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Leadership Behaviors and Subordinate Resilience

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Abstract: Utilizing a sample of 150 part-time MBA students, this study evaluated the relationship between leader behaviors and subordinate resilience. We proposed that the transformational leadership dimensions of Attributed Charisma, Idealized Influence, Inspirational Motivation, Intellectual Stimulation, and Individualized Consideration, as well as the transactional leadership dimension of Contingent Reward would be positively associated with subordinate resilience. We also proposed that the transactional leadership dimensions of Management-by-Exception Active and Management-by-Exception Passive and the non-leadership dimension of Laissez-Faire leadership would not be positively associated with subordinate resilience. With the exception of Inspirational Motivation, all hypothesized relationships were supported. A post-hoc analysis of open-ended responses to the question "What helped you to deal with this situation?" indicated that participants who mentioned their leaders as a positive factor in dealing with the situation exhibited greater resilience than participants who did not. The implications of these results and suggestions for future research are discussed.

From 1914 to 1916, Ernest Shackleton and his crew were stranded in the Antarctic, twelve hundred miles from civilization after the wreck of their ship, the Endurance. In contrast to most other polar expeditions, every Endurance crew member survived the harrowing experiences that led to their successful return to civilization. This positive outcome is attributed largely to the leadership of Ernest Shackleton, whose leadership behaviors fueled the resilience of his stranded crew over and over again during their almost two-year ordeal (Connor & Davidson, 2003; Morrell & Capparell, 2001).

While few leaders face the life and death leadership situations experienced by Shackleton, all leaders are likely to face situations where employees experience setbacks and challenges. Indeed, as Thomas Pynchon notes, "You wait. Everyone has an Antarctic" (1961: 255). How people respond to workplace setbacks is a function of resilience. Resilient individuals rebound from adversity strengthened and more resourceful (Sutcliffe & Vogus, 2003). The question we raise is, do leaders make a difference in helping employees become more resilient in the face of their own "Antarctics?"

In recent years, a number of researchers in both psychology and organizational behavior have become interested in examining positive aspects of people and organizations (Luthans, Luthans, Hodgetts, & Luthans, 2001; Seligman & Csikszentmihalyi, 2000; Wright, 2003). These researchers contend that research and application in both fields has focused too much on understanding negative phenomena while under-researching the positive aspects of organizational life. Seligman and Csikszentmihalyi (2000) contend that to facilitate positive aspects such as optimism, hope, resiliency and creativity, these phenomena need to be investigated directly.

In line with this desire to understand the causes of positive behavior in organizations, our goal is to empirically examine the relationship between leader behavior and subordinate resilience. To this end, we discuss research in the area of resilience and coping, summarize the relevant leadership research with an emphasis on Avolio's (1999) full-range leadership model, and then develop and test specific proposals with regard to leadership and subordinate resilience.

Resilience

In their recent review of the concept of resilience, Sutcliffe and Vogus (2003) note that previous research on resilience has been conducted largely by developmental psychologists. Specifically, resilience research has tended to focus on the various individual and environmental factors influencing a child's social and personal success (Richardson, 2002). This research stream has identified numerous individual and situational risk and protective factors influencing resilience (Grotberg, 2003).

While a comprehensive discussion of all resilience predictors is beyond the scope of this paper (see Richardson (2002) for a thorough review), it may be instructive to list some of them to gain a sense of the existing findings. Conveniently, Grotberg (2003: 3-4) has developed a three category framework for grouping the protective factors: External supports (e.g., good role models, trusted family and non-family members), inner strengths (e.g., likability, optimism, empathy, a sense of purpose), and interpersonal and problem-solving skills (e.g., staying with a task until it's finished, reaching out for help when needed, and generating new ideas on how to do things). While these predictors and others were typically identified in studies of children, these predictors do offer some intriguing possibilities in applying resilience to employees and their leaders.

Additionally, research on coping (a related area) offers additional insights on the factors influencing resilience. In contrast to the resilience literature, the coping literature has focused largely on adult populations. Similar to the resilience literature, the coping literature has focused on the individual and situational factors influencing effective coping and the findings are consistent with those demonstrated for resilience (e.g., personality factors such as optimism (Hewitt & Flett, 1996: 415-416) and situational factors such as social support (Pierce, Sarason, & Sarason, 1996)). These similarities are interesting given that the resilience and coping literatures appear to have evolved along parallel, yet largely non-intersecting, paths. The extent of their relatedness is captured in two quotes, one from Holahan, Moos, and Schaefer (1996: 33) in their Handbook of Coping chapter: "Resilience (underline added) develops from confronting stressful experiences and coping with them effectively" and one from Greene and Conrad (2002: 37) in their resilience book chapter where they define resilience as "the capability of individuals to cope (underline added) successfully in the face of significant change, adversity, or risk."

Both the resilience and coping literatures focus to a large extent on assessing the strategies used by individuals when faced with challenges (Greene, 2002, Parker & Endler, 1996) and the outcomes associated with those strategies. For example, coping studies often assess the impact of various coping strategies (e.g., approach-coping versus avoidance-coping) on health or adjustment outcomes while resilience studies assess the impact of risk (e.g., poverty) and protective factors (e.g., close and secure relationships and a strong sense of purpose) on adjustment outcomes such as drug abuse, dropping out of school, mental illness, etc. As such, resilience and coping tend to be utilized as predictors in these studies, not as outcomes. As a result, in neither of the two literatures can one find outcome-oriented resilience scales. This is rather surprising since both coping and resilience are often defined in an outcome-oriented fashion.

For example, Richardson defines the term resilience "... to mean growth or adaptation through disruption rather than just to recover or bounce back" (2002: 313). Similarly, Lengnick-Hall and Beck contend that resilience "includes the ability to turn challenges into opportunities" (2003: 8) and to "more than bounce

back from the edge of catastrophe ... to move forward with even greater vigor and success than before" (2003: 4). And finally, Sutcliffe and Vogus state that "resilience is the capacity to rebound from adversity strengthened and more resourceful" (2003: 97). Similarly, in the coping literature, adaptive coping or functioning is defined "more than simple adjustment; it is the pursuit of human growth, mastery and differentiation allowing us to evolve in an ever-changing world" (Zeidner & Saklofske, 1996: 506) and as "stress resistance and crisis growth" (Holohan, Moos, and Schaefer, 1996: 25).

Thus, while an outcome-oriented notion of achieving growth and greater strength through meeting difficult challenges is emphasized in the definitions of resilience and coping presented above, there are no existing measures of resilience that capture this specific growth/strengthening outcome emphasis. Indeed, this lack of a general outcome measure of resilience/adaptive coping has been noted by Cartwright and Cooper (1996: 208) who contend that "assessment of the range and types of coping employed by individuals has received considerably more attention than any direct empirical measurement of its efficacy in terms of outcome." Similarly, Zeidner and Saklofske (1996: 512) note that "Most coping questionnaires ask about coping behaviors and frequency of usage ... however this does not provide information about the success in carrying out the coping efforts, outcome, and the like." Cartwright and Cooper (1996: 210) ultimately conclude that "In occupational settings, coping has to be considered in terms of its functionality and outcomes" (210). As a result, one of the goals of the current study was to develop a reliable outcome-oriented measure of resilience.

The coping literature also facilitates our main goal of examining the relationship between leadership behavior and subordinate resilience by virtue of the integrated coping model developed by Moos and Schaefer (1993). This coping model uses a two-part (approach and avoidance) conceptualization of coping strategies which helps provide a theoretical underpinning to our predictions regarding the leadership/subordinate resilience relationship. Avoidance-coping involves actions such as seeking out others as social diversions, engaging in substitute tasks to distract oneself, and trying to forget the issue causing the stress. Avoidance-coping is typically found to be less effective in engendering adaptive coping and resilience (Holahan et al., 1996). In contrast, approach-coping involves actions such as logical analysis, positive reappraisal of the situation, seeking guidance and support, and taking problem-solving actions. Approach coping is typically found to be more effective in engendering adaptive coping and resilience (Holahan et al., 1996). As will be discussed in the following section on leadership, certain leader behavior dimensions seem more likely to engender subordinate approach-coping (thus enhancing subordinate resilience) while other leader behavior dimensions seem more likely to engender subordinate behaviors associated with avoidance-coping (thus reducing subordinate resilience).

Leadership

While empirical research directly linking resilience and leadership could not be found, there are a number of authors who have theorized a link between leadership and resilience. For example, Luthans and Avolio (2003: 256) note that developing the capacity for resilience is a vital component of authentic leadership development. Similarly, Sutcliffe and Vogus (2003) propose that organizations can increase their effectiveness by developing the capability of resilience. Interestingly, Luthans and Avolio note that the application of leadership to resilience "has been largely ignored" (2003: 255). Likewise, Sutcliffe and Vogus contend that the study of resilience in organizations "has received little independent attention . . .

[and] is worthy of scholarly attention as it can provide insight into the etiology and course of positive adjustment or adaptability under challenging conditions" (2003: 99).

Some indirect support for the notion that leadership may be associated with subordinate resilience can be gleaned from the literature on leadership and subordinate reactions to stress. In Bass's (1990) review of the research on the relationship between transformational leadership and subordinate reactions to stress, he notes that transformational leaders may convert crises into developmental challenges by presenting crises as challenges that can be overcome and by providing "intellectual stimulation to promote subordinates' thoughtful, creative, adaptive solutions to stressful conditions, rather than hasty, defensive, maladaptive ones" (1990: 652). Bass's notion of converting crises into developmental challenges echoes the conceptualizations of resilience described earlier in this paper emphasizing resilience as growth through adversity.

Bass (1998) further addresses the relationship between leadership and adversity in his discussion of leadership and subordinate stress and burnout. He describes a study by Seltzer, Numerof, and Bass (1989) in which charisma, individualized consideration, intellectual stimulation, and contingent reward were negatively associated with stress and burnout in a sample of employed MBA students. While burnout and stress are not simply the "flip sides" of resilience, these results suggest it may be reasonable to propose that some leader behaviors may be associated with subordinate resilience.

Taken as a whole, it appears that leadership may be a factor worth examining with regard to resilience. While there are numerous leadership theories (or conceptualizations) from which to choose, it would seem most appropriate to choose a conceptualization that focuses on adaptive change or growth in the follower. For this reason, we utilized Bass and Avolio's Full-Range Leadership Theory (FRLT) (Avolio, 1999) as our leadership model for this paper. This integrated theory emphasizes to a greater extent than others the potentially transformational aspects of leadership. Bass views transformational leadership as a necessary component for taking the process of leadership beyond mere goal attainment to a higher meaning and purpose (Antonakis & House, 2002: 9). This notion of transformation meshes closely with the concepts of resilience and adaptive coping, which, as noted earlier, consistently emphasize achieving growth and greater strength.

As noted by Antonakis and House (2002: 8-9), the FRLT is comprised of nine factors reflecting three broad classes of leader behavior: Transformational, Transactional, and Laissez-Faire. Transformational leader behaviors (of which they propose five) include Attributed Charisma, Idealized Influence, Inspirational Motivation, Intellectual Stimulation, and Individualized Consideration. Transactional leader behaviors include the three factors of Contingent Reward, Management-By-Exception Active, and Management-By-Exception Passive. And finally, the FRLT includes a dimension of non-leadership referred to as Laissez-Faire Leadership. The following paragraphs discuss the factors of the FRLT and relate those factors to the Coping Theory of Moos and Schaefer(1993).

Turning first to the transformational leader behavior of Attributed Charisma, this dimension focuses on the degree to which the leader behaves with confidence, engenders respect and pride among subordinates, and seems to look beyond his or her own self-interest. Bass (1990: 654) notes that these behaviors may reduce panic and feelings of helplessness during stressful situations and can replace those feelings with a sense of security and belonging (1990: 656). It seems plausible that reducing panic and increasing

confidence would tend to engender approach-coping behaviors (and thus resilience) in subordinates because they would be less fearful and approach the situation in a more positive and confident way (a central component of approach-coping).

The second of five transformational leadership dimensions, Idealized Influence, emphasizes leader behaviors transmitting a sense of higher purpose that goes beyond the goals of the individual and focuses attention on the common good. Bass points out that helping followers "transcend their own immediate self-interests" increases follower awareness of "the larger issues" and shifts "goals away from personal safety and security toward achievement and self-actualization" (1990: 652). Once again, it seems possible that focusing on the positive outcomes of achievement and self-actualization is more likely to engender approach-coping responses (and thus resilience) than avoidance coping responses since positive reappraisal of a situation is an essential component of approach-coping.

The third of five transformational dimensions, Inspirational Motivation, emphasizes leader behaviors that transmit enthusiasm, optimism, and ability to articulate a compelling vision of the future. Bass clearly emphasizes the potential impact of Inspirational Motivation in his statement "Effective transformational leaders can halt crises by disclosing opportunities, arousing courage, and stimulating enthusiasm" (1990: 655). Consistent with previous transformational dimensions, inspirational motivation should help engender approach-coping (and thus resilience) by providing a sense of hope or purpose to the subordinate and by role-modeling confident behavior.

The fourth of five transformational dimensions, Intellectual Stimulation, emphasizes leader behaviors that focus on effective problem solving behaviors such as re-examining critical assumptions and seeking different perspectives and approaches. Bass contends that intellectually stimulating leaders may promote "thoughtful, creative, adaptive solutions to stressful conditions, rather than hasty, defensive, maladaptive ones" (1990: 652). Such leader behaviors may directly enhance approach-coping (and thus subordinate resilience) by providing a role model for using new or innovative approaches as opposed to relying on old solutions that no longer work effectively (effective problem-solving is a central component of approach-coping).

The final transformational dimension, Individualized Consideration, emphasizes leader behaviors such as developing employees and treating employees as individuals. Bass notes that transformational leaders may utilize individual consideration to "convert crises into developmental challenges" (1990: 652). With regard to approach-coping and resilience, employees who feel more competent and valued may be more likely to engage in positive appraisals of the situation (a central component of approach-coping) because they feel more capable of meeting the challenge and less afraid of negative consequences if they fail. Additionally, feeling valued by the leader may increase the likelihood that the employee will ask the leader or others for support or guidance in coping with the challenge (a central component of approach-coping).

The results of a meta-analysis by Dumdum et al. (2002) provide indirect support for the notion that transformational leadership behaviors may be positively related to subordinate resilience. In that meta-analysis, the corrected correlations between the five transformational leadership dimensions and satisfaction and effectiveness ranged from .55 to .90. While resilience as a construct is certainly different

from effectiveness and satisfaction, it seems reasonable to propose that the relationships between these transformational leadership dimensions and subordinate resilience may be somewhat consistent.

Moving on to Transactional Leader Behaviors, the potential relationships between the three Transactional Leadership dimensions and approach-coping vary across the three dimensions. The Contingent Reward dimension of the FRLT focuses on whether the leader is clear about who is responsible for achieving specific outcomes and the benefits resulting from achieving those outcomes. As Bass notes, "The leader needs to ensure that there will be positive outcomes and that the subordinates know what they are" (1990: 655). It seems possible that Contingent Reward behaviors may potentially engender subordinate approach-coping (and thus resilience) by virtue of focusing their attention on the positive benefits of successfully resolving a work challenge (as opposed to the negative ramifications of not doing so). Positive re-appraisal of a challenge is a central component of approach-coping. Indirect support for the contention that contingent reward may be related to resilience is offered by the meta-analytic results of Dumdum et al. (2002) who reported corrected correlations of .56 and .76 between contingent reward behaviors and effectiveness and satisfaction respectively.

The second of three Transactional Leadership dimensions, management-by-exception-active, focuses on leader behaviors such as focusing on mistakes, failures, and complaints. This type of leader behavior might be expected to engender avoidance-coping (and thus reduce resilience) in subordinates because most subordinates will not seek feedback from leaders providing primarily negative feedback. Plus, this type of leader is not modeling proactive problem-solving and planning to the employee (a component of approach-coping). Indirect support for the contention that management-by-exception-active leader behavior is unlikely to be positively correlated with resilience can be found in the meta-analytic results of Dumdum et al. (2002) who reported corrected correlations of .08 and -.09 between management-by-exception-active behaviors and effectiveness and satisfaction respectively.

The third of three Transactional Leadership dimensions, management-by-exception-passive, focuses on leader behaviors such as failing to interfere until problems become serious or waiting until something has gone seriously wrong before taking action. Such a leader would clearly be modeling avoidance-coping responses for his or her subordinates and thus would seem less likely to engender approach-coping behavior from them. Indirect support for the contention that management-by-exception-passive leader behavior is unlikely to be positively correlated with resilience can be found in the meta-analytic results of Dumdum et al. (2002) who reported corrected correlations of-.38 and -.46 between management-by-exception-active behaviors and effectiveness and satisfaction respectively.

The final FRLT dimension to be discussed is Laissez-Faire Leadership, which focuses on leader behaviors such as avoiding getting involved, avoiding making decisions, being absent when needed, and delaying responding to urgent questions. Such a leader would clearly be modeling avoidance-coping responses for his or her subordinates and thus would seem less likely to engender approach-coping behavior (and thus resilience) from them. Indirect support for the contention that laissez-faire leader behavior is unlikely to be positively correlated with resilience can be found in the meta-analytic results of Dumdum et al. (2002) who reported corrected correlations of -.37 and -.53 between laissez-faire leadership behaviors and effectiveness and satisfaction respectively.

Based upon the arguments provided in the previous paragraphs, we propose the following two hypotheses:

> Hypothesis 1: The five transformational leadership dimensions of Attributed Charisma, Idealized Influence, Inspirational Motivation, Intellectual Stimulation, and Individualized Consideration and the transactional leadership dimension of Contingent Reward will be positively associated with subordinate resilience before and after controlling for employee optimism.
>
> Hypothesis 2: The transactional leadership dimensions of Management-by-Exception Active and Management-by-Exception Passive, and the non-leadership dimension of Laissez-Faire leadership will not be positively associated with subordinate resilience before or after controlling for employee optimism.

Optimism as a Control Variable

As was noted earlier in this paper, optimism has been found to be a consistent dispositional predictor of resilience and adaptive coping in previous studies. Thus, it seems prudent to include optimism as a personality control variable when examining the relationship between the situational factor of leadership behavior and resilience as this allows a more conservative test of that relationship. Seligman sees the defining characteristic of optimists as the ability, when "confronted with the ... hard knocks of this world [to] think about misfortune" without a defeatist attitude (1990: 4). Contemporary research provides support for the idea that the personality variable of optimism can contribute to an individual's ability to persist at tasks to successful completion and fulfill his/her potential (Peterson, 2000; Ryan & Deci, 2000).

Methods

Participants

The participants were 150 part-time Master's of Business Administration (MBA) students at a medium-sized Midwestern university. The mean age of participants was 30 years old. Eighty-six (58%) of the participants were male, 63 (42%) were female. One hundred thirty (88%) respondents were Caucasian; 17 (11%) classified themselves as a racial/ethnic minority.

Procedure

Over a period of one year, a questionnaire was administered to students in all six sections of an MBA Leadership Skills course, two sections of a required MBA Organizational Behavior course, and one Human Resource Management elective course. Participation was completely voluntary and anonymous. The questionnaire required approximately twenty minutes to complete and all students who were invited to participate did so. First, participants were asked to complete two open-ended questions. The first open-ended question was as follows: "Think of a time in the last two years when you experienced a difficult or challenging situation at work. For example, you may have had difficulty accomplishing a goal or learning a new skill, or you might have had a project that didn't go as you desired, or you may have interviewed for a new position but did not get it - anything which you found to be a difficult or challenging situation. Please describe the situation as completely as you can." Participant self-generation of challenging

situations is a common methodological approach in the coping literature (e.g., Amirkhan, 1990; Feifel & Strack, 1989). This first open-ended question was used as the foundation for all subsequent open-ended and resilience items.

After completing the challenging situation description, participants were asked to turn the page and respond to an open-ended question which read "What helped you to deal with this situation?" The remaining questionnaire scales measured resilience, optimism, and leader behaviors. The items and anchors associated with these three constructs are described below. After all participants completed their questionnaires, the instructor facilitated a discussion on leadership and subordinate resilience.

Measures

Resilience. Due to the previously discussed lack of an existing measure of outcome-oriented resilience, a measure was constructed to correspond very closely to the outcome-oriented conceptualizations of resilience and adaptive-coping described earlier in the paper. To review, these conceptualizations of resilience emphasize the degree to which a person grows and develops as a result of a challenging experience; for example, "growth or adaptation through disruption" (Richardson, 2002: 313), "the ability to turn challenges into opportunities" and to "more than bounce back from the edge of catastrophe ... to move forward with even greater vigor and success than before" (Lengnick-Hall & Beck, 2003: 8 & 4), and finally "the capacity to rebound from adversity strengthened and more resourceful" (Sutcliffe &Vogus, 2003: 97).

Using a five-point scale ranging from l=very little to 5=a great deal, respondents answered the following four questions:

1. How much did you learn from this difficult or challenging experience?

2. How much did this experience improve your ability to cope with difficult or challenging situations?

3. How much do you feel capable of dealing with such a challenge now?

4. How much has this experience strengthened you?

The focus of these four items is on learning, improved coping ability, and a sense of increased capability and strength. As such they closely follow the conceptualizations provided in the previous paragraph in that all four definitions explicitly emphasize growth and learning (e.g., Richardson's use of the terms "growth" and "adaptation", LengnickHall & Beck's use of the terms "greater vigor and success", and Sutcliffe and Vogus's use of the terms "strengthened" and "more resourceful").

An exploratory factor analysis of these four items resulted in one factor that accounted for 69% of the variance. Factor loadings for the four items ranged from .80 to .87. As a result, all four items were retained for use in the final scale. Participant's responses to the four items were averaged to form an index of resilience (Cronbach's alpha = .85).

Optimism. Scheier and Carver's (1985) Life Orientation Test (LOT) contains four optimistic and four pessimistic statements assessed on a five-point Likert response scale ranging from Strongly Disagree to Strongly Agree. After reversing the pessimism items, scores were computed as averages across the eight items (Cronbach's alpha = .80).

Leadership Behaviors. Bass and Avolio's (2000) Multifactor Leadership Questionnaire (MLQ 5x-Short) is a 45-item assessment of the respondent's perception of his or her leader's behavior. A five-point frequency scale is used for each item. Nine four-item leader behavior scales are formed from 36 of these items. Five of these scales assess transformational behaviors, three concern transactional behaviors, and one scale assesses laissez-faire leadership. All scales attained Cronbach alphas between .73 and .84 in this sample.

Results

Predictors

Zero-order correlations among the predictor variables of optimism and transformational, transactional, and laissezfaire leader behaviors are displayed in Table 1. Optimism (M = 3.91, SD = .54) is relatively independent of the other measures. The five MLQ transformational behavior scales and Contingent Reward are strongly positively inter-correlated. The last two MLQ scales in Table 1 are moderately negatively correlated with this cluster. Management-by-Exception (Active) is more or less uncorrelated with the other variables. Resilience and optimism were significantly correlated at r=.27, $p<.01$.

Hypothesis 1 Results

We hypothesized that the five Transformational Leadership dimensions and Contingent Reward would be positively associated with Resilience before and after controlling for optimism. Column one of Table 2 displays the zero-order correlations between the ten predictor variables (optimism plus the nine dimensions of leadership measured by the MLQ) and Resilience (M = 3.96, SD = .82). All six of the hypothesized leadership behaviors were positively correlated with resilience. After controlling for Optimism (see Column 2 in Table 2), five of the six hypothesized MLQ dimensions (Attributed Charisma, Idealized Influence, Intellectual Stimulation, Individual Consideration, and Contingent Reward) were still significantly positively correlated with resilience. Thus, Hypothesis 1 is largely supported in that five out of six hypothesized MLQ leader behaviors are significantly positively associated with subordinate resilience even after controlling for optimism.

Hypothesis 2 Results

As was hypothesized, the two transactional leadership dimensions (Management-by-Exception Active and Management-by-Exception Passive) and the Laissez-Faire leadership dimension were not significantly positively associated with subordinate resilience, before or after controlling for employee optimism.

Supplemental Open-Ended Question Results

As an additional check on the results described in the previous two paragraphs, participant responses to the second open-ended question "What helped you to deal with this situation?" were coded with regard to whether or not the participant mentioned his or her leader as one of the factors helping the participant deal with this challenging situation. Out of a total of 150 respondents, 34 (23%) indicated that their leader helped them deal with this challenging situation. These responses were then transformed into a dichotomous variable in which 0 = "did not mention leader" and 1 = "mentioned leader." Mentioning the leader was positively correlated with resilience both before ($r = .32$, $p < .01$, one-tailed) and after (semipartial $r = .30$, $p < .01$ one-tailed) controlling for optimism.

Discussion

This study evaluated the relationship between leader behavior and subordinate resilience. Hypothesis 1, which proposed that the Full Range Leadership Theory (FRLT) dimensions of Attributed Charisma, Idealized Influence, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, and Contingent Reward would be positively associated with subordinate resilience even after controlling for employee optimism was largely supported (Inspirational Motivation was the only dimension not significantly correlated with resilience after controlling for optimism). Moreover, an analysis of the open-ended responses regarding the question "What helped you to deal with this situation?" indicated that participants who mentioned the leader as a positive factor in dealing with the situation exhibited greater resilience than participants who did not (even after controlling for optimism).

Hypothesis 2, which proposed that the FRLT leadership dimensions of Management-by-Exception Active, Management-by-Exception Passive, and Laissez-Faire leadership would not be positively associated with subordinate resilience, was also supported. None of these three leadership behaviors were significantly positively correlated with resilience either before or after controlling for optimism.

The only hypothesized FRLT transformational leadership dimension not significantly positively associated with resilience in this study was the dimension of Inspirational Motivation. Specifically, the positive zero-order correlation between Resilience and Inspirational Motivation was reduced to non-significance after controlling for employee optimism. One possibility is that the optimism emphasis of the Inspirational Motivation dimension causes its resilience-relevant variance to overlap with the resilience-relevant variance associated with employee optimism. However, this may not be the entire issue. Even before controlling for employee optimism, the correlation between Inspirational Motivation and subordinate resilience was small in magnitude ($r = .14$). It is possible that leader behaviors associated with Inspirational Motivation may be more general in nature and thus less explicitly relevant to a specific job challenge faced by one employee. For example, knowing that a leader is optimistic about the organization's future may not necessarily give the employee additional confidence that he or she can cope with a specific work challenge. Of course it is also possible that the impact of the leader's Inspirational Motivation on subordinate resilience may be moderated by other factors in the situation, for example, the nature of the relationship between the employee and the leader.

Implications

Overall, the results of this study suggest that subordinate resilience may be positively impacted by leader behaviors and that there may be a variety of leadership behaviors that positively impact subordinate resilience. As such, these results support and extend the research discussed by Bass (1990, 1998) on the impact of leadership in enhancing employee coping with stress and adversity. These findings also suggest that it may be worthwhile to pursue additional research in this area that will help further identify and understand the factors influencing subordinate resilience.

Study Limitations and Future Research

This study utilized part-time MBA students as participants. The age distribution was wide (ages ranged from 20 to 51 with an average age of 30) and the gender distribution was relatively even (58% male and 42% female). This age and gender diversity should contribute positively to the generalizability of the results, as should the fact that 11 % of the participants were a racial minority. However, it is certainly possible that MBAs may have different expectations of their leaders than other employees; for example, MBAs may be more concerned with transformational leadership and reward-oriented leader behaviors. If so, then the results of this study may over-estimate the importance of these specific leader behaviors to subordinate resilience. And while these MBA participants are employed in a wide variety of occupations, they do not fully represent the entire range of potential occupations and occupational differences. As a result, it is possible that employees in occupations not represented in this study might exhibit different results. Future research studies in this area should utilize non-MBA samples to ensure that the results generalize to other populations and occupations.

Additionally, because this study utilized self-reported resilience and optimism, this may have resulted in some level of socially desirable responding in that participants may have been motivated to portray their resilience (and optimism) in the most positive light possible. As a result, this may have resulted in ceiling effects (and thus range restriction) in the resilience and optimism measures (the scale means for both of these measures were 3.9 out of 5). Such range restriction may serve to constrain the magnitude of the predictor/criterion correlations. Alternatively, since both the resilience and leader behavior measures were collected from the same person using one questionnaire, the correlations may be inflated due to mono-method bias. Future studies in this area may be able to avoid this issue by collecting leader behavior ratings (or resilience ratings) from other sources (such as co-workers).

Furthermore, because participants generated their own challenging situations, it was not possible for us to control the actual severity of the challenges that were chosen. As a result, some participants described fairly innocuous challenges while others described quite stressful challenges. Future studies may want to control the type of workplace challenges considered. For example, researchers could evaluate whether the resilience exhibited by employees in a company undergoing a merger is related to leader behaviors. Ideally, this study would utilize a predictive approach as opposed to the concurrent approach utilized in this study.

The methodology described in the previous paragraph raises yet another issue associated with potential future studies in this area. In this study, we examined only the leadership impact of the participant's immediate manager on resilience. However, in small (or relatively flat) organizations, executives at

higher levels may be an important factor influencing subordinate resilience since such executives may have significant contact with lower-level employees and managers. Thus, future research might examine the impact of higher level leaders on subordinate resilience as well as the potential moderating impact of organizational size or hierarchical structure.

In addition to examining moderating factors, it may also be fruitful to evaluate the potential impact of other organizational factors on subordinate resilience, for example, coworker support. Indeed, additional post hoc analyses of participant responses to the open-ended follow-up question "What helped you deal with this challenge?" indicated that participants mentioning a co-worker (N = 35 or 23%) reported greater resilience both before (r = .17, p < .05 one-tailed) and after (semipartial r =.18, p < .05, one-tailed) controlling for optimism.

In addition to organizational factors and their influence on subordinate resilience, there may also be some value to studies examining the importance of factors such as the nature of the work setback (resilience to some types of setbacks may be less influenced by leadership than others) and the influence of the individual's interpersonal and problem-solving skills. Grotberg's (2003) categorization of resilience predictors specifically proposes that stronger interpersonal and problem-solving skills will enhance resilience. Future research should include assessments of these individual differences in addition to optimism. Role modeling effective interpersonal and problem-solving skills may be another route through which transformational leaders can enhance the interpersonal and problem-solving skills (and thus the resilience) of their subordinates.

Finally, this study does not address the question of whether individual subordinate resilience will translate to greater overall organizational resilience. While one might anticipate that increasing individual resilience capabilities will increase overall organizational resilience, this relationship needs to be examined empirically. One of the significant challenges in this area will be to determine how to objectively measure resilience at the organizational level.

Conclusion

Overall, the issue of leadership and subordinate resilience appears to be worthy of additional study. The rate of change in organizations and the demands faced by employees do not appear to be slowing down. Indeed, Daft (2004) contends that "Considering the turmoil and flux inherent in today's world, the mindset needed by organizational leaders is to expect the unexpected and be prepared for rapid change and potential crises" (2004: 8). A better understanding of how to enhance subordinate resilience in the face of setbacks and crises may assist organizations in coping with this ever-increasing turmoil and flux.

TABLE 1
Predictor Correlation Matrix

Predictor	1	2	3	4	5	6	7	8	9
1. Optimism									
2. Attributed Charisma	.22								
3. Idealized Influence	.24	.74							
4. Inspirational Motivation	.22	.81	.76						
5. Intellectual Stimulation	.17	.80	.74	.72					
6. Individual Consideration	.30	.82	.70	.71	.82				
7. Contingent Reward	.23	.75	.67	.76	.76	.82			
8. Management-by-Exception (Active)	-.08	-.16	-.10	-.17	-.18	-.26	-.15		
9. Management-by-Exception (Passive)	-.17	-.43	-.33	-.42	-.42	-.41	-.41	.17	
10. Laissez-faire Leadership	-.08	-.55	-.39	-.46	-.52	-.49	-.48	.20	.68

Note. $N = 146$. All coefficients ≥ .17 are significant, $p < .05$, two-tailed.
All coefficients ≥ .22 are significant, $p < .01$, two-tailed.

TABLE 2
Predictor Correlations with Resilience

Predictor	Zero-order Correlation	Semipartial Correlation[a]
1. Optimism	.29**	–
2. Attributed Charisma	.21**	.16*
3. Idealized Influence	.22**	.16*
4. Inspirational Motivation	.14*	.08
5. Intellectual Stimulation	.27**	.23*
6. Individual Consideration	.27**	.21*
7. Contingent Reward	.23**	.18*
8. Management-by Exception (Active)	-.11	-.09
9. Management-by Exception (Passive)	-.14*	-.10
10. Laissez-faire Leadership	-.12	-.11

Note. $N = 146$.
[a]Controlling for Optimism.
*$p < .05$, one-tailed.; **$p < .01$, one-tailed.

References

Amirkhan, J. 1990. A factor analytically derived measure of coping: The coping strategy indicator. Journal of Personality and Social Psychology, 59, 1066-1074.

Antonakis, J., and House, R. 2002. The fullrange leadership theory: The way forward. In B. Avolio & F. Yammarino (Eds.), Transformational and Charismatic Leadership: The Road Ahead: 3-33. Oxford: Elsevier.

Avolio, B. 1999. Full Leadership Development: Building the Vital Forces in Organizations. Thousand Oaks, CA: Sage.

Bass, B. 1990. Handbook of Leadership, 3rd Ed. New York, NY: Free Press.

Bass, B. 1998. Transformational Leadership: Industrial, Military, and Educational Impact. Mahwah, NJ: Erlbaum.

Bass, B., & Avolio, B. 2000. Multifactor Leadership Questionnaire: Sampler Set, 2nd Ed. Redwood City, CA: Mind Garden.

Cartwright, S., & Cooper, C. 1996. Coping in occupational settings. In M. Zeidner & N. Endler (Eds.), Handbook of Coping: Theory, Research, Applications: 202-220. New York, NY: Wiley.

Connor, K., & Davidson, J. 2003. Development of a new resilience scale: The ConnorDavidson resilience scale (CD-RISC). Depression and Anxiety, 18,76-82.

Daft, R. 2004. Organization Theory and Design, 8th Ed. Mason, OH: Thomson.

Dumdum, U., Lowe, K., & Avolio, B. 2002. A meta-analysis of transformational and transactional leadership correlates of effectiveness and satisfaction: An update and extension. In B. Avolio & F. Yammarino (Eds.), Transformational and Charismatic Leadership: The Road Ahead: 35-66. Oxford: Elsevier.

Feifel, H., & Strack, S. 1989. Coping with conflict situations: Middle-aged and elderly men. Psychology and Aging, 4, 2633.

Greene, R. 2002. Human Behavior Theory: A resilience orientation. In R. Greene (Ed.), Resiliency: An integrated approach to practice, policy, and research: 29-62. Washington, DC: National Association of Social Workers Press.

Greene, R., & Conrad, N. 2002. Basic Assumptions and Terms. In R. Greene (Ed.), Resiliency: An integrated approach to practice, policy, and research: 1-27. Washington, DC: National Association of Social Workers Press.

Grotberg, E. 2003. Resilience for today: Gaining strength from adversity. Westport, CT: Praeger.

Hewitt, P., & Flett, G. 1996. Personality traits and the coping process. In M. Zeidner & N. Endler (Eds.), Handbook of Coping: Theory, Research, Applications: 410-433. New York, NY: Wiley.

Holahan, C, Moos, R., & Schaefer, J. 1996. Coping, stress resistance, and growth: Conceptualizing adaptive functioning. In M. Zeidner & N. Endler (Eds.), Handbook of Coping: Theory, Research, Applications: 24-43. New York, NY: Wiley.

Lengnick-Hall, C., & Beck, T. 2003. Beyond bouncing back: The concept of organizational resilience. Paper presented at the annual meeting of the Academy of Management, Seattle, WA.

Luthans, F., & Avolio, B. (2003). Authentic leadership development. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), Positive Organizational Scholarship: Foundations of a New Discipline: 241-258. San Francisco, CA: Berrett-Koehler.

Luthans, F., Luthans, K., Hodgetts, R., & Luthans, B. 2001. Positive approach to leadership (PAL): Implications for today's organizations. Journal of Leadership and Organizational Studies, 8(2): 3-20.

Moos, R., & Schaefer, J. 1993. Coping resources and processes: Current concepts and measures. In L. Goldberger & S. Breznitz (Eds.), Handbook of stress: Theoretical and clinical aspects, 2nd Ed.: 234-257. New York, NY: Free Press.

Morrell, M., & Capparell, S. 2001. Shackleton's Way: Leadership Lessons from the Great Antarctic Explorer. New York, NY: Penguin.

Parker, J., & Endler, N. 1996. Coping and defense: A historical overview. In M. Zeidner & N. Endler (Eds.), Handbook of Coping: Theory, Research, Applications: 3-23. New York, NY: Wiley.
Peterson, C. 2000. The future of optimism. American Psychologist, 55: 44-55.
Pierce, G., Sarason, I., & Sarason, B. 1996. Coping and social support. In M. Zeidner & N. Endler (Eds.), Handbook of Coping: Theory, Research, Applications: 434-451. New York, NY: Wiley.
Pynchon, T. 1961. V. New York: HarperCollins.
Richardson, G. 2002. The metatheory of resilience and resiliency. Journal of Clinical Psychology, 58: 307-321.
Ryan, R., & Deci, E. 2000. Self-determination theory and the facilitation of intrinsic motivation, social development, and wellbeing. American Psychologist, 55: 68-78.
Scheier, M., & Carver, C. 1985. Optimism, coping, and health: Assessment and implications of generalized outcome expectancies. Health Psychology, 4: 219247.
Seligman, M. 1990. Learned Optimism. New York, NY: Knopf.
Seligman, M., & Csikszentmihalyi, M. 2000. Positive psychology: An introduction. American Psychologist, 55: 5-14.
Seltzer, J., Numerof, R., & Bass, B. 1987. Transformational leadership: Is it a source of more or less burnout or stress? Paper presented at the annual meeting of the Academy of Management, New Orleans, LA.
Sutcliffe, K. & Vogus, T. 2003. Organizing for Resilience. In K. Cameron, J. Dutton, & R. Quinn (Eds.), Positive Organizational Scholarship: Foundations of a New Discipline: 94-110. San Francisco, CA: Berrett-Koehler.
Wright, T. 2003. Positive organizational behavior: An idea whose time has truly come. Journal of Organizational Behavior, 24: 437-442.
Zeidner, M., & Saklofske, D. 1996. Adaptive and maladaptive coping. In M. Zeidner & N. Endler (Eds.), Handbook of Coping: Theory, Research, Applications: 505-531. New York, NY: Wiley.