New York, NY: Guilford.

- Mitchell JT, Kimbrel NA, Hundt NE, Cobb AR, Nelson-Gray RO, Lootens C M. (2007). An analysis of reinforcement sensitivity theory and the five-factor model. *European Journal of Personality*, 21, 869–887.
- Morgeson FP, Campion MA, Dipboye RL, Hollenbeck JR, Murphy K, Schmitt N. (2007). Reconsidering the use of personality tests in personnel selection contexts. *PERSONNEL PSYCHOLOGY*, 60, 683–729.
- Ng KY, Ang S, Chan KY. (2008). Personality and leader effectiveness: A moderated mediation model of leadership self-efficacy, job demands, and job autonomy. *Journal of Applied Psychology*, 93, 733–743.
- Offermann LR, Kennedy JK, Wirtz PW. (1994). Implicit leadership theories: Content, structure, and generalizability. *The Leadership Quarterly*, 5, 43–58.
- Olson KR. (2005). Engagement and self-control: Superordinate dimensions of Big Five traits. *Personality and Individual Differences*, 38, 1689–1700.
- Oreg S, Berson Y. (2011). Leadership and employees' reactions to change: The role of leaders' personal attributes and transformational leadership style. *PERSONNEL PSYCHOLOGY*, 64, 627–659.
- Oswald FL, Hough LM. (2011). Personality and its assessment in organizations: Theoretical and empirical developments. In Zedeck S (Ed.), *APA handbook of industrial and organizational psychology* (Vol. 2, pp. 153–184). Washington, DC: APA.
- Pawar BS, Eastman KK. (1997). The nature and implications of contextual influences on transformational leadership: A conceptual examination. *Academy of Management Review*, 22, 80–109.
- Pillai R. (1996). Crisis and the emergence of charismatic leadership in groups: An experimental investigation. *Journal of Applied Social Psychology*, 26, 543–562.
- Pillai R, Meindl JR. (1998). Context and charisma: A “meso” level examination of the relationship of organic structure, collectivism, and crisis to charismatic leadership. *Journal of Management*, 24, 643–671.
- Ployhart RE, Lim BC, Chan KY. (2001). Exploring relations between typical and maximum performance ratings and the five factor model of personality. *PERSONNEL PSYCHOLOGY*, 54, 809–843.
- Resick CJ, Whitman DS, Weingarden SM, Hiller NJ. (2009). The bright-side and the dark-side of CEO personality: Examining core self-evaluations, narcissism, transformational leadership, and strategic influence. *Journal of Applied Psychology*, 94, 1365–1381.
- Riggio RE, Riggio HR, Salinas C, Cole EJ. (2003). The role of social and emotional communication skills in leader emergence and effectiveness. *Group Dynamics*, 7, 83–103.
- Roberts BW, Chernyshenko OS, Stark S, Goldberg LR. (2005). The structure of conscientiousness: An empirical investigation based on seven major personality questionnaires. *PERSONNEL PSYCHOLOGY*, 58, 103–139.
- Roccas S, Sagiv L, Schwartz SH, Knafo A. (2002). The Big Five personality factors and personal values. *Personality and Social Psychology Bulletin*, 28, 789–801.
- Rokeach M. (1973). *The nature of human values*. New York, NY: Free Press.
- Schwartz S. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In Zanna MP (Ed.), *Advances in experimental social psychology* (Vol. 25, pp. 1–65). San Diego, CA: Academic Press.
- Shaffer JA, Postlethwaite BE. (2012). A matter of context: A meta-analytic investigation of the relative validity of contextualized and noncontextualized personality measures. *PERSONNEL PSYCHOLOGY*, 65, 445–493.

- Shamir B, House RJ, Arthur MB. (1993). The motivational effects of charismatic leadership: A self-concept based theory. *Organization Science*, 4, 577–594.
- Siemsen E, Roth A, Oliveira P. (2010). Common method bias in regression models with linear, quadratic, and interaction effects. *Organizational Research Methods*, 13, 456–476.
- Smits DJ, Boeck P. (2006). From BIS/BAS to the big five. *European Journal of Personality*, 20, 255–270.
- Sonnentag S, Frese M. (2013). Stress in organizations. In Schmidt NW, Highhouse S (Eds.), *Handbook of psychology* (Vol. 12, pp. 560–592). Hoboken, NJ: John Wiley & Sons.
- Sosik JJ. (2005). The role of personal values in the charismatic leadership of corporate managers: A model and preliminary field study. *The Leadership Quarterly*, 16, 221–244.
- Talbot R, Cooper C, Barrow S. (1992). Creativity and stress. *Creativity and Innovation Management*, 1, 183–193.
- Tett RP, Burnett DD. (2003). A personality trait-based interactionist model of job performance. *Journal of Applied Psychology*, 88, 500–517.
- Tett RP, Guterman HA. (2000). Situation trait relevance, trait expression, and cross-situational consistency: Testing a principle of trait activation. *Journal of Research in Personality*, 34, 397–423.
- Waldman DA, Ramirez GG, House RJ, Puranam P. (2001). Does leadership matter? CEO leadership attributes and profitability under conditions of perceived environmental uncertainty. *Academy of Management Journal*, 44, 134–143.

## APPENDIX

### *Behavioral Items From the Conger and Kanungo Charismatic Leadership Scale, Used in Study 1*

1. Exciting public speaker
2. Appears to be a skillful performer when presenting to a group
3. Inspirational, able to motivate by articulating effectively the importance of what group members are doing
4. Consistently generates new ideas for the future of the group
5. Readily recognizes constraints in the group's environment that may stand in the way of achieving group's objectives
6. Readily recognizes constraints in the physical environment (technological limitations, lack of resources, etc.) that may stand in the way of achieving group objectives
7. Recognizes the abilities and skills of other members in the group
8. Recognizes the limitations of other members in the group
9. Readily recognizes new environmental opportunities that may facilitate achievement or group objectives
10. Engages in unconventional behavior to achieve group goals
11. Often exhibits very unique behavior that surprises other members of the group

12. Shows sensitivity for the needs and feelings of other members in the group
13. Influences others by developing mutual liking and respect
14. Tries to maintain the status quo or the normal way of doing things
15. Advocates following nonrisky well-established courses of action to achieve group goals