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The impact of positivity and transparency on trust in leaders and their perceived effectiveness

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Abstract

A critical challenge facing today's organizational leaders is gaining their followers' trust and having them view leaders as effective in addressing turmoil and change. Using a downsizing scenario as the context, this field experiment examined how a leader's positivity and transparency impacted followers' perceived trust, defined in terms of willingness to be vulnerable, and effectiveness of their leader. To test the hypotheses, 304 participants were randomly assigned to one of the four conditions of high (low) leader positivity \times high (low) leader transparency. Results of our mixed methods study indicated both the leader's level of positivity and transparency impacted followers' perceived trust and evaluations of leader effectiveness. Besides limitations and suggestions for future research, we conclude with the practical implications that positive, transparent leaders may have on building trust and perceived effectiveness among their followers.

Keywords: Authentic leadership, Positivity, Transparency, Trust, Downsizing

1. Introduction

In today's turbulent global environment too often characterized by prominent examples of unethical practices and the reality of increasingly frequent mergers, acquisitions and downsizing, followers' trust in their organizational leaders has become an important issue. Prior leadership research has shown that how a leader acts and communicates with followers during very challenging periods of time can create the foundation for future trust in the leader (Kasper-Fuehrer & Ashkanasy, 2001). Specifically, the manner in which negative events such as layoffs or downsizing events are dealt with by leaders may directly impact followers' subsequent trust in their leaders (Korsgaard et al., 2002 and Tourish et al., 2004). Having trust in one's leader, in turn, has been tied to desirable performance outcomes such

as satisfaction, retention, commitment, organizational citizenship behavior, and performance (Connell et al., 2003, Corbitt and Martz, 2003, Costa, 2003 and Dirks and Ferrin, 2002).

Through the use of a mixed methods design, this study examines how differing levels of positivity and communication transparency, within the context of a downsizing event, impacted participants' willingness to be vulnerable and place trust in the target leader and the leader's perceived effectiveness in addressing the downsizing situation. Specifically, this study responds to earlier calls in the leadership literature and in a special issue published in this journal to begin empirically assessing how authentic leadership characterized by positivity and transparency (Avolio and Gardner, 2005, Avolio and Luthans, 2006 and Luthans and Avolio, 2003) impacts key outcomes such as trust and effectiveness.

2. Theoretical foundation

2.1. Leader's positivity

Drawn from the foundational work in positive psychology (Seligman and Csikszentmihalyi, 2000 and Snyder and Lopez, 2002) and positive organizational behavior (Luthans, 2002a, Luthans, 2002b, Nelson and Cooper, 2007 and Wright, 2003; for a recent comprehensive review see Luthans & Youssef, 2007), in this study a leader's positivity or positive psychological capacities was defined using the four components associated with positive psychological capital (Luthans et al., 2007 and Luthans et al., 2007) and authentic leadership (Avolio and Luthans, 2006 and Luthans and Avolio, 2003). The four components include hope, resiliency, optimism and efficacy. Hope is defined as a "positive motivational state that is based on an interactively derived sense of successful (a) agency (goal directed energy) and (b) pathways (planning to meet goals)" (Snyder, Irving & Anderson, 1991, p. 287). Resiliency represents coping and adaptation in the face of significant adversity or risk (Masten & Reed, 2002), and has been adapted to the workplace by Luthans (2002a, p. 702) as the "positive psychological capacity to rebound, to 'bounce back' from adversity, uncertainty, conflict, failure, or even positive change, progress and increased responsibility."

Optimism is an internal, relatively stable, and global attribution regarding positive events like goal attainment, and an external, relatively unstable, and specific cause for negative events such as not meeting a deadline (Seligman, 1998). Realistic optimism has been associated with having a positive future outlook, as well as making positive attributions regarding events that may be perceived by less optimistic individuals as inhibiting their motivation or performance (Luthans, 2002a and Schneider, 2001).

Efficacy is the belief that one can execute actions required to successfully deal with prospective situations (Bandura, 1997). Applied to the workplace, Stajkovic and Luthans (1998, p. 66) define efficacy as "the conviction (or confidence) employees have about their ability to mobilize the motivation, cognitive resources or courses of action needed to successfully execute a specific task within a given context."

These four positive psychological capacities when combined have been conceptually (Luthans, Youssef et al., 2007) and empirically (Luthans, Avolio, et al., 2007) shown to represent a higher-order, core construct and can be thought of as one's positive psychological resources or capacities. This core construct has been defined as "an individual's positive psychological state of development that is characterized by: (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive reference (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success" (Luthans, Youssef, et al., 2007, p. 3).

This higher-order positive capacity construct has an underlying commonality among the four dimensions representing a

positive appraisal and belief in the situation, and available and/or potential psychological resources that can be used to attain success through personal effort, striving, and perseverance. Empirically, it has been shown that the four dimensions have convergent and discriminant validity in both the positive psychology (e.g., Bryant and Cvigengros, 2004, Carifio and Rhodes, 2002 and Magaletta and Oliver, 1999) and workplace literature (Luthans, Avolio, et al., 2007). Evidence also indicates that when combined into a core higher factor, it accounts for more variance in employee performance and satisfaction than each of the four individual components (Luthans, Avolio, et al., 2007).

2.2. Linkages to trust

Although there is a growing body of research on trust, there are still differences of opinion on its definition (Connell et al., 2003). This study will examine trust by using the frequently cited definition that focuses on defining trust in terms of a 'willingness to be vulnerable' in one's relationship (Mayer et al., 1995 and Whitener et al., 1998) with another person based on positive expectations regarding that person's behavior (Rousseau, Sitkin, Burt, & Camerer, 1998). Inherent in this definition is that trust also involves a willingness to be exposed to and take risks with that individual (Mayer et al., 1995). This definition of trust also includes an expectation that the individual who is being trusted is more predictable and/or dependable, and thus would be expected to be described as more trustworthy (Rousseau et al., 1998).

One of the main goals of the current study is to examine how a leader's level of positivity as represented by expressed levels of hope, resiliency, optimism and efficacy are related to participants' trust in that leader. Trust has been previously associated with a leader's perceived ability, competence and performance (Driscoll, 1978, Mayer et al., 1995, McAllister, 1995 and Scott, 1980). Specifically, Mayer and colleagues (1995) discussed three components of trustworthiness including competence, integrity and benevolence. We propose that a leader who displays higher levels of positivity (represented by hope, efficacy, optimism, and resiliency), would be seen by others as being more competent and in turn trustworthy because these components have been demonstrated to be connected to higher levels of performance (Luthans, Avolio, et al., 2007).

The ability of a leader to develop trust during a downsizing event has been shown to be directly related to the perceived effectiveness of that leader in successfully getting through adversity (Appelbaum et al., 1999 and Mishra et al., 1998). Similarly, since one's competence and ability has been shown to be positively related to trust in that person by others (Driscoll, 1978, Mayer et al., 1995, McAllister, 1995 and Scott, 1980), leaders who are viewed as more effective should also be evaluated as being more trustworthy and more highly trusted. Based on this theory and prior research, we derive the following study hypotheses:

Hypothesis 1a. The leader's exhibited level of positive psychological capacities has a positive relationship with the participant's/follower's perceived trust in the leader.

Hypothesis 1b. The leader's exhibited level of positive psychological capacities has a positive relationship with the participant's/follower's overall rating of their leader's effectiveness.

2.3. Transparency and trust

Open communication or communication transparency has historically been viewed as an essential ingredient in effective organizations (Gross, 2002, Haney, 1967, Likert, 1967, Myers et al., 1999 and Rogers, 1987). Research on openness in communication began with initial support through early laboratory experiments conducted by Bavelas and Barrett in 1951, and more open communication has also been associated with higher levels of honesty, effective listening, trust, supportiveness, and frankness (Rogers, 1987).

Brought into the organizational context, communication openness has been defined as "message sending and receiving behaviors of superiors, subordinates, and peers with regard to task, personal, and innovative topics" (Rogers, 1987, p. 54). Thus, communication openness revolves around each individual at all organizational levels being receptive to and then responsive to the information that is provided by others in the organization. In the context of leadership research, open communication would involve both the leader and his or her followers in terms of how they exchange information with each other and the quality of their respective relationship.

Relevant to the current study, communication openness has been positively associated with higher levels of organizational success, as well as helping to avoid or minimize the impact of unexpected organizational crises (Rogers, 1987). In addition, higher levels of communication openness have been linked with better leader and follower relationships as well as higher follower motivation (Kay & Christophel, 1995), job satisfaction (Burke and Wilcox, 1969, Klauss and Bass, 1982, Korsgaard et al., 2002 and Weiss et al., 2002), role clarity (Klauss and Bass, 1982 and Wilson and Malik, 1995), more positive peer relationships (Myers, Knox, Pawlowski, & Ropog, 1999), and trust and organizational citizenship behaviors (Korsgaard et al., 2002).

2.4. Transparency and leadership

Discussions of transparency in authentic leadership have recently emerged in both the research and practice literature (Gardner et al., 2005, George, 2003 and Ilies et al., 2005). In this literature, authentic transparent leadership has been described as representing the extent to which an individual exhibits a pattern of openness and clarity in his/her behavior toward others by sharing the information needed to make decisions, accepting others' inputs, and disclosing his/her personal values, motives, and sentiments in a manner that enables followers to more accurately assess the competence and morality of the leader's actions. Such

leaders have been described as demonstrating transparency in areas/functions such as decision making (Avolio & Gardner, 2005).

Webster's Dictionary defines "transparency" as something which is obvious, readily understandable, clear, candid and/or lucid. A comprehensive definition of leader and follower transparency proposed by (Vogelgesang, 2008) entails "Interactions characterized by sharing relevant information, being open to giving and receiving feedback, being forthcoming regarding motives and the reasoning behind decisions, and displaying alignment between words and actions" (p. 43). Transparency has also been proposed as a descriptive construct that relates to whether or not relevant information is made known to all interested parties (Vogelgesang & Crossley, 2006). When a leader is transparent, "followers come to know what the leader values and stands for, and that the leader understands who they are as well. Furthermore, if such insights reveal high levels of congruence between the attributes, values, and aspirations of both parties, the level of trust will deepen" (Avolio, Gardner, Walumbwa, Luthans, & May, 2004, p. 811).

This transparency component of authentic leadership has been described by Kernis (2003) as representing the valuing and striving for openness in one's relationships with others whereby the leaders and followers openly share information about each others' true thoughts and feelings. By creating higher levels of openness or transparency, the leader and followers are expected to have higher levels of trust in each other (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008).

In the current study, we will focus specifically on the component of leader transparency and how it relates to trust in the leader and the leader's perceived effectiveness, as it has been most consistently linked with the way effective leaders deal with traumatic organizational events such as an organizational downsizing (Cascio and Wynn, 2004, Mullaney, 1989 and Tourish et al., 2004). Preliminary evidence does support hypothesizing a positive link between a leader's level of transparency and trust. Specifically, in an experimental study where Vogelgesang (2007) examined the effects of violating a psychological contract with followers, it was found that leaders who were initially more transparent with their followers maintained higher levels of trust following the contract violation.

Leadership in the form of displaying higher levels of communication transparency is proposed to be related to trust and leader effectiveness during a downsizing event in two specific ways. First, such leaders have been defined as being aware of and acting in accordance with high moral and ethical values, while displaying specific behaviors and actions that are consistent with those high moral standards (Avolio and Luthans, 2006, Gardner et al., 2005, Kernis, 2003 and Luthans and Avolio, 2003). This consistency relative to behaviors and values is expected to positively relate to the leader being seen as more trustworthy (Mayer and Gavin, 2005 and Mayer et al., 1995). Furthermore, leaders who are open and who self-disclose are expected to instill higher levels of trust in their followers based on prior theory and research (Gardner et al., 2005, Hughes, 2005, Korsgaard et al.,

2002, Mayer and Gavin, 2005 and Rogers, 1987), particularly when dealing with difficult and challenging situations (Avolio & Luthans, 2006) such as would be found in an organizational downsizing.

Second, prior downsizing literature has stressed the importance of open and honest communication for subsequent effectiveness of those leaders going through these events (Appelbaum et al., 1999, Cascio and Wynn, 2004, DeMeuse et al., 1994, Mullaney, 1989 and Tourish et al., 2004). Based on reviews of past cases and research (Appelbaum et al., 1999 and Cascio and Wynn, 2004), it has been shown that organizations who kept employees well informed through an organizational downsizing event were rated as being much more effective by the survivors, or those who remained with their respective organizations (Mullaney, 1989 and Tourish et al., 2004). It would seem to follow that those leaders who communicate more transparently regarding a downsizing event (the context for the current investigation), should be rated as more effective. Thus, the following study hypotheses were derived:

Hypothesis 2a. The leader's exhibited communication transparency has a positive relationship with the participant's/follower's perceived trust in that leader.

Hypothesis 2b. The leader's exhibited communication transparency has a positive relationship with the participant's/follower's evaluation of the effectiveness of that leader.

Finally, since communication openness has been tied to more positive performance evaluations of leaders after a downsizing (Mullaney, 1989 and Tourish et al., 2004), we expected that this relationship should hold true in this study's context. Further, since positive psychological capacities have been found to be positively related with performance in previous research (Luthans, Avolio, et al., 2007), we expected that leaders who are viewed as being higher in both positive psychological capacities and transparency (Condition 1 in this study), would be rated more favorably than leaders in any other condition. This leads to our final study hypothesis:

Hypothesis 3. Evaluation of the leader's perceived effectiveness will be higher when the leader exhibits both high levels of communication transparency and positive psychological capacities than when the leader is rated higher in one but not the other.

3. Method

The field experiment utilized a 2×2 between groups design resulting in the creation of four leadership scenario conditions associated with a downsizing event: (1) a leader exhibiting high positive psychological capacity and high transparency; (2) a leader displaying low positive psychological capacity and high transparency; (3) a leader displaying high positive psychological

capacity and low transparency; and (4) a leader indicating low positive psychological capacity and low transparency.

3.1. Study sample

Participants in the field experiment were working adults, with a large representation (37%) coming from the information technology (IT) field. Initial contacts from our research team and then their respective network of contacts were asked to participate in the proposed study via an email using a snowball sampling strategy to recruit participants. Many of these contacts were either managers or business owners who also forwarded the email from the researcher to their organizations and outside contacts asking that they voluntarily participate in this field research project sponsored by the University. Included in the email was a hyper-link to a website where participants were first asked to consent and were assured confidentiality, and then they were presented with the randomly assigned experimental condition.

After examining all variables for outliers using the procedure outlined by Tukey and colleagues (Hoaglin, Mosteller, & Tukey, 1983), and after examining responses for completeness, 304 participants remained. These participants were 69% male and 31% female and 90% were based in the United States. Further, 89.5% identified themselves as White/Caucasian, 3.8% Hispanic/Latino, 1.9% African American/Black, 2.3% Asian/Pacific Islander, .4% American Indian/Alaskan Native, .8% Eastern Indian and 1.5% identified themselves as "Other". Participants had an average age of 47 years old and had an average of 26.31 years of work experience. Almost all (90%) had experienced an organizational downsizing event.

3.2. Pilot work

Several phases of pilot work preceded the final field experimental study. First, scripts were developed to create each of the manipulations or conditions. This was accomplished through an iterative process with personnel that have been through at least one downsizing event. The content from this phase of the pilot work was utilized to create the following: (a) the target leader's initial communication to the organization during his appointment as CEO, (b) BLOG entries designed to be from employees of the organization commenting on the leader, and (c) an email communication from the target leader regarding the current downsizing event. This input was used as the basis for creating the four experimental scenarios for each of the respective conditions.

In the next phase of the pilot work, the scripts created in step one were verified for content and face validity. Through a multi-phased process, a group of 17 leadership researchers were first shown all four versions of the manipulation scripts that had been created in Phase 1. After incorporating feedback from this expert panel, a group of 103 upper level undergraduate management students from a large Midwestern university were randomly presented all four versions of the manipulation scripts and were asked to describe the target leader in 2–3 words. Results indicated

support for the manipulation with approximately 80% of these participants “hitting” on the intended content. Examples of the specific scripts that resulted from this pilot testing that were utilized for each of the three manipulations are provided in Fig. 1 and are discussed in more detail below.

In the last phase of the pilot work, the functionality of the on-line data collection process was tested and verified. Another group of approximately 50 management students from a small western college went to the URL for the data collection site and went through the process to verify that the functionality worked. After the successful completion of this last phase of the pilot work, we proceeded to the experiment itself.

3.3. Procedures

After clicking on the link in the study solicitation e-mail, participants were first given the purpose of the study and why they were being asked to participate. They were also given some background on the research institute conducting the field study including its mission surrounding the study and practice of leadership. Following this introduction, participants were asked to confirm their voluntary participation in the study by checking the informed consent form.

The participants were then given a brief description of the fictitious organization’s name, size, and industry sector. For all participants, the target organization was described as being on the

verge of undergoing a downsizing event. Participants were shown a generic news release announcing the prior appointment of the target CEO to the organization. This leader was depicted as a male since male CEO’s comprise over 98% of CEO’s of the Fortune 500 companies and since the company described here was a high technology company and over 90% of the CEOs that run such companies in the United States are male (Kramer, 2006). The information given to all participants contained the leader’s name (Joe Miller), his tenure with the organization (since inception of the firm, 15 years ago), his current time in the role as CEO (4 years), and his former department and role (Director of Development). These descriptions were used to provide a common background on the organization and the leader that was consistent across all four conditions to create procedural equivalence.

Next, participants were randomly assigned to one of the four experimental conditions involving the leader’s high and low positive psychological capacities and transparency, respectively. Participants were shown the leader’s initial address to the organization from 4 years ago when the leader was appointed to the position of CEO with the four conditions being manipulated as part of the CEO’s address. For example, those assigned to the leader exhibiting high positive psychological capacity and high transparency were shown an initial communication from the leader that exuded higher levels of hope, optimism, resiliency and confidence, as well as a great deal of openness in terms of transparency.

Script samples utilized for manipulations

Manipulation 1: CEO’s initial organizational address

Our organization has managed difficulties one way or another before, and I am confident that we will successfully bounce back from this challenge as well. [Include in the high positive condition only]

This is a tough time for all of us with many difficulties and we will do the best we can to get through it. [Include in the non-positive condition only]

Once we have completed our planning process, we will provide copies of these plans for each of you, and will hold a series of employee forums to discuss the plans openly and to receive your feedback and guidance. [Include in the high transparency condition only]

We will need to keep these plans confidential at least for the foreseeable future as they contain strategic information that might disadvantage us with competitors. Once we have completed formulation of these plans, we will share what information we can. [Include in the non-transparency condition only]

Manipulation 2: Employees’ reactions to layoff news story

... our CEO has successfully recovered from setbacks at work before, and to be honest I think he can do it again. [high positive]

...our CEO has not successfully recovered from setbacks at work before, and I honestly don’t think he can do it again either. [low positive]

...this CEO does ask for suggestions and acts on criticisms. [high transparency]

...this CEO doesn’t ask for suggestions or act on criticisms. [low transparency]

Manipulation 3: Email communication from leader

Though this is a very difficult time for all of us, I know our organization will get through this, as we have in the past, and will rise successfully to the challenges that lie ahead. [high positive]

Though this is a very difficult time for all of us, I know we will all need to do our best to get through this tough situation, though there are challenges that lie ahead. [low positive]

It is important that we talk openly and freely in order to help each other get through these challenges. [high transparency]

Though we will try to share what information we can with you, our employees, we must be very careful regarding what information gets out. [low transparency]

Fig. 1. Script samples utilized for manipulations.

The CEO's speech was followed by all participants receiving a generic, unauthorized news story that was said to have run in the local newspaper. All were provided with the same information aimed at providing an independent view of the challenge confronting the organization and to reinforce that layoffs were eminent. Following the presentation of the news story, participants were then shown web logs (BLOGS) that had been created that were said to be from employees in the fictitious organization. Participants were told these BLOGS were in response to the story that appeared in the paper. The content of the BLOGS were specifically designed to reinforce the experimental conditions whereby one employee referred to the leader's level of optimism, one referred to the leader's level of resiliency, one referred to the leader's level of hope, one spoke to the leader's level of efficacy, and the last BLOG referred to the leader's level of openness or transparency. The content of these BLOGS differed depending on the condition to which the participant was randomly assigned. For example, the BLOG for the high positive psychological capacity and high transparency condition described the leader's high levels of confidence, hope, optimism, and resiliency, as well as his high degree of openness (i.e., transparency) that was specific to the news of the upcoming downsizing event that appeared in the paper.

Last, participants were shown an email communication from the leader that was intended to reinforce the specified condition concerning the degree of positive psychological capacity and level of transparency associated with the leader. For example, the leader in the high positive psychological capacity, high transparency condition said in the email that he was clearly hopeful for the future of the organization, would be resilient in getting through this adversity, was confident in his plans, skills, and organizational resources to succeed in this given situation, while also displaying a high level of optimism regarding the future prospects for the organization.

In the high transparency condition, the leader in this email provided specific information surrounding the reasons for the downsizing in order to disclose additional information to the hypothetical follower (i.e., the participant) as has been proposed in prior research (Appelbaum et al., 1999). All conditions had about the same length of message so as to minimize any perceived differences based on the quantity of information given.

Following their review of all of the materials described above, participants were then asked to complete several on-line survey measures described below. Finally, after completing these surveys, participants were asked if they would volunteer to enter into a BLOG their opinion of the leader they had read about and how he addressed the downsizing situation, as well as any suggestions to improve his leadership.

Preliminary pilot tests with these materials using another small group of experienced employees in the IT industry indicated that the downsizing scenario was perceived as being very realistic. These pilot participants also felt that the descriptions of the leader were also realistic, and conveyed the leader profiles as intended with the manipulations.

3.4. Measures of the independent variables

3.4.1. Positive psychological capacity

As one of several manipulation checks, participants were asked to rate the level of positive psychological capacity exhibited by the leader utilizing a 12 item version of the Psychological Capital Questionnaire or PCQ (Luthans et al., 2007 and Luthans et al., 2007). All items were rated on a 6-point Likert scale with the following anchors: 1 = Strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree, 6 = strongly agree. A sample item from the three efficacy items is: "This leader is confident in representing his organization." A sample item from the four hope items is: "This leader can think of many ways to reach his current work goals." A sample item from the three resiliency items is: "This leader appears to take stressful things at work in stride." Finally, a sample item from the two optimism items is: "This leader looks on the bright side of things regarding his job." The overall reliability for this 12 item PCQ was $\alpha = .93$.

3.4.2. Transparency

Transparency was also measured as a manipulation check utilizing five items from the authenticity scale developed and validated by Walumbwa et al. (2008). The transparency items were rated on a 5-point scale. An example item is: "This Leader: Says exactly what he/she means." The reliability for this scale was $\alpha = .88$.

3.5. Dependent variables

3.5.1. Trust

Though there are many trust scales found in the literature, Mayer and Gavin's (2005) 5-item trust measure was determined to be most relevant for the current study because it focuses on assessing participants' willingness to be vulnerable with their leader in a downsizing event where they would also be expected to feel more vulnerable. Participants were asked to respond to questions on the trust scale using 6 points with the following anchors: 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree, 6 = strongly agree. An example item is: "I would tell this leader about mistakes I've made on the job, even if they could damage my reputation." The reliability of this scale was $\alpha = .82$.

We also utilized Cummings and Bromiley's (1996) 12-item organizational trust inventory (OTI) for post-hoc analyses examining cognitive versus affective trust. Participants were asked to respond to questions on this trust scale using 6 points with the following anchors: 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree, 6 = strongly agree. An example item for affective trust is: "I feel that the leader will keep his word" and an example item for cognitive trust is "I think that the leader tells the truth." The overall 12-item scale had a reliability of $\alpha = .93$, the 6-item affective component scale had a reliability of $\alpha = .82$ and the 6-item cognitive component had a reliability of $\alpha = .88$.

We examined the relationship between the two trust measures utilized in our analyses described below (the OTI and Mayer & Gavin's, 2005 scale). The overall 12-item OTI was correlated at .77 ($p < .01$) with Mayer and Gavin's 5-item trust scale. Mayer & Gavin's 5-item trust scale was correlated .74 ($p < .01$) with the 6-item affective component scale of the OTI and .75 ($p < .01$) with the 6-item cognitive component scale of the OTI. Thus, both the affective and cognitive components seem to be represented in Mayer and Gavin's (2005) primary trust measure.

3.5.2. *Leader perceived effectiveness*

Relevant to the context of this study, participants were first asked to judge how competently the leader handled the downsizing situation with which he was faced using four items to evaluate the leader's effectiveness. Since we did not find any pre-existing scales that had evaluated a leader's performance in addressing downsizing events, and given the evaluative criteria suggested in prior downsizing literature as discussed below, the four items were constructed specifically for the current study given the uniqueness of the event in which the leader was being judged in terms of his performance.

First, since past literature has related communication effectiveness to successfully managing a downsizing event (Cascio and Wynn, 2004 and Tourish et al., 2004), the first item that was used to measure the leader was how effectively the leader communicated with his constituents. Next, participants evaluated whether the leader showed sensitivity to followers' needs, which has been tied to more effective downsizing events (Tourish et al., 2004). Specifically, participants were asked to judge the extent to which the leader appeared to understand what followers were going through and how he translated that understanding into fair treatment of employees.

Third, participants were asked to assess whether the leader addressed the important issues in the downsizing event. Prior research has reported (e.g., Appelbaum et al., 1999) that not only the *amount* of information was important, but the *type* of information was equally as important to the perceived effectiveness of leaders during downsizing events. Thus, we felt it was important to ask about the type of information provided.

Finally, participants were asked whether they would recommend the leader to a friend or close colleague. In other words, given the other related questions (i.e., if the leader was competent, sensitive to followers' needs, and provided important information), would participants recommend this leader to other colleagues. This was meant to examine whether participants would actually extend their commitment to the leader in a more tangible manner such as recommending them to a friend or colleague where their reputation might be affected, which we assumed would also be relevant to evaluating the leader's perceived effectiveness.

These four leader effectiveness items were then combined into a scale designed to measure overall leader effectiveness in the context of the study. All four items were rated on a 6-point scale with the following anchors: 1 = strongly

disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree, 6 = strongly agree. The reliability of this 4-item measure was $\alpha = .92$.

3.6. *Open-ended, qualitative questions*

After completing all of the above survey scales, participants were then asked to provide an entry that described in their own words their reactions to the leader. More specifically, participants were asked the following: "We would appreciate your now entering an anonymous blog entry to give feedback to the leader in the space provided. Please provide any specific feedback on how you felt the leader handled the situation and importantly how he can improve." The intent of this open-ended question was to examine the participant's willingness to take the time to comment on the respective leaders and show their support for the leader as well as to provide qualitative data that could provide additional insights into how they perceived and reacted to the leader. Further, participants were asked to "Please list 2–3 attributes that come to mind that characterize this leader" in order to provide a manipulation check on the transparency condition in order to further validate results obtained in this study.

3.7. *Control variables*

Given the nature of this study, we gathered data on various control variables from participants. First, we asked whether participants had previously been through a downsizing event to assess possible differences between those who had and had not been through a downsizing. To gather this data, participants were simply asked to respond "yes" if they had been through a downsizing and "no" if they had not. We also collected control data on participants' propensity to trust others using Jarvenpaa, Knoll and Leidner's (1998) 7-item propensity to trust measure. All items were rated on a 6-point agreement scale using the same anchors as describe above. A sample item is: "One should be very cautious when working with leaders" (reverse-coded). The reliability of this scale was $\alpha = .83$. Additionally, we controlled for the effects of demographic variables including age and gender, job type, job level, years of work experience, and whether the participant was U.S.-based.

4. Results

Before analyzing the results obtained, in addition to the data cleaning previously mentioned, we assessed the normality of the data as well as whether the homogeneity of variance assumption was met. Normality was assessed by examining skewness and kurtosis values for each variable included in the study. Without exception, all study variables were found to be well within acceptable values between +1 and -1 for both skewness and kurtosis. Next, since the homogeneity of variance assumption is critical for experimental designs, the data were examined for possible violation of the homogeneity of variance assumption. Both the

Box's M and Levene's homogeneity of variance tests were non-significant for each analysis, indicating that this assumption was met.

4.1. Manipulation checks

Before testing the study's hypotheses, we determined whether the manipulations had their intended effect. First, we manually went through each qualitative response that asked participants to openly describe what 2–3 attributes came to mind for the leader they were exposed to in each of the respective experimental scenarios. We counted each time that at least one of the 2–3 words matched the intended manipulation. This analysis indicated 77% of the participants properly identified at least one of the manipulated qualities for each condition. This was consistent with the approximately 80% hit rate from our pilot studies.

Next, to more stringently test the manipulation checks, a series of multivariate analyses of variance (MANOVA) were conducted for the overall model with both dependent variables entered at once with the four conditions as fixed (independent) factors (i.e., cell 1, cell 2, cell 3, cell 4). First, we found that there were significant mean differences resulting from the MANOVA for the full model test (Wilks' lambda = .54, $F(6, 502) = 29.73$, $p < .001$, partial $\eta^2 = .26$). A MANOVA was then conducted to examine the main effects for both independent variables with both dependent variables described above entered. Results indicated a significant main effect for the leadership manipulations with a Wilks' lambda of .65, $F(2, 251) = 68.32$, $p < .001$, partial $\eta^2 = .35$. The interaction effect was not significant, $F(2, 251) = .42$, $p = .66$, partial $\eta^2 = .00$. Therefore, the main effects were interpreted for both leader conditions with follow-up univariate analyses.

With positive psychological capacity as the dependent variable in the univariate analysis, we found significant main effects for leader positivity ($F(1, 252) = 128.60$, $p < .001$, partial $\eta^2 = .34$). There were also main effects for the transparency manipulations ($F(1, 252) = 41.90$, $p < .001$, partial $\eta^2 = .14$) when we examined transparency as the dependent variable.

Taken together, our results appear to support that our manipulations did produce the desired effects. Specifically, the mean ratings of positive psychological capital and transparency respectively were significantly higher in the conditions where we expected them to be higher based on the participants' ratings.

Finally, we examined whether the order in which the survey questions were presented to participants affected their responses. In order to minimize ordering effects, within each condition subjects were randomly assigned to one of two sub-conditions which differed from each other by the order in which questions were presented to participants with most questions given in reverse order within each sub-condition. Without exception, MANOVA tests showed no differences in the pattern of responses received between any of the sub-conditions. Therefore, the possibility of ordering effects appears to have been minimized.

4.2. Testing of hypotheses

Since the two dependent variables (participants' trust in the leader and overall effectiveness rating of the leader) were highly correlated in the current study ($r = .78$, $p = .001$), a 2 (high leader transparency/low leader transparency) \times 2 (high leader positive psychological capacity/low leader positive psychological capacity) MANOVA was conducted to test the overall main effects of leader positivity, leader transparency, and the possible interaction between these variables. Dependent on whether main or interaction effects were discovered, these analyses were followed by various univariate ANOVA's to explore any possible simple, main, or interactive effects.

First, for the overall model test with both ratings of trust in the leader and overall leader effectiveness entered simultaneously as the dependent variables and with the four conditions entered as the independent variables, there was a significant effect for the full model with a Wilks' lambda of .54 ($F(6, 502) = 29.73$, $p < .001$, partial $\eta^2 = .26$). These results indicate that there were mean differences across all four conditions relative to the two dependent variables.

Next, to examine main effects, with both ratings of trust in the leader and his overall effectiveness entered simultaneously as dependent variables, and the two main effects entered as the independent variables, a MANOVA yielded a statistically significant main effect for both leader positive psychological capacity (Wilks' lambda = .79, $F(2, 263) = 35.28$, $p < .001$, partial $\eta^2 = .21$) and leader transparency (Wilks' lambda = .92, $F(2, 263) = 10.76$, $p < .001$, partial $\eta^2 = .07$). The interaction effect was not significant ($F(2, 263) = .88$, $p = .42$, partial $\eta^2 = .01$), therefore, the main effects were interpreted for both leader positivity and transparency.

Univariate analyses (ANOVA) were then conducted for the positive psychological capacity conditions in order to examine simple effects, which yielded a significant effect for both ratings of trust in the leader ($F(1, 264) = 48.23$, $p < .001$, partial $\eta^2 = .15$) and the leader's effectiveness ($F(1, 264) = 68.88$, $p < .001$, partial $\eta^2 = .21$). Univariate analyses (ANOVA) were also conducted with the transparency conditions, which also yielded a significant effect for both trust in the leader ($F(1, 264) = 11.77$, $p < .01$, partial $\eta^2 = .04$) and the leader's effectiveness rating ($F(1, 264) = 21.59$, $p < .001$, partial $\eta^2 = .08$). Given that leader positive psychological capacities and leader transparency main effects were both significant, we next examined the results of testing for simple effects for each manipulated variable. These results are shown in Table 1.

Overall, the positive leader main effects were significant and descriptive across both high and low transparency conditions with both dependent variables of trust and leader effectiveness. Specifically, not only were all main effects highly significant ($p < .001$), but there were also cell differences within both the high transparency ($p < .001$) and the low transparency ($p < .001$) conditions between high and low leader positivity for both dependent variables of trust in the leader and ratings of overall leader effectiveness. Thus, the significant main effects were reproduced across all conditions.

Table 1. ANOVA means, standard deviations, and *F* values for the leader positivity and transparency conditions.

Dependent variables and conditions	Transparency		Positivity		F value
	High	Low	High	Low	
High transparency					
Trust in the leader			3.78 (.86)	3.21 (.80)	$F(1, 135) = 16.06, p < .001$
Leader effectiveness			4.17 (1.04)	3.29 (1.00)	$F(1, 135) = 25.64, p < .001$
Low transparency					
Trust in the leader			3.57 (.90)	2.70 (.85)	$F(1, 140) = 34.56, p < .001$
Leader effectiveness			3.71 (1.09)	2.56 (1.08)	$F(1, 145) = 41.40, p < .001$
High positivity					
Trust in the leader	3.78 (.86)	3.57 (.90)			$F(1, 136) = 1.96, p = .16$
Leader effectiveness	4.17 (1.04)	3.71 (1.09)			$F(1, 139) = 6.44, p = .01$
Low positivity					
Trust in the leader	3.21 (.80)	2.70 (.85)			$F(1, 139) = 13.02, p < .001$
Leader effectiveness	3.29 (1.00)	2.56 (1.08)			$F(1, 143) = 17.62, p < .001$

The transparency main effects were significant, but not descriptive with trust in the leader as the dependent variable. Though the main effect for transparency was significant ($p < .001$), this can be misleading when examining the level of trust in the leader since the difference between the high and low transparency cells were not significantly different from each other in the high leader positivity condition ($p = .16$). Transparency main effects were both significant and descriptive within both high and low leader positivity condition when the rating of the leader's effectiveness was the dependent variable.

To add further rigor to our hypotheses testing, a series of MANCOVA's were conducted to determine if the hypothesized control variables such as whether the participant had been through a downsizing event before, participant gender, age, and propensity to trust, as well as some ad-hoc control variables including participant's overall years of work experience, whether the participant was based in the U.S., and the participant's job type level. Without exception, none of the control variables had a significant effect on the results obtained in the above analyses, thus increasing confidence in the results obtained.

To summarize the results of our hypotheses tests, we found full support for Hypothesis 1a and Hypothesis 1b. Overall, the positive psychological capacity effects were significant for both the high and the low transparency conditions with both trust in the leader and leader effectiveness. Not only were all main effects highly significant (all at $p < .001$), but there were also cell differences (i.e., simple effects) within both the high transparency ($p < .001$) and the low transparency ($p < .001$) conditions between high and low positive psychological capacity for both dependent variables.

Next, we found support for both Hypothesis 2a and Hypothesis 2b. The main effects for transparency for both trust in the leader (Hypothesis 2a) and ratings of leader effectiveness (Hypothesis 2b) were significant. The transparency main effects were significant ($p < .001$) in the full model test for both dependent variables. However, as previously discussed, it should be noted that the results for Hypothesis 2a should be interpreted with caution since the differences for trust in the leader comparing the high and low transparency cells were not significantly different

from each other within the high positive psychological capacity condition. Although the main effects were significant for transparency, and the simple effects were significant for the low positive psychological capacity condition, the simple effects were not significant for the high positive psychological capacity condition.

Regarding Hypothesis 2b, transparency main effects were significant within both high and low positive psychological capacity conditions with the ratings of leader effectiveness. Therefore, both main effects and simple effects were significant for transparency with leader effectiveness rating as the dependent variable, thus supporting Hypothesis 2b.

Finally, support was found for Hypothesis 3. The cell with the leader who was high in both positive psychological capacity and transparency (Cell 1) had higher leader effectiveness ratings than any other cell.

4.3. Qualitative analysis of BLOG entries

Qualitative analyses were also conducted on the open-ended question that participants responded to through the BLOG entry. As previously indicated, at the end of the survey questions, participants were asked to volunteer a BLOG entry about the leader in the presented scenario. These qualitative data were first analyzed using an open coding process (Strauss & Corbin, 1998) to determine categories that could then be used for subsequent analyses such as determining positive versus negative comments. The data was then analyzed for volume by calculating the simple number and percentage of participants that entered information in this space for each of the four conditions to see if there were differences across cells.

Next, the data were analyzed to see whether the comments were positive, negative or neutral. The total number of participants entering responses that were clearly either positive (e.g., "The leader did a great job of explaining the current fiscal crisis at the company and how many options had been reviewed. He explained well that every 'headcount reduction' was losing a valuable person.") or negative (e.g., "This leader clearly will not be upfront or direct about anything in the works. There are no definite details or positives, just vague notions of 'maybes' and 'possibilities'") were totaled per cell. Responses that were considered

Table 2. Condition comparisons from qualitative analysis.

Condition	# of BLOG entries/ total subjects in condition (%)	% Positive entries	% Negative entries	% Neutral entries	Ratio of good comments to bad
High transparency/high positivity	48/72 (67%)	27	15	58	2:1
High transparency/low positivity	44/74 (59%)	9	86	5	1:9.5
Low transparency/high positivity	41/78 (53%)	17	59	24	1:3.5
Low transparency/low positivity	46/80 (58%)	4	93	3	1:22x

neutral (e.g., “What time frame will we be let go in?”) or that offered both support and criticism were omitted since they did not represent either a positive or negative feeling towards the leader.

As shown in Table 2, several patterns emerged from this qualitative data. First, as suggested by Strauss and Corbin (1998), inductive logic was utilized in order to determine categories of information. The data from the BLOG entries were coded line by line in order to see what patterns emerged both within and between the cells/conditions. The qualitative analysis software program Atlas/Ti was utilized in order to help capture the data and determine emergent categories. An independent investigator who had prior experience with qualitative methods conducted these analyses. This independent investigator did not have details as to which variables were being examined and what the qualitative data should include.

During the initial open coding process, data were examined line-by-line for similarities and differences. Overall, lack of transparency seemed to elicit higher negative reactions in this context. A matrix of impressions of the data was first created, which resulted in a broad array of descriptors for the comments. This resulted in 102 different dimensions for Cell 1 (high transparency/high positive psychological capacity), 76 for Cell 2 (high transparency/low positive psychological capacity), 53 for Cell 3 (low transparency/high positive psychological capacity), and 107 for Cell 4 (low transparency/low positive psychological capacity). Following Strauss and Corbin (1998), these comments were then organized across common dimensions to create the coding categories.

This qualitative analysis supported all of the experimental manipulations. Specifically, participants in the low transparency conditions commented on the need for open communication, while participants in the low positive psychological capacity conditions commented on the need for a more hopeful, confident, resilient, and optimistic leader. Participants in the low/low condition criticized the lack of openness by the leader as well as the lack of the leader's positivity (i.e., hope, confidence, optimism, and resilience) in their evaluations of both the leader's overall effectiveness and participants' trust in the leader.

Finally, the qualitative data were analyzed for overall volume of responses with the results shown in Table 2. Cell 1 presenting the high transparency/high positive psychological capacity leader did produce the most participants with BLOG entries as hypothesized. In addition, the positive comments received were also supportive of the manipulated dimensions. As expected, BLOG entries in Cell 1 where the leader was presented as exhibiting high transparency/high positive psychological capacity had more total entries and also entries that were more positive and less negative

than in any other cell. In addition, entries in Cell 4 (low transparency/low positive psychological capacity) were far more negative than in any other cell, though the condition with the high transparency/low positive psychological capacity also produced a high percentage of negative comments. Further, the low transparency conditions produced the most negative, fewest positive, and fewest neutral responses than did the other cells.

4.4. Affective versus cognitive trust

In addition to the quantitative and qualitative analyses conducted above, we did conduct post-hoc analyses aimed at exploring whether there were differences in any of the results specific to both affective and cognitive aspects of trust. First, data were analyzed to examine potential differences between cognitive and affective trust in the leader as dependent variables using both the leader's positivity and degree of transparency as the independent variables. We conducted the same initial MANOVA analyses as described above, but in these analyses we used affective and cognitive trust in the leader as dependent variables. To examine these differences, the previously discussed Organizational Trust Inventory (OTI; Cummings & Bromiley, 1996) was utilized.

First, a MANOVA was conducted to determine overall model effects. With both affective trust in the leader and cognitive trust in the leader entered simultaneously as the dependent variables and with the four main conditions entered as the independent variables, there was a significant effect across the full model with a Wilks' lambda of .85 ($F(6, 530) = 7.44, p < .001$, partial $\eta^2 = .08$). Therefore, there were significant mean differences across all four conditions to explore further.

With both affective trust in the leader and cognitive trust in the leader entered simultaneously as the dependent variables, and the two main effects for leader positivity and transparency entered as the independent variables, a MANOVA yielded a statistically significant main effect for positivity and transparency (Wilks' lambda = .91, $F(2, 265) = 13.85, p < .001$, partial $\eta^2 = .10$). Similar to our earlier findings, the interaction effect was not significant ($F(2, 265) = .13, p = .89$, partial $\eta^2 = .00$). Therefore, the main effects were interpreted separately for both leader positivity and transparency.

We conducted univariate analyses (ANOVA) including only the leader positivity conditions. This yielded a significant effect for both affective trust in the leader ($F(1, 266) = 22.59, p < .001$, partial $\eta^2 = .08$) and for cognitive trust in the leader ($F(1, 266) = 27.78, p < .001$, partial $\eta^2 = .10$).

Univariate analyses (ANOVA) were then conducted including the transparency conditions. This yielded a significant effect for both affective trust in the leader ($F(1, 266) = 17.33, p < .001$, partial $\eta^2 = .06$) and cognitive trust in the leader ($F(1, 266) = 12.39, p < .01$, partial $\eta^2 = .05$).

In summary, though we found many similarities with past results, there were also some interesting differences that were generated by our analyses. First, there were significant main effects for leader positivity with both affective and cognitive trust as the dependent variables. Moreover, this pattern was descriptive since the patterns held for both the high and the low transparency conditions. These findings were consistent with prior results. However, one difference in comparison to the results reported above using Mayer and Gavin's (2005) measure was that in the current analysis both affective and cognitive trust produced significant overall and simple effects for the respective transparency conditions. That is, the significant pattern of relationships held across the high and low leader positivity conditions for both measures of trust, whereas these relationships were not significant across both leader positivity conditions when examining trust using the Mayer and Gavin (2005) scale. In addition, there were differences in effects between the leader positivity and transparency conditions for both affective and cognitive trust. More specifically, leader positivity appeared to induce higher levels of cognitive trust ($F = 27.78$) as compared with affective trust ($F = 22.59$), whereas transparency induced higher levels of affective trust ($F = 17.33$) as compared to cognitive trust ($F = 12.39$).

5. Discussion

The main purpose of this study was to examine how leader positivity and transparency impacted participants' level of trust in the leader and the leader's perceived effectiveness. Our results support that both the level of transparency exhibited by the leader and the leader's level of positive psychological capacity each positively impacted both participants' rated trust and perceived effectiveness of their leaders. All study hypotheses were supported with leaders that were represented as being higher in both positive psychological capacity and transparency being rated as more effective than leaders in any other condition.

The between-groups experimental design set up initial equivalence across study participants based on random assignment to the experimental conditions. In addition, there was ongoing (procedural) equivalence across participants and treatments in that all four conditions were administered in parallel using the same procedures. All of the background information and context given to study participants was the same for all conditions. Analyses indicated that the manipulations had the intended impact, and none of the control variables impacted the pattern of results. For example, trust has been said to consist of two factors: one's propensity to trust and one's expectations about a trustee's future behavior (Mayer et al., 1995). By controlling for the participants' propensity to trust, this adds further support that the effects observed in the current study were a result of participant evaluations of the respective leaders presented in this study. In total, the study results contribute

evidence regarding the important role that expressed positive psychological capacity and transparency plays in the trust and effectiveness attributed to leaders attempting to deal with a challenging event such as organizational downsizing.

5.1. Study limitations

Though the study design offers benefits to the research process used and more confidence in the findings, there are also some potential limitations. First, participants were not actual followers of the leader and were asked to judge the leader on the relatively limited amount of information provided in the study. Consequently, the trust participants rated across the different leadership scenarios may be based on first impression or considered a type of 'swift trust' (Meyerson, Weick, & Kramer, 1996). Thus, the current findings may not generalize to more typical situations where followers have more interaction time and history with the leader.

Another limitation associated with the participants not being the actual followers of the leader is that there were no real consequences of the leader's actions. However, it should be noted that participants were willing to voluntarily enter more BLOG entries, as well as a significantly larger amount of support for the high positive psychological capacity and more transparent leader, when given the voluntary opportunity to do so in the current experiment. Therefore, perhaps this limitation is minimized.

Another possible limitation with the current study concerned the high correlation between both dependent measures ($r = .78, p < .001$). In order to examine the overlap between the two variables, we conducted an exploratory principal component factor analysis (PCA) simultaneously entering all five trust and the four leadership effectiveness questions. This analysis appeared to produce one factor with an eigen value of 5.47 versus the next factor, which had an eigen value of .84. Thus, there seems to be some factor overlap which should be recognized.

The single factor may be due in part to the overlap in the constructs measured by these scales, as well as to the reliance on a single source, common method and data, which was collected at the same time from participants. Consequently, even though we did find some differences when using trust and effectiveness as our dependent variables, these findings should be interpreted with some caution given the post hoc results presented above. Future research may want to separate these two measures over time to determine whether the observed relationship between ratings of trust in the leader and effectiveness can be lowered.

Although more and more interactions between leaders and followers are occurring virtually (Rousseau & McCarthy, 2007), another possible limitation to the generalizability of our findings to face to face interactions is that this experiment was conducted on line. Perhaps participant responses would have been different if this study was conducted face to face either in a laboratory or field setting where participants had an opportunity to interact with the leader. For example, variables that may affect perceptions of the leader, such as non-verbal behavior, were excluded from this study's depictions of the leader.

Another possible limitation to the current study involves

potential demand effects that could have biased our results. For example, it is certainly possible that the pattern of results obtained in this study were at least partially influenced by participants' perception of the intention of this experimental exercise. However, in order to prepare participants for the study and to attempt to minimize such effects, we did provide information to each participant to explain the primary purpose of the study and to solicit their honest reactions given they would remain anonymous and confidential. Nevertheless, we cannot rule out that demand effects were not present and impacted the pattern of results obtained in the current study.

A final limitation was in the use of a snowball sampling method. In other words, by utilizing direct and indirect contacts in the manner that we did, and due to the large number of participants from the information technology field, it is possible that non-response bias was introduced and we recognize this limitation. However, we tested the representativeness of this sample through various methods mentioned previously and results generally supported the representativeness of the desired sample. Further, the use of the snowball sampling method has been supported as an appropriate and valid sampling method in past studies (Liu et al., 2004 and Treadway et al., 2005). Therefore, though the limitation of this sampling technique is recognized, we hope to have minimized any possible adverse impact on this study.

5.2. Theoretical implications and future research

This study provides several significant implications for future theory building and research. First, the study extends theory relative to trust by examining it as an outcome of variables not previously studied. In particular, positivity as identified and measured by hope, efficacy, optimism, and resilience (Luthans et al., 2007 and Luthans et al., 2007) has not been tested as causal variables impacting the trust one has in a leader.

Also, this study adds to other literature on trust by examining both cognitive and affective trust (Colquitt et al., 2007, Cummings and Bromiley, 1996, Lewis and Weigert, 1985 and McAllister, 1995). In terms of examining cognitive versus affective trust, we did find in post-hoc analyses conducted using Cummings and Bromiley's (1996) organizational trust inventory, that there were some interesting differences across the various leadership conditions. It appeared based on results obtained, that cognitive trust was more directly associated with the leader's level of positive psychological capacity and affective trust was more directly related with the leader's level of transparency.

Given the differences between affective and cognitive trust that we found, it is possible that the causal mechanism impacting each form of trust may be different. For example, affective trust may be more influenced by one's emotions, which has been suggested to be instrumental in experiencing deeper levels of trust (Flores and Solomon, 1998 and Jones and George, 1998). It is also possible that the differences reported here between the effects of leader positivity and transparency with trust might be due in part to highly positive and transparent leaders being viewed as more believable. These results offer some preliminary support for there being differences between cognitive and affective trust in terms of how

individuals are judged by others (Colquitt et al., 2007 and Mayer et al., 1995). Future research might explore how the positive and authentic qualities of leaders may manifest in both the cognitive and affective trust levels leaders receive from followers.

In addition to extending trust research, the current study also has implications for both the recently emerging work on positive psychological capacities (Luthans et al., 2007 and Luthans et al., 2007) and authentic leadership (Avolio and Gardner, 2005, Avolio and Luthans, 2006, Avolio et al., 2004 and Luthans and Avolio, 2003). By examining leader positive psychological capacity with new outcomes such as trust and leadership effectiveness, the current study expands the nomological network of constructs previously reported. For example, even though a leader's positive psychological capacities have been shown to be related to employee performance and satisfaction (Luthans, Avolio, et al., 2007), they have not been directly linked with an individual's trust in their leader nor the leader's perceived effectiveness.

As for authentic leadership, leader authenticity and communication transparency has been theoretically linked with follower trust (Gardner et al., 2005, Hughes, 2005, Korsgaard et al., 2002, Mayer and Gavin, 2005 and Rogers, 1987), but there is still limited empirical support for this relationship (Vogelgesang & Crossley, 2006). This study found that leaders who gave participants more information (that is, they disclosed more, or were more transparent in their communications) appeared to instill higher levels of trust in participants/followers who were asked to judge the leader's actions. Thus, these findings confirm theoretical propositions from past research regarding the disclosure of information to others and the level of trust that develops. More specifically, the current study empirically confirms prior theorizing relative to the benefits of exhibiting transparency in terms of authentic leadership (e.g., Gardner et al., 2005) by examining how transparency relates to trust during an organizational downsizing event. Further, it is interesting that positivity seemed to lead to higher levels of trust than transparency based on overall effect sizes. These results should be explored in further research in an attempt to parse out the independent effects of each construct. It is possible that the degree of leader positivity makes leaders more believable to followers, but this cannot be determined with certainty in the current study.

Still another avenue for future research is the need to determine whether a leader's positive psychological capacity and transparency lead directly to follower trust, or whether they lead to indirect trust mechanisms that lead to trust (i.e., trustworthiness). It is possible that the levels of trust followers felt toward the leaders depicted in this study were influenced by trustworthiness factors such as competence (Mayer et al., 1995). Given the current distinction in the trust literature specific to trust versus trust mechanisms or trustworthiness (e.g., Colquitt et al., 2007), there are potential implications for the relationship found in this study between both positive leader psychological capacities and transparency relative to trust that should be further explored.

In addition, it would be interesting to conduct a laboratory study in order to attempt to replicate the results obtained here. Such a study would strengthen the results obtained here by attempting to replicate the findings in a different and more

controlled setting where relationships and individual impact of each factor can be further explored. It is through conducting such research that these results can be validated and the boundaries of related theoretical models can be explored.

Another potential area for future research is to examine the links between leader positivity, transparency, interactional and procedural justice. The interactional justice literature is closely aligned with the type of work reported here that relates to leadership issues (e.g., see van Knippenberg, De Cremer, & van Knippenberg, 2007). Also, there is both theoretical and empirical support linking interactional justice with levels of trust in the leader (Leung et al., 2001, Ramaswami and Singh, 2003 and Stinglhamber et al., 2006) as well as with both satisfaction with the leader and openness to negative feedback (Leung et al., 2001).

Procedural justice has also been related to the level of trust one has in leaders (Folger and Konovsky, 1989 and Ramaswami and Singh, 2003). It has also been suggested as a key determinant in evaluating overall leadership effectiveness (van Knippenberg et al., 2007) as well as impacts on follower self-esteem and positivity (De Cremer, van Knippenberg, van Knippenberg, Mullenbers, & Stinglhamber, 2005). We would expect both interactional and procedural justice to be highly relevant to how participants react to a leader's actions during a downsizing event. Indeed, the transparency construct is certainly similar to these justice variables in that they too promote follower input into decision-making, while informing them of decision procedures. It is therefore possible that participants in the current study were judging the leader in part based on how they viewed their use of interactional and procedural justice, which we were not able to measure in the present study. Clearly, future research needs to examine the combined effects of transparency, positivity and justice when leaders are dealing with adverse situations such as downsizing.

Finally, by empirically linking transparency with trust, prior research indicating that individuals trust leaders who are more transparent and open about their decision-making process was supported (Baum, Locke, & Kirkpatrick, 1998). Further support can be leveraged from the downsizing literature where communication transparency has been linked with firms being able to better manage the downsizing process and at the same time maintain more favorable reputations (Kammeyer-Mueller & Liao, 2006). Thus, the positive impact of transparency of leaders in such contexts was supported in the current study.

5.3. Practical implications and conclusion

Results of this study have several practical implications. First, the findings offer practical guidelines for how leaders should approach organizational downsizing. Although the importance of open and honest communication by an organization's leadership for those organizations going through downsizing events is widely advocated (Appelbaum et al., 1999, Cascio and Wynn, 2004, DeMeuse et al., 1994, Mullaney, 1989 and Tourish et al., 2004), empirical support has been sparse. Therefore, by providing empirical evidence for the relationship between leader transparency and followers' trust in that leader, the importance of leaders being very transparent and open before and during downsizing activities is underscored.

Additionally, the importance of transparency in business transactions has been underscored with the passage of the Sarbanes-Oxley bill of 2002. Sarbanes-Oxley places requirements for increased disclosure by an organization's leadership, thus encouraging greater transparency. By showing in this study that leader transparency was strongly related with participant trust in the leader, there are potential benefits in meeting the spirit (as well as the letter) of the law by increasing the transparency level exhibited by leaders, especially during times of organizational turmoil.

Another important practical consideration is that both the positive psychological capacities and transparency constructs manipulated in the current study have been described and measured as being "state-like" constructs (Luthans et al., 2007 and Luthans et al., 2007). Unlike traits, these state-like constructs are more easily developed and therefore another practical implication is that leaders can be developed to exhibit higher levels of positive psychological capacities and transparency, with the expectation that such increases in each of those states could result in higher levels of trust and perceived effectiveness.

In conclusion, the results of this study not only provide added support for the value of leaders being more transparent to buffer the negative effects of downsizing, the findings also for the first time offer empirical evidence of the importance of leaders also being positive in terms of their confidence, hope, optimism, and resiliency in a downsizing context. Based on the study results, we would suggest that the most important practical guideline for leaders to follow during an organizational downsizing would be the following: With followers, leaders need to be very transparent and in addition be confident in themselves, hopeful of the future with both the desire to succeed and a plan to accomplish that success, optimistic toward the future, and demonstrate their resilience to bounce back and beyond. Followers who perceive their leaders to be transparent and positive seem to trust them and judge them to be effective in leading them through challenging times.

References

- Appelbaum et al., 1999 • S.H. Appelbaum, A. Everard, L.T.S. Hung Strategic downsizing: Critical success factors *Management Decision*, 37 (7) (1999), pp. 535–552
- Avolio and Gardner, 2005 • B.J. Avolio, W.L. Gardner Authentic leadership development: Getting to the root of positive forms of leadership *The Leadership Quarterly*, 16 (3) (2005), pp. 315–338
- Avolio et al., 2004 • B.J. Avolio, W.L. Gardner, F.O. Walumbwa, F. Luthans, D.L. May Unlocking the mask: A look at the process by which authentic leaders impact follower attitudes and behaviors *The Leadership Quarterly*, 15 (2004), pp. 801–823
- Avolio and Luthans, 2006 • B.J. Avolio, F. Luthans The high impact leader: Moments matter for accelerating authentic leadership development McGraw-Hill, New York, NY (2006)
- Bandura, 1997 • A. Bandura Self-efficacy: The exercise of control Freeman, New York, NY (1997)
- Baum et al., 1998 • J.R. Baum, E.A. Locke, S.A. Kirkpatrick A longitudinal study of the relation of vision and vision communication to venture growth in entrepreneurial firms *Journal of Applied Psychology*, 83 (1) (1998), pp. 43–54

- Bryant and Cvengros, 2004 • F.B. Bryant, J.A. Cvengros Distinguishing hope and optimism *Journal of Social and Clinical Psychology*, 11 (2004), pp. 273–302
- Burke and Wilcox, 1969 • R.J. Burke, D.S. Wilcox Effects of different patterns and degrees of openness in superior-subordinate communications on subordinate job satisfaction *Academy of Management Journal*, 12 (1969), pp. 319–326
- Carifio and Rhodes, 2002 • L. Carifio, L. Rhodes Construct validities and the empirical relationships between optimism, hope, self-efficacy, and locus of control *Work*, 19 (2002), pp. 125–136
- Cascio and Wynn, 2004 • W.F. Cascio, P. Wynn Managing a downsizing process *Human Resource Management*, 43 (4) (2004), pp. 425–436
- Colquitt et al., 2007 • J.A. Colquitt, B.A. Scott, J.A. LePine Trust, trustworthiness, and trust propensity: A meta-analytic test of their unique relationship with risk taking and job performance *Journal of Applied Psychology*, 92 (4) (2007), pp. 909–927
- Connell et al., 2003 • J. Connell, N. Ferres, T. Travaglione Engendering trust in manager-subordinate relationships: Predictors and outcomes *Personnel Review*, 32 (5) (2003), pp. 569–587
- Corbitt and Martz, 2003 • G. Corbitt, B. Martz Groupware case studies: Trust, commitment, and the free expression of ideas *Team Performance Management*, 9 (1/2) (2003), pp. 16–22
- Costa, 2003 • A.C. Costa Work team trust and effectiveness *Personnel Review*, 32 (5) (2003), pp. 605–622
- Cummings and Bromiley, 1996 • L.L. Cummings, P. Bromiley The Organizational Trust Inventory (OTI): Development and validation R. Kramer, T. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research*, Sage, Thousand Oaks, CA (1996), pp. 302–330
- De Cremer et al., 2005 • D. De Cremer, B. van Knippenberg, D. van Knippenberg, D. Mullenders, F. Stinglhamber Rewarding leadership and fair procedures as determinants of self-esteem *Journal of Applied Psychology*, 90 (2005), pp. 3–12
- DeMeuse et al., 1994 • K.P. DeMeuse, Vanderheiden, T.J. Bergmann Announced layoffs: Their effect on corporate financial performance *Human Resource Management*, 33 (4) (1994), pp. 509–530
- Dirks and Ferrin, 2002 • K.T. Dirks, D.L. Ferrin Trust in leadership: Meta-analytic findings and implications for research and practice *Journal of Applied Psychology*, 87 (2002), pp. 611–628
- Driscoll, 1978 • J.W. Driscoll Trust and participation in organizational decision making as predictors of satisfaction *Academy of Management Journal*, 21 (1) (1978), pp. 44–56
- Flores and Solomon, 1998 • F. Flores, R.C. Solomon Creating trust *Business Ethics Quarterly*, 8 (2) (1998), pp. 205–232
- Folger and Konovsky, 1989 • F. Folger, M.A. Konovsky Effects of procedural and distributive justice on reactions to pay raise decisions *Academy of Management Journal*, 32 (1989), pp. 115–130
- Gardner et al., 2005 • W.L. Gardner, B.J. Avolio, F. Luthans, D.R. May, F.O. Walumbwa Can you see the real me? A self-based model of authentic leader and follower development *The Leadership Quarterly*, 16 (3) (2005), pp. 343–372
- George, 2003 • W. George Authentic leadership: Rediscovering the secrets to creating lasting value Jossey-Bass, San Francisco (2003).
- Gross, 2002 • C.U. Gross Managing communication within virtual intercultural teams *Business Communication Quarterly*, 65 (4) (2002), pp. 22–38
- Haney, 1967 • W.V. Haney Communication and organizational behavior: Text and cases (2nd ed.) Richard D. Irwin, Homewood, IL (1967)
- Hoaglin et al., 1983 • D.C. Hoaglin, F. Mosteller, J.W. Tukey Understanding robust and exploratory data analysis Wiley, New York, NY (1983)
- Hughes, 2005 • Hughes, L.W. (2005). The spirit of GIVE: Relational transparency and humor in authentic leader-follower relationships. In W.L. Gardner & B.J. Avolio (Eds.), *Authentic leadership development: Monographs in leadership and management series* (vol. 3), Boston, MA: Elsevier, JAI Press.
- Ilies et al., 2005 • R. Ilies, F.P. Morgeson, J.D. Nahrgang Authentic leadership and eudaemonic well-being: Understanding leader-follower outcomes *The Leadership Quarterly*, 16 (2005), pp. 373–394
- Jarvenpaa et al., 1998 • S.L. Jarvenpaa, K. Knoll, D.E. Leidner Is anybody out there? *Journal of Management Information Systems*, 14 (4) (1998), pp. 29–64
- Jones and George, 1998 • R. Jones, J.M. George The experience and evolution of trust: Implications for cooperation and teamwork *Academy of Management Review*, 23 (3) (1998), pp. 531–546
- Kammeyer-Mueller and Liao, 2006 • J. Kammeyer-Mueller, H. Liao Workforce reduction and job-seeker attraction: Examining job seekers' reactions to firm workforce-reduction policies *Human Resource Management*, 45 (4) (2006), p. 585
- Kasper-Fuehrer and Ashkanasy, 2001 • E.C. Kasper-Fuehrer, N.M. Ashkanasy Communicating trustworthiness and building trust in inter-organizational virtual organizations *Journal of Management*, 27 (2001), pp. 235–254
- Kay and Christophel, 1995 • B. Kay, D.M. Christophel The relationships among manager communication openness, nonverbal immediacy, and subordinate motivation *Communication Research Reports*, 12 (1995), pp. 200–205
- Kernis, 2003 • M.H. Kernis Toward a conceptualization of optimal self-esteem *Psychological Inquiry*, 14 (2003), pp. 1–26
- Klauss and Bass, 1982 R. Klauss, B.M. Bass *Interpersonal communication in organizations* Academic Press, New York, NY (1982)
- Korsgaard et al., 2002 • M.A. Korsgaard, S.E. Brodt, E.M. Whitener Trust in the face of conflict: The role of managerial trustworthy behavior and organizational context *Journal of Applied Psychology*, 87 (2) (2002), pp. 312–319
- Kramer, 2006 • Kramer, H. (2006). A woman's place is in the corner office. Retrieved from: http://money.aol.com/investing/hillaryonstocks/canvas/_a/a-womans-place-is-in-the-corner-office/20060305155809990001.
- Leung et al., 2001 • K. Leung, S. Su, M.W. Morris When is criticism not constructive? The roles of fairness perceptions and dispositional attributions in employee acceptance of critical supervisory feedback *Human Relations*, 54 (2001), pp. 1155–1187
- Lewis and Weigert, 1985 • J.D. Lewis, A. Weigert Trust as a social reality *Social Forces*, 63 (1985), pp. 967–98.
- Likert, 1967 • R. Likert The human organization McGraw-Hill, New York, NY (1967)
- Liu et al., 2004 • Y. Liu, P.L. Perrewe, W.A. Hochwarter, C.J. Kacmar Dispositional antecedents and performance-related consequences of emotional labor at work *Journal of Leadership & Organizational Studies*, 10 (2004), pp. 12–25
- Luthans, 2002a • F. Luthans The need for and meaning of positive organizational behavior *Journal of Organizational Behavior*, 23 (2002), pp. 695–706
- Luthans, 2002b • F. Luthans Positive organizational behavior: Developing and managing psychological strengths *Academy of Management Executive*, 16 (1) (2002), pp. 57–72
- Luthans and Avolio, 2003 • F. Luthans, B.J. Avolio Authentic leadership: A positive developmental approach K.S. Cameron, J.E. Dutton, R.E. Quinn (Eds.), *Positive organizational scholarship*, Barlett-Koehler, San Francisco, CA (2003), pp. 241–261
- Luthans et al., 2007 • Luthans, B.J. Avolio, J.B. Avey, S.M. Norman Psychological capital: Measurement and relationship with performance and satisfaction *Personnel Psychology*, 60 (2007), pp. 541–572

- Luthans and Youssef, 2007 • F. Luthans, C.M. Youssef Emerging positive organizational behavior *Journal of Management*, 33 (2007), pp. 321–349
- Luthans et al., 2007 • F. Luthans, C.M. Youssef, B.J. Avolio Psychological capital Oxford University Press, Oxford, UK (2007)
- Magaletta and Oliver, 1999 • P.R. Magaletta, J.M. Oliver The hope construct, will, and ways: Their relations with efficacy, optimism, and general well-being *Journal of Clinical Psychology*, 55 (1999), pp. 539–551
- Masten and Reed, 2002 • A.S. Masten, M.G.J. Reed Resilience in development C.R.E.L. Snyder, S.J. Lopez (Eds.), *Handbook of positive psychology*, Oxford University Press, London (2002), pp. 74–88
- Mayer et al., 1995 • R.C. Mayer, J.H. Davis, F.D. Schoorman An integrative model of organizational trust *Academy of Management Review*, 20 (3) (1995), pp. 709–734
- Mayer and Gavin, 2005 • R.C. Mayer, M.B. Gavin Trust in management and performance: Who minds the shop while the employees watch the boss? *Academy of Management Journal*, 48 (5) (2005), pp. 874–888
- McAllister, 1995 • D.J. McAllister Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations *Academy of Management Journal*, 38 (1) (1995), pp. 24–59
- Meyerson et al., 1996 • D. Meyerson, K. Weick, R. Kramer Swift trust and temporary groups R. Kramer, T. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research*, Sage, Thousand Oaks, CA (1996), pp. 166–195
- Mishra et al., 1998 • K.E. Mishra, G.M. Spreitzer, A.K. Mishra Preserving employee morale during downsizing *Sloan Management Review*, 39 (2) (1998), pp. 83–95
- Mullaney, 1989 • A. Mullaney Downsizing: How one hospital responded to decreasing demand *Health Care Management Review*, 14 (1989), pp. 41–48
- Myers et al., 1999 • S.A. Myers, R.L. Knox, D.R. Pawlowski, B.L. Ropog Perceived communication openness and functional communication skills among organizational peers *Communication Reports*, 12 (2) (1999), pp. 71–83
- Nelson and Cooper, 2007 • D. Nelson, C. Cooper (Eds.), *Positive organizational behavior*, Sage, Thousand Oaks, CA (2007)
- Ramaswami and Singh, 2003 • S.N. Ramaswami, J. Singh Antecedents and consequences of merit pay fairness for industrial salespeople *Journal of Marketing*, 67 (2003), pp. 46–66
- Rogers, 1987 • D.P. Rogers The development of a measure of perceived communication openness *The Journal of Business Communication*, 24 (4) (1987), pp. 53–61
- Rousseau and McCarthy, 2007 • D.M. Rousseau, S. McCarthy Educating managers from an evidence-based perspective *Academy of Management Learning & Education*, 6 (1) (2007), pp. 84–101
- Rousseau et al., 1998 • D.M. Rousseau, S.B. Sitkin, R.S. Burt, C. Camerer Not so different after all: A cross-discipline view of trust *Academy of Management Review*, 23 (1998), pp. 393–404
- Schneider, 2001 • S.I. Schneider In search of realistic optimism *American Psychologist*, 56 (2001), pp. 250–263
- Scott, 1980 • C.L. Scott Interpersonal trust: A comparison of attitudinal and situational factors *Human Relations*, 33 (11) (1980), pp. 805–813
- Seligman, 1998 • M.E.P. Seligman *Learned optimism* Pocket Books, New York, NY (1998)
- Seligman and Csikszentmihalyi, 2000 M.E.P. Seligman, M. Csikszentmihalyi *Positive psychology* *American Psychologist*, 55 (2000), pp. 5–14
- Snyder et al., 1991 • C.R. Snyder, L. Irving, J. Anderson Hope and health: Measuring the will and the ways C.R. Snyder, D.R. Forsyth (Eds.), *Handbook of social and clinical psychology*, Pergamon, Elmsford, NY (1991), pp. 285–305
- Snyder and Lopez, 2002 • C.R. Snyder, S. Lopez *Handbook of positive psychology* Oxford University Press, Oxford, UK (2002)
- Stajkovic and Luthans, 1998 • A. Stajkovic, F. Luthans Self-efficacy and work-related performance: A meta-analysis *Psychology Bulletin*, 124 (1998), pp. 580–590
- Stinglhamer et al., 2006 • F. Stinglhamer, D. De Cremer, L. Mercken Perceived support as a mediator of the relationship between justice and trust: A multiple foci approach *Group and Organization Management*, 31 (2006), pp. 442–468
- Strauss and Corbin, 1998 • A. Strauss, J. Corbin *Basics of qualitative research: Techniques and procedures for developing grounded theory* Sage, Thousand Oaks (1998)
- Tourish et al., 2004 • D. Tourish, N. Paulsen, E. Hobman, P. Bordia The downsides of downsizing: Communication processes and information needs in the aftermath of a workforce reduction strategy *Management Communication Quarterly*, 17 (4) (2004), pp. 485–516
- Treadway et al., 2005 • D.C. Treadway, G.R. Ferris, W.A. Hochwarter, P.L. Perrewe, L.A. Witt, J.M. Goodman The role of age in the perceptions of politics-job performance relationship: A three-study constructive replication *Journal of Applied Psychology*, 90 (2005), pp. 872–881
- van Knippenberg et al., 2007 • D. van Knippenberg, D. De Cremer, B. van Knippenberg Leadership and fairness: The state of the art *European Journal of Work and Organizational Psychology*, 16 (2) (2007), pp. 113–140
- Vogelgesang, 2007 • G.R. Vogelgesang The impact of relational transparency on trust under changing conditions *Academy of Management National Conference* (2007) Philadelphia, PA
- Vogelgesang, 2008 • G.R. Vogelgesang (2008). How leader interactional transparency can impact follower psychological safety and role engagement. Unpublished Dissertation, University of Nebraska – Lincoln, Lincoln.
- Vogelgesang and Crossley, 2006 • G.R. Vogelgesang, C.D. Crossley Toward an understanding of interactional transparency *Gallup Leadership Summit* (2006) Washington, D.C.
- Walumbwa et al., 2008 • F.O. Walumbwa, B.J. Avolio, W.L. Gardner, T.S. Wernsing, S.J. Peterson Authentic leadership: Development and validation of a theory-based measure *Journal of Management*, 34 (2008), pp. 89–126
- Weiss et al., 2002 • W.H. Weiss Organizing for quality, productivity, and job satisfaction *Supervision*, 63 (2) (2002), pp. 13–15
- Whitener et al., 1998 • E. Whitener, S. Brodt, M.A. Korsgaard, J. Werner Managers as initiators of trust: An exchange relationship framework for understanding managerial trustworthy behavior *Academy of Management Review*, 23 (1998), pp. 513–530
- Wilson and Malik, 1995 • D.O. Wilson, S.D. Malik Looking for a few good sources: Exploring the intra-organizational communication linkages of first line managers *Journal of Business Communication*, 32 (1995), pp. 31–48
- Wright, 2003 • T.A. Wright Positive organizational behavior: An idea whose time has truly come *Journal of Organizational Behavior*, 24 (2003), pp. 437–442