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Elevation at work: The effects of leaders' moral excellence

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Leaders influence followers in many ways; one way is by eliciting positive emotions. In three studies we demonstrate that the nearly unstudied moral emotion of 'elevation' (a reaction to moral excellence) mediates the relations between leaders' and their followers' ethical behavior. Study 1 used scenarios manipulated experimentally; study 2 examined employees' emotional responses to their leaders in a natural work setting; study 3 compared the effects of elevation to those of happiness, serenity, and positive affect. We found that leaders' interpersonal fairness and self-sacrifice are powerful elicitors of elevation, and that this emotion fully mediates leaders' influence on followers' organizational citizenship behavior and affective organizational commitment. In the first study, we also observed a moderation effect of interpersonal fairness on self-sacrifice. Results underline the importance of positive moral emotions in organizations and shed light on the emotional process by which ethical leaders can foster positive organizational outcomes.

Keywords: elevation; leader self-sacrifice; interpersonal fairness; organizational citizenship behavior; organizational commitment

Introduction

Ethical issues are perennially important in leadership studies. Several high-profile ethical scandals (such as Enron), as well as the role of ethically suspect practices in bringing about the worldwide collapse of financial institutions in 2008, have made the relationship between ethics and leadership an even more pressing area for research. Many hypotheses have been brought forward in order to understand how leaders can foster moral behaviors among employees and organizations.

When he originally introduced transformational leadership, Burns (1978) explicitly relied on Kohlberg's (1969) theory of cognitive moral development, arguing that transformational leaders move followers to higher stages of moral reasoning. Later on, the morality of transformational leadership was seriously questioned. Each of the four components of the construct of transformational leadership – idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass, 1985, 1998; Bass & Avolio, 1993) – has an ethical dimension but, as Bass and Steidlmeier (1999) recognized, is in itself morally neutral. Howell and Avolio (1992) demonstrated that transformational leaders might act both ethically and unethically, depending on what values are embedded in their vision and program.

In response, Bass and Steidlmeier (1999, p. 184) proposed a distinction between authentic and pseudo-transformational leadership, arguing that 'authentic transformational leadership must rest on a moral foundation of legitimate values.' Authentic transformational leaders are committed to moral values, such as fairness and human rights, and concerned about the common good, while pseudo-transformational leaders are self-interested and, consciously or unconsciously, act in bad faith. Some empirical evidence supports the notion that authentic transformational leadership is grounded in a moral foundation and is consistent with an ethical leadership style. For instance, it has been shown to be related to the perception of leader's moral integrity (Parry & Proctor-Thomson, 2002) and to leader's moral reasoning (Turner, Barling, Epitropaki, Butcher, & Milner, 2002).

Other models of leadership have been introduced which narrow the focus on ethical issues. Luthans and Avolio (2003) proposed authentic leadership as a separate construct placed at the confluence of positive organizational behavior and transformational leadership. Authentic leaders are defined as true to themselves, reliable, trustworthy, transparent, committed to followers' development, and moral/ethical. Authentic leaders are guided by positive moral values and are capable of judging ambiguous ethical issues.

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Specifically developed to understand the effects of ethical leaders on employees, the construct of ethical leadership (Brown & Treviño, 2006; Treviño & Brown, 2007; Treviño, Hartman, & Brown, 2000) was conceptualized as 'the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision-making' (Brown, Treviño, & Harrison, 2005, p. 120). Ethical leaders act as moral role models, promote ethical conduct by setting ethical standards, and make principled and fair decisions that followers can observe and emulate.

It is not our goal here to reconcile these overlapping conceptualizations of leadership's moral and ethical components. We simply observe that ethics is widely thought to be crucial for leadership. Notably, with regard to the underlying psychological processes by which ethical leaders influence their followers' conduct, several mediators have been proposed, such as ideological appeal (Shamir, House, & Arthur, 1993), internalization of moral values (Dvir, Eden, Avolio, & Shamir, 2002), value congruence (Brown & Treviño, 2006), personal identification with the leader and social identification with the collective (Avolio, Gardner, Walumbwa, Luthans, & May, 2004), and social learning and role modeling (Weaver, Treviño, & Agle, 2005). In this article, we sought to develop a rationale and provide some first evidence supporting the idea that an unstudied emotional mediator is sometimes at work when leaders behave ethically: the emotion of moral elevation (Haidt, 2000). In two studies, we show that leaders who are committed to the common good and treat followers in an exceptionally fair manner can elicit elevation in their employees, and that this emotion is related to an increase in employees' altruism, courtesy, compliance, and affective organizational commitment.

The emotion of elevation

Moral elevation is the emotional response to the perception of moral beauty or moral excellence (Haidt, 2006). This emotion was first fully described by Thomas Jefferson, in a letter to a friend that made the case for the morally uplifting powers of great literature. Jefferson's friend had asked for advice on what books to buy for his library. Jefferson, who loved to give advice as much as he loved books, wrote back with a long list of titles in history, philosophy, law, and other solid, scholarly disciplines. But Jefferson also advised his friend to buy some novels and plays – genres that at the time were held in low esteem in part because of their appeals to emotion. Jefferson justified his unconventional advice by arguing that repeated exposure to moral exemplars will foster a young person's moral development by triggering strong and beneficial emotions:

> When any... act of charity or of gratitude, for instance, is presented either to our sight or imagination, we are deeply impressed with its beauty and feel a strong desire in ourselves of doing charitable and grateful acts also. On the contrary when we see or read of any atrocious deed, we are disgusted with its deformity and conceive an abhorrence of vice. (Jefferson, 1771/1975, p. 349)

Jefferson went on to say that such experiences allow us to 'exercise' our virtuous dispositions, thereby making them stronger. He asked, rhetorically, whether well-written accounts of virtuous action 'do not dilate [the reader's] breast, and elevate his sentiments as much as any similar incident which real history can furnish?' (Jefferson, 1771/1975, p. 350).

In this letter, Jefferson lays out the basic features of an emotion in much the way a modern affective scientist would – by listing its component parts. Elevation is elicited by acts of charity, gratitude, fidelity, generosity, or any other strong display of virtue. It leads to particular physical feelings: a feeling of 'dilation' or opening in the chest, combined with the feeling that one has been uplifted or 'elevated' in some way. It causes a specific motivation or action tendency: emulation, the desire 'of doing charitable and grateful acts also.' It is the opposite of the disgust reaction toward vice. In sum, elevation is a response to acts of moral beauty in which we feel as though we have become – for a moment – less selfish, and we want to act accordingly.

There is evidence that Jefferson was right. Algoe and Haidt (2009) found that participants who recalled morally elevating events (compared to positive but non-elevating events) were more likely to focus their thoughts and motivations on people other than themselves, including desires to enhance relationships and to make changes that demonstrated (at least temporary) moral growth. In a second study, participants who watched a morally elevating video (compared to an amusing video) were more likely to report warm feelings in the chest and to report wanting to become a better person and do good things for other people. Importantly, participants' self-reports of their emotional reactions partially mediated the major outcome variables, suggesting that emotion was an active ingredient; the results were not due to cooler, purely 'cognitive' priming mechanisms. In a previous study, Silvers and Haidt (2008) had found evidence that the hormone oxytocin may be involved in the elevation response. In this study, women who were breastfeeding young children came into the lab with their children and watched either an elevating or a humorous video. Those who watched the elevating video were more likely to hug and to nurse their children, and to leak milk into a nursing pad. All of these

responses – lactation and wanting warm, physical contact – are hallmarks of oxytocin, which affects many receptors in the heart and which is well known for its ability to bond people together (Porges, 1998).

If Jefferson was indeed right, then the emotion of elevation should have enormous relevance to organizational functioning. Great leaders who wrestle with moral and practical challenges and then do the right thing, acting nobly, generously, and fairly, may have powerful effects on the members of their organizations, causing those members to be less selfish, to think of others, and to want to improve their relationships within the organization. While such close relationships could make an organization more effective and cooperative in cheating and harming others, the nature of elevation – the feeling of moral ennoblement – seems on its face to make such outcomes unlikely. We suspect that if elevation suppresses selfishness and increases cooperation, its effects within organizations would be generally benign and productive, as employees increase their willingness to help each other and work for the common good.

Organizational elicitors of elevation: Leader's self-sacrifice and interpersonal fairness

Affective Events Theory (AET; Weiss & Cropanzano, 1996) holds that employees' emotional reactions to organizational events have a direct influence on their behaviors and attitudes, and several studies suggest that emotions mediate the relationships between organizational antecedents and individual outcomes (cf. Ashkanasy, 2003; Fisher, 2002). From this perspective, leadership is conceived as a fundamental source of affective events in the workplace, in that leaders can evoke both positive and negative emotional responses in their employees through their behaviors (Bass & Fisher, 2000; Dasborough, 2006; Dasborough & Ashkanasy, 2002). Research on affective consequences of leader's behavior and on emotional processes involved in the leader–follower relationship grew up since Ashkanasy and Tse (2000) first highlighted the role of emotions in leadership effectiveness.

In this article, the focus is on leaders' morally relevant positive behaviors that can evoke in followers the positive emotion of moral elevation. As Haidt (2003) noted, acts of self-sacrifice are powerful elicitors of elevation. *Self-sacrifice* is an essential aspect of the ethical component of transformational leadership (see, e.g., Burns, 1978; Choi & Mai-Dalton, 1998, 1999; Choi & Yoon, 2005; Conger & Kanungo, 1987, 1998) and is at the core of all the moral/ethical models of leadership cited above. The concept of self-sacrifice refers to people's capability to 'suffer the loss of types of things to maintain personal beliefs and values'

(Yorges, Weiss, & Strickland, 1999, p. 428) and, as far as leaders are concerned, it refers to

> the total/partial abandonment, and/or permanent/ temporary postponement of personal interests, privileges, or welfare in (a) division of labor, (b) distribution of rewards, and/or (c) exercise of power. [...] Self-sacrificial leadership is demonstrated when a leader exhibits self-sacrificial behaviors as defined above in the service to his/her organization and employees (Choi & Mai-Dalton, 1998, pp. 479–480).

Self-sacrificing leaders have been found to positively influence followers' perceptions of leader's charisma and effectiveness (De Cremer, 2002; De Cremer & Van Knippenberg, 2002; B. Van Knippenberg & D. Van Knippenberg, 2005); promote cooperation, prosocial behaviors, reciprocity intentions and altruism (Choi & Mai-Dalton, 1999; Choi & Yoon, 2005; Yorges et al., 1999); strengthen followers' self-esteem (De Cremer, Van Knippenberg, Van Dijke, & Bos, 2006); increase affective organizational commitment (Halverson, Holladay, Kazama, & Quiñones, 2004); and improve followers' motivation (De Cremer, 2006; De Cremer & Van Knippenberg, 2004). At present, the only evidence we know of for a direct effect of leader's self-sacrifice on followers' positive emotions was provided by De Cremer (2006). He considered happiness, satisfaction, joy, anger (reverse-coded), and disappointment (reverse-coded) to form a single score of positive emotion. Thus, what he measured was to some extent state-positive affect rather than discrete emotions (cf. Watson & Clark, 1997; Watson, Clark, & Tellegen, 1988; Watson & Tellegen, 1985). Yet, a number of authors have argued that specific discrete emotions have effects that cannot be accounted for by higher order factors such as affect (Watson & Clark, 1992), that they exert differential effects on behavior (e.g., Keltner, Ellsworth, & Edwards, 1993; Roseman, Wiest, & Swartz, 1994), and that, when compared to moods, they are more intense and usually have a definite cause and clear cognitive content (Cropanzano, Weiss, Hale, & Reb, 2003). Furthermore, Algoe and Haidt (2009) have recently shown that different positive emotions exert specific and clearly identifiable motivational consequences, suggesting that researchers should be careful in considering a single general or composite 'positive emotion' score.

According to AET (Weiss & Cropanzano, 1996), we conceive leader self-sacrifice as an affective event that, given its moral valence, will exert a main effect on the discrete emotion of elevation.

Hypothesis 1: Leader self-sacrifice elicits elevation in followers.

The second leadership behavior we suggest as an elicitor of elevation is *interpersonal fairness*, which is conceived as a set of moral behaviors both in ethical

(Brown et al., 2005) and authentic (Luthans & Avolio, 2003; Mitchie & Gooty, 2005) leadership models. Interpersonal fairness precisely fits the criteria that define some typical elicitors of elevation, such as acts of kindness (Haidt, 2003). Interpersonal fairness is indeed the component of interactional fairness that refers to the kind, polite, and proper treatment that leaders give to their followers.

Bies and Moag (1986) suggested that interactional fairness was a third dimension of organizational fairness (Greenberg, 1987, 1990; Leventhal, 1976, 1980; Thibaut & Walker, 1975), together with distributive and procedural fairness. It refers to the interpersonal treatment that people receive as procedures are enacted. Bies and Moag (1986) identified four criteria for interactional fairness: justification, truthfulness, respect, and propriety. Greenberg (1993) later showed that these four criteria can be reduced to two factors: informational fairness, which refers to justification and truthfulness, and interpersonal fairness, which refers to respect and propriety. According to this conceptualization of organizational fairness, the distributional and procedural components refer to somehow 'compulsory' behaviors aimed at guaranteeing the absence of harm in employees (a just distribution of resources and fair procedures enacted to allocate them). Indeed, their violation is typically studied (and found to be a predictor of negative emotions, cf e.g., Greenberg & Ganegoda, 2007). On the contrary, interpersonal fairness refers to the good treatment received by collaborators during social interactions with supervisors. More specifically, it is commonly defined and measured as the degree to which people are treated with politeness, dignity, propriety, and respect by authorities (Colquitt, 2001; Tata, 2005).

A number of recent studies have clearly shown that fairness directly and strongly impacts affect and emotions (cf. Breugelmans & De Cremer, 2007; De Cremer, 2007). Although most organizational research in this domain focuses on procedural fairness, some evidence was provided that leader's interactional fairness also influences followers' emotions (Kohari & Lord, 2007). Consistent with the prevalence of theoretical and practical concerns with unfairness issues, the justice literature has paid far more attention to the study of negative rather than positive emotions (cf. Greenberg, 2006; Greenberg & Ganegoda, 2007). Nevertheless, positive affect and discrete emotions have been shown to result from high levels of perceived organizational justice (Kohari & Lord, 2007; Tyler, Degoey, & Smith, 1996). In the perspective of AET (Weiss & Cropanzano, 1996), these findings suggest that leader's acts of fairness represent a class of affective events that can evoke both positive and negative emotions in employees. Notably, and in line with the notion that interpersonal fairness refers to less 'ordinary' behavior, several authors agree that

emotional reactions to interactional fairness are more intense than those to the other forms of justice (Bembenek, Beike, & Schroeder, 2007; Gonzales & Tyler, 2007; Tripp & Bies, 2007).

As regards moral emotions, they have recently gained increasing interest among justice scholars (e.g., Folger, Cropanzano, & Goldman, 2005; Horberg & Keltner, 2007). Cropanzano, Byrne, Bobocel, and Rupp (2001), Cropanzano, Goldman, and Folger, (2003), and Folger (2001) proposed a deontic approach to justice arguing that perceptions of (un)fairness are grounded in basic ethical assumptions and give rise to strong emotional, automatic responses. Such deontic responses (from the Greek deon) are the emotional reaction to the violation of any moral obligation that is a proscription about what not to do rather than a prescription about what to do (Folger et al., 2005). Thus, the emphasis is on unfairness rather than fairness judgments and, as a consequence, on negative rather than positive moral emotions. Likewise, Horberg and Keltner (2007) proposed a conceptual framework rooted in the study of moral intuitions, which focuses on negative moral emotions derived from perceptions of unfairness, such as anger, contempt, disgust, and compassion. For their part, negative self-conscious emotions such as embarrassment, shame, and guilt have been related to people's direct engagement in acts of unfairness (cf. Gonzales & Tyler, 2007), and a positive self-conscious emotion such as pride has been shown to result from high levels of organizational justice (Tyler et al., 1996). De Cremer and Van Hiel (2006) showed that witnessing acts of fairness directed toward others gives rise to positive emotions such as happiness and satisfaction, but no research exists – to our knowledge – on the positive other-directed moral emotional responses triggered by perceptions of fairness. Given that elevation is the emotional response to acts of moral virtue that do not directly benefit the self, we predict that a highly fair leader would cause followers to feel moral elevation even if they are not the direct beneficiaries of that treatment.

Hypothesis 2: Leader's interpersonal fairness elicits elevation in followers.

Outcomes of elevation at work: Organizational citizenship behavior and affective organizational commitment

Elevation motivates individuals to engage in prosocial and affiliative behaviors, to be kind and caring to others, and to emulate the virtuous example that triggers the emotional response (Algoe & Haidt, 2009). We suggest that, when experienced in organizations as a response to the moral behavior of a leader, elevation drives employees to engage in organizational

citizenship behavior (OCB) such as altruism, courtesy, and compliance. These are the three most widely studied components of OCB, which is defined as any discretionary 'contribution to the maintenance and enhancement of the social and psychological context that supports task performance' (Organ, 1997, p. 91). The impact employees' positive emotions exert on OCB is well known (Johnson, 2008; Lee & Allen, 2002; Lyubomirsky, King, & Diener, 2005; Miles, Borman, Spector, & Fox, 2002; Spector & Fox, 2002) and we have reason to believe that the emotion of moral elevation elicited by a moral leader's behavior would influence OCB above and beyond the effects of positive affect, positive mood, or discrete non-moral positive emotions such as happiness. Precisely, we consider altruism as a direct consequence of the prosocial motivation that elevation activates, courtesy as kindness and caring to colleagues, and compliance as a consequence of the motivation to emulate the leader's moral commitment to the common good.

Hypothesis 3: Elevation has a positive effect on followers' OCB.

Elevation also motivates affiliative behavior (Algoe & Haidt, 2009). When the person that demonstrated moral beauty belongs to the same group as the elevated individual, it is likely that the elevation-derived affiliative motivation will be generalized from the leader to the group, strengthening ingroup salience, and identification. We suggest that the affiliative motivation that is triggered by elevation in work settings promotes employees' organizational commitment which is 'a psychological link between the employee and his or her organization that makes it less likely that the employee will voluntarily leave the organization' (Allen & Meyer, 1990, p. 252).

The construct of organizational commitment has three components (Meyer & Allen, 1991). *Continuance commitment* is based on employee's recognition of the costs associated with leaving the organization. For example, the absence of a good job alternative constitutes a source of continuance commitment. *Normative commitment* refers to employees' sense of moral obligation to the organization. The perceived organizational support and the sense of reciprocity derived from being grateful to the organization are sources of normative commitment. The third component of the tripartite model is *affective commitment* (AC) defined as 'the employee's emotional attachment to, identification with, and involvement in the organization' (Meyer & Allen, 1991, p. 67). Normative and AC are strongly correlated (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002), but they substantially differ from each other in their source. Employees with high normative commitment remain with their organization because they feel they ought to do so. In contrast, AC causes people to remain with their organization

because they *want* to do so. AC is also more strongly correlated with work experiences and job attitudes that have an affective tone, like job satisfaction and job involvement (Meyer et al., 2002).

Recent research shows that positive emotions significantly enhance AC (Herrbach, 2006; Thoresen, Kaplan, Barsky, Warren, & de Chermont, 2003). Our hypothesis is that the emotion of elevation elicited by virtuous leaders will specifically strengthen the affective link between the employees and their organization. If elevation opens people up to those around them (Haidt, 2003), as well as to the leader who elicits the emotion, then elevated employees should develop a stronger emotional attachment to, and identification with their whole organizations.

Hypothesis 4: Elevation has a positive effect on followers' affective organizational commitment.

A remark must be made here on the level of the outcome variables. We predict that elevation elicited by acts of fairness and self-sacrifice coming from the leader produces organizational – level outcomes – i.e., OCB beneficial to the whole organization and AC to the organization. This is a central part of our hypotheses that highlights the power of elevation in organizations. According to Fredrickson (2001, p. 220), positive emotions have distinct and complementary effects compared to negative emotions, since 'they broaden people's momentary thought–action repertoire, widening the array of the thoughts and actions that come to mind [...]. These broadened mindsets carry indirect and long-term adaptive benefits because broadening builds enduring personal resources.' Positive emotions can generate virtuous upward spirals both at an individual (Fredrickson, 2000, 2001) and organizational level (Fredrickson, 2003). Positive emotions can reverberate across interpersonal relationships – such as leader–follower interactions – and then spread in groups and organizations (Fredrickson, 2003). 'If elevation increases the likelihood that a witness to good deeds will soon become a doer of good deeds, then elevation sets up the possibility for the same sort of 'upward spiral' for a group that Fredrickson (2000) describes for the individual' (Haidt, 2000, p. 4). Fredrickson (2003) also argued that this virtuous cycle enhances organizational functioning.

Elevation as a mediator between leader's behavior and organizational outcomes

Several kinds of evidence were provided that both leader self-sacrifice and interactional fairness predict OCB and organizational commitment. Leader self-sacrifice has been shown to be an antecedent of citizenship behavior (Choi & Yoon, 2005; De Cremer

& Van Knippenberg, 2005) as well as of organizational commitment (Halverson et al., 2004). On the other hand, interactional fairness has been demonstrated to predict OCB (Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Fassina, Jones, & Uggerslev, 2008; Moorman & Byrne, 2005; Reis, 2002) and organizational commitment (Aryee, Chen, Sun, & Debrah, 2007; Cohen-Charash & Spector, 2001; Liao & Rupp, 2005; Meyer et al., 2002). Furthermore, several authors have argued for the consideration of emotions as mediators between perceptions of both fairness and leadership and organizational outcomes (e.g., Breugelmans & De Cremer, 2007; De Cremer, 2006; Folger et al., 2005; Greenberg & Ganegoda, 2007; Zerbe & Härtel, 2000). Consistent with these authors, and drawing on AET's statement that the effects of work events on affect-driven behavior and work attitudes are fully mediated by employees' affective reactions (Weiss & Cropanzano, 1996, p. 12), we predict that elevation fully mediates the relationships between a leader's moral behavior and its organizational outcomes.

Hypothesis 5: Elevation fully mediates the effects of both leader's self-sacrifice and interpersonal fairness on followers' OCB and affective organizational commitment.

We tested our hypotheses about elevation in two studies. The first was a scenario experiment involving 121 members of a furniture company and the second was a field survey with 275 hospital nurses. Finally, we compared the effects of elevation to those of happiness, serenity, and positive affect in a third study involving 42 teachers of several primary schools.

Study 1

In this study, we manipulated a fictitious leader's interpersonal fairness and self-sacrifice by means of scenarios and then measured our hypothesized mediator (elevation) and our hypothesized organizational outcomes.

Method

Participants

The study was conducted in a leading Italian company that produces residential wood doors. The company employs more than 170 people, and its annual budget amounts to about 25 million euros. Main office employees ($n = 140$) were invited to participate in the research on a voluntary basis and for no reward. A questionnaire was sent to each potential participant by mail, preceded by a letter in which researchers introduced themselves, and the research. Participants were asked to return their anonymous questionnaires in a box placed in the main entrance of the office.

One hundred and twenty-one correctly completed questionnaires were returned (65% male, mean age = 35.4). On average, respondents had worked in the company for nearly 10 years, and 55% of them worked in production; the remaining 45% were split roughly equally between commercial, administrative, and customer assistance areas.

Design, materials, and procedure

We used a 2×2 factorial study design, manipulating leader self-sacrifice (*vs.* self-benefit) and leader's interpersonal fairness (high *vs.* low). We provided participants with four different scenarios, namely *Self-Sacrifice/High-Fairness* (Scenario 1), *Self-Sacrifice/Low-Fairness* (Scenario 2), *Self-Benefit/High-Fairness* (Scenario 3), and *Self-Benefit/Low-Fairness* (Scenario 4). In all scenarios, participants were asked to imagine that they were employees of Massimo Castelli, the fictitious leader presented. We manipulated the self-sacrificing *versus* self-benefiting conditions drawing on work by Choi and Mai-Dalton (1999), Choi and Yoon (2005), De Cremer (2006), and De Cremer and Van Knippenberg (2002, 2004). Interpersonal fairness was manipulated according to the definition proposed by Bies and Moag (1986) and Greenberg (1993); thus it refers to Bies and Moag's (1986) criteria of politeness, respect, and propriety. Tata (2005) used a similar manipulation. An English translation of Scenarios 1 and 4 is provided in Appendix 1.

After each participant read his or her scenario, two questions were posed: 'Do you think Massimo Castelli sacrificed himself in order to help the company'? (*Self-Sacrifice*) and 'Do you think Massimo Castelli treated his employees with politeness, respect, and sensibility?' (*Interpersonal Fairness*). These questions served as manipulation checks as well as proxies for our independent variables, as explained below. Responses on these and all other questions were collected using Likert-type scales (ranging from 0 – Not at all to 7 – Absolutely yes).

In order to measure the degree to which participants felt elevated, we developed a scale drawing on Algoe and Haidt (2009). They offered a list of the physical, emotional, and motivational components of elevation that differentiated it from other positive, moral, and non-moral emotions. We measured elevation by asking respondents to rate their experience in terms of these three components. We used two items for measuring the affective component of elevation (*I feel more open toward others, I feel like I'm a better person*), three items for measuring specific physical sensations (*How much did you feel these sensations: Warmth in chest, lump in throat, muscles relaxed*), and three items for measuring the motivational component of elevation (*How much would you like to: Do*

something good for other people, behave as Massimo Castelli, become a better person). Next, participants were asked to think to their actual jobs, and were given three widely used scales to measure three components of OCB: altruism (Konovsky & Organ, 1996, $\alpha = 0.84$), courtesy (Smith, Organ, & Near, 1983; $\alpha = 0.62$), and compliance (Pond, Nacoste, Mohr, & Rodriguez, 1997; $\alpha = 0.84$). These components were measured as behavioral intentions (example of item: 'I am willing to help my colleagues'). Furthermore, we measured AC toward their organization (Meyer, Allen, & Smith, 1993; $\alpha = 0.90$). Responses to OCB and commitment scales were used as dependent variables.

Results

Before analyzing the data, we tested for eventual violations of normality and absence of outliers assumptions, following common recommendations (see, e.g., Tabachnick & Fidell, 2001). We deleted 10 multivariate outliers (Mahalanobis $d^2 > 15$, $p < 0.001$), leaving a total of 111 cases.[1] Variables in the analysis had acceptable skewness and kurtosis values, and they were centered around their mean (Aiken & West, 1991) in order to interpret an eventual interaction effect.

Validating the elevation scale

Our three-component measure of elevation was derived from the exploratory factor analyses of Algoe and Haidt (2009); so we conducted a confirmatory factor analysis (CFA) of the scale to verify the fit of a three-dimensional factor structure. In this and all subsequent structural equation modeling (SEM) analyses, we followed suggestions by Hu and Bentler (1999). We therefore accepted theoretical models with a standardized root mean square residual (SRMR) less than or equal to 0.08 and a comparative fit index (CFI) greater or equal to 0.95. In order to analyze the factor structure of our measure of elevation, we estimated a first-order CFA with three factors (Affective reactions, Physical sensations, Motivational reactions) explained respectively by two, three, and three observed variables. In order to achieve identification, we fixed the factors' variances at 1. The model – graphically represented in Figure 1 – fit the data very well ($\chi^2_{(17)} = 24.1$, $p = 0.12$, SRMR = 0.044, CFI = 0.98).
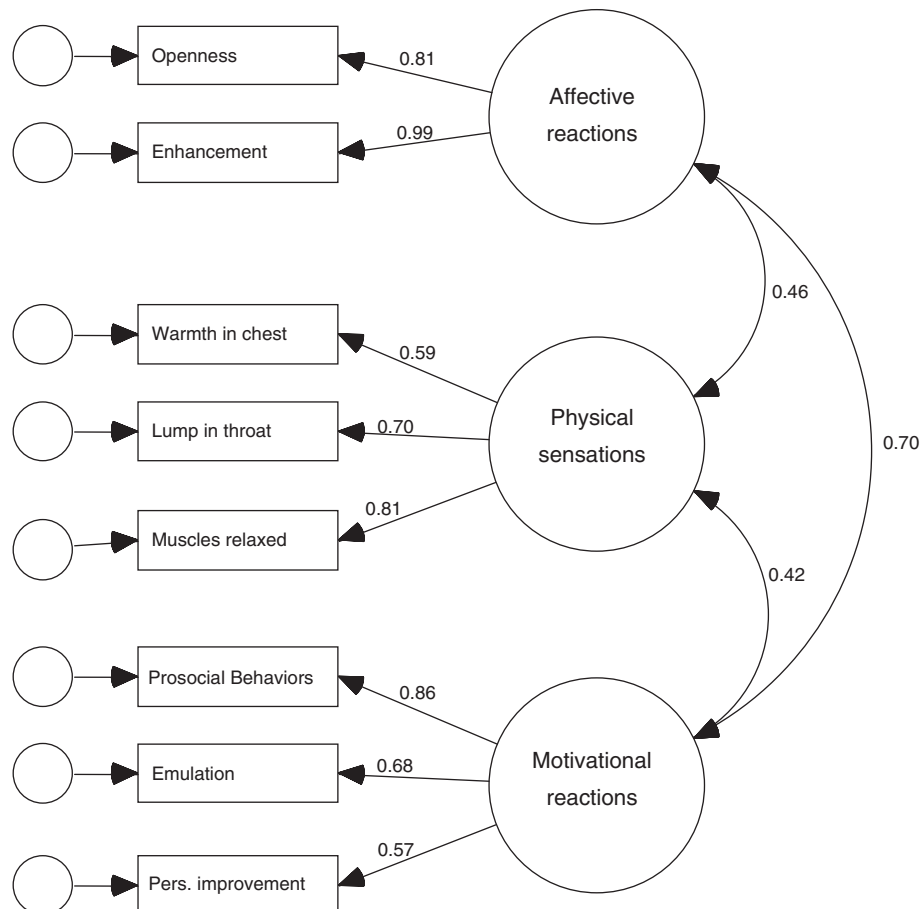

Figure 1. The elevation scale: Path diagram of the first order CFA. Values provided in the path diagram are standardized and significant. Some labels and parameters have been omitted for clarity.

Table 1. Study 1: Group means and standard deviations (in parentheses) of perceived interpersonal fairness and self-sacrifice.

	Condition	Fairness mean	Self-sacrifice mean
1	Self-sacrifice/high fairness (25 subjects)	5.21 (1.7)	5.04 (1.74)
2	Self-sacrifice/low fairness (31 subjects)	2.39 (1.58)	4.03 (1.94)
3	Self-benefit/high fairness (26 subjects)	3.5 (1.77)	1 (1.41)
4	Self-benefit/low fairness (29 subjects)	0.18 (0.6)	0.38 (0.82)

We compared this model to alternative nested models, observing that the three-factor solution fit the data much better than a one-factor solution (obtained fixing all covariances between factors at 1; $\Delta\chi^2_{(2)} = 86.2$, $p < 0.001$) and much better than three equivalent two-factor solutions (obtained fixing sequentially at 1 the three covariances; $55.2 < \Delta\chi^2_{(2)} < 81.2$, $p < 0.001$). The average standardized item loadings were always high (Affective reactions = 0.90, Physical sensation = 0.70, Motivational reactions = 0.70). The mean correlation among the three factors was 0.53. We can thus conclude that the three factors of our measure of elevation are independent but highly correlated. These high correlations – which could also have been modeled as a second order factor – justify the use of a single measure, which is indeed highly reliable ($\alpha = 0.82$). Such a measure, which captures the three most important facets of the emotion of elevation, will be used in further analysis.

Manipulation check

We checked the efficacy of our manipulations by means of two two-way analysis of variance (ANOVA) models with a first factor identifying High and Low Fairness conditions and a second factor identifying Self-Benefiting and Self-Sacrificing conditions. Participants' ratings of Massimo Castelli's fairness and self-sacrifice were entered as dependent variables. Results suggest that the effects of our manipulations were very strong (Table 1). We found a main effect of the fairness factor on the fairness measure ($F_{(1,105)} = 117.50$, $p < 0.001$, $\eta^2 = 0.53$) and a main effect of the self-sacrifice factor on the self-sacrifice measure ($F_{(1,105)} = 168.16$, $p < 0.001$, $\eta^2 = 0.62$). The interaction effects were not significant.

Hypotheses testing

We tested our hypotheses by means of a structural equation models for observed variables[2] (i.e., a path analysis), which is one of the best methods to test for mediation and mediated moderation and was observed to be sufficiently powerful even on small sample sizes (see Morgan-Lopez & MacKinnon, 2006, for a detailed analysis of the procedure, its power, and its accuracy).

Descriptive statistics and intercorrelations among the study variables are provided in Table 2. In specifying and estimating our structural model for observed variables, we followed the procedure described by James, Mulaik, and Brett (2006). Parameters were estimated with the maximum likelihood method. The direction of the causal relations, in this study, was inferred from our manipulations, and the mediation hypothesis was not a function of the direction of the relationships. Thus, we did not estimate alternative models at this stage of the analyses.

We observed a mean correlation of 0.46 between organizational commitment and the three OCB dimensions, and a correlation of 0.57 between self-sacrifice and fairness.

According with the hypotheses, we estimated a SEM for observed variables with two predictors, a mediator and four criteria in which all unmediated effects of the predictors on the criteria were fixed at zero ($\chi^2_{(8)} = 15.5$, $p = 0.05$, SRMR = 0.044, CFI = 0.97, and $0.13 < R^2 < 0.24$). Contrary to our prediction, in this model, the effect of self-sacrifice on elevation was non-significant; so we hypothesized that its effect would have been moderated by interpersonal fairness. Hence, we estimated a second model that would account for this moderation effect. This model ($\chi^2_{(12)} = 20.5$, $p = 0.06$, SRMR = 0.052, CFI = 0.97, and $0.13 < R^2 < 0.24$) is graphically represented in Figure 2, which shows only standardized and significant parameters. In this model, the relationships between predictors (self-sacrifice and fairness) and the mediator (elevation) are indeed significant both for fairness and the interaction effect between fairness and self-sacrifice. The relationships between the criteria (altruism, courtesy, compliance, and commitment) and the mediator are all moderate to large, and all are significant. The model accounts for 24% of altruism's variance, 17% of courtesy's variance, 15% of compliance's variance, and 13% of commitment's variance.

Our hypothesis H2 (Leader's interpersonal fairness elicits elevation in followers) can thus be accepted, but we have to partially reject H1, since the effect of self-sacrifice on fairness is significant only when the leader is highly fair (Figure 3). The interaction between fairness and self-sacrifice significantly contributes to

Table 2. Study 1: Means, standard deviations, and intercorrelations of study variables.

		Mean	SD	Mean/number of items in the scale[a]	1	2	3	4	5	6	7
1	Fairness	2.74	2.31	2.74	–						
2	Self-sacrifice	2.54	2.47	2.54	0.57	–					
3	Elevation	36.70	13.88	4.07	0.36	0.28	0.82				
4	Altruism	14.86	3.98	4.59	0.23	0.04	0.49	0.84			
5	Courtesy	17.03	3.19	5.76	0.04	0.02	0.41	0.61	0.62		
6	Compliance	16.18	4.36	5.39	0.27	0.10	0.38	0.67	0.58	0.84	
7	Commitment	30.29	9.42	5.05	0.17	0.16	0.35	0.55	0.46	0.63	0.90

Notes: Correlations greater than 0.19 are significant at the 0.05 level. Means were computed before centering variables around their mean.
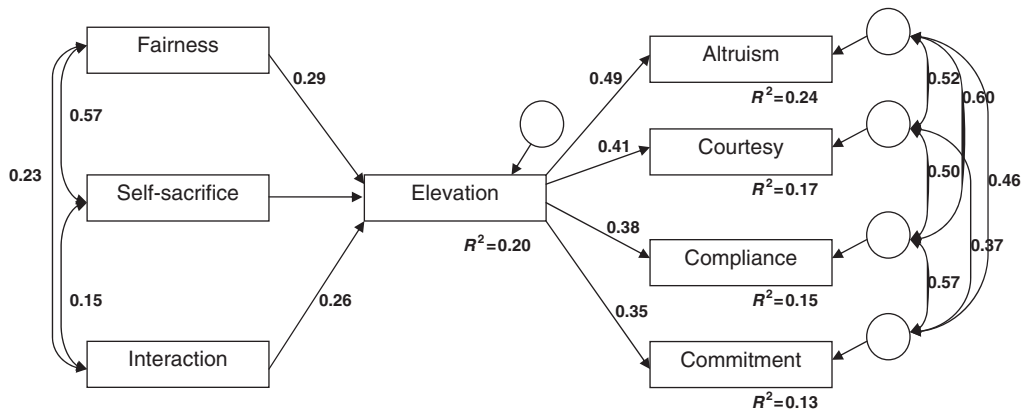[a]Range: 0–7. Fairness and self-sacrifice were one-item measures.

Figure 2. Path diagram of the relations analyzed in study 1. Values provided in the path diagram are standardized and significant. Some labels and parameters have been omitted for clarity.

explain elevation. Indeed, fixing at zero the path between the interaction and elevation, the portion of elevation's variance accounted for by our predictors goes down to 13%. Hence the interaction contributes to account for a ΔR^2 of 0.07 ($F_{(1,110)} = 8.28$, $p < 0.01$).

As far as the relationships between the mediator and the outcomes are concerned, we can accept hypotheses H3 and H4, according to which elevation has a positive effect on followers' altruism, courtesy, compliance (H3), and affective organizational commitment (H4). Our last hypothesis (H5) stated that elevation mediates the effects of both leader's self-sacrifice and interpersonal fairness on followers' OCB and AC. All direct relationships were fixed at zero and the model fit was excellent. Thus according to James et al. (2006), our full mediation model can be accepted.[3] Yet, we decided to further analyze the effects according to both the Sobel test (1982)[4] and Preacher and Hayes' (2008) bootstrapping method. Many authors agree that the product between the two indirect effects 'is a proper quantification of the indirect effects' and with adequate sample sizes, confidence intervals computed according to this test
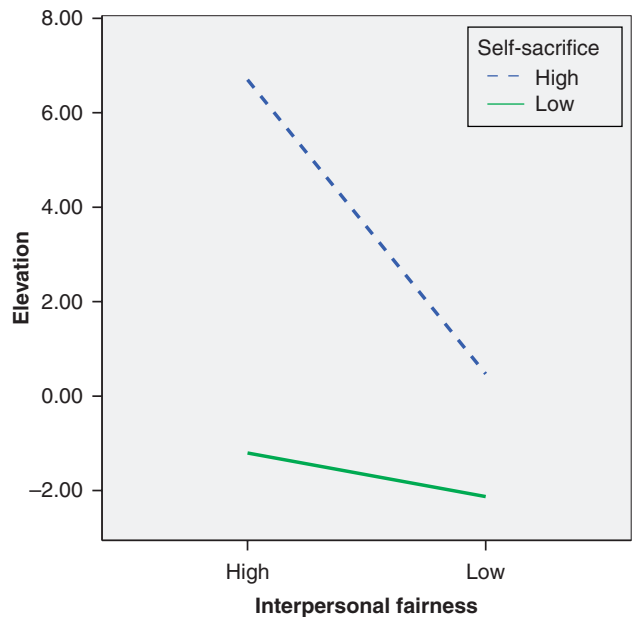

Figure 3. Study 1: The interaction effect between fairness and self-sacrifice. Values in the *y*-axis represent mean group scores (centered sum) at the elevation scale.

Table 3. Study 1: Sobel and bootstrapping tests of the effects of mediation and mediated moderation.

Criterion (y)	Predictor (x)	Z	$p_{(z)}$	95% CI[a] (low–up)
Altruism	Self-sacrifice (X1)	0.54	0.59	0.09–0.42
	Fairness (X2)	*2.52*	0.01	0.11–0.53
	Interaction (X1 × X2)	*2.70*	0.01	0.04–0.20
Courtesy	Self-sacrifice (X1)	0.54	0.59	0.06–0.30
	Fairness (X2)	*2.40*	0.02	0.09–0.44
	Interaction (X1 × X2)	*2.54*	0.01	0.02–0.12
Compliance	Self-sacrifice (X1)	0.55	0.59	0.06–0.41
	Fairness (X2)	*2.37*	0.02	0.07–0.53
	Interaction (X1 × X2)	*2.50*	0.01	0.03–0.18
Commitment	Self-sacrifice (X1)	0.55	0.58	0.13–0.76
	Fairness (X2)	*2.31*	0.02	0.18–0.99
	Interaction (X1 × X2)	*2.44*	0.02	0.06–0.35

Notes: Significant parameters ($\neq 0$) are reported in italics bold.
[a]Bias corrected and accelerated confidence intervals of the indirect effect estimated according to Preacher and Hayes (2008).

are accurate and reliable (Preacher, Rucker, & Hayes, 2007, p. 189). Results of both tests (Table 3) supported the mediation of all effects of fairness and of the interaction between fairness and self-sacrifice on our criteria. As regards the interaction effects, we observed four mediated moderations. Self-sacrifice had positive effects only when the leader was highly fair, and this moderation was mediated by followers' emotion of elevation. We therefore accept Hypothesis 5: The effects predicted and found for H3 and H4 occurred through the mediation of participants' feelings of elevation.

Discussion of study 1

This study was designed to explore how elevation, a positive moral emotion, might play a role in the leader–follower relationship. We observed that reading about a leader's interpersonal fairness increases followers' intentions to perform OCB and their affective organizational commitment, confirming previous findings (e.g., Cohen-Charash & Spector, 2001; Colquitt et al., 2001; Meyer et al., 2002). More importantly, results suggest that a leader's interpersonal fairness elicits elevation in followers, and that elevated employees report the intention of being more altruistic, courteous, compliant, and committed to their organization. We also observed that self-sacrificial leadership elicits elevation only if leader's fairness is high. This was probably due to the fact that elevation is felt as a response to moral excellence and leaders who sacrifice themselves for their organizations but are unfair with their collaborators are very far from the examples of moral beauty that are known to elicit elevation. All together, these results provide evidence that elevation fully mediates the positive effects that both leaders interpersonal fairness and self-sacrifice (when fairness is high) have on followers' altruism, courtesy,

compliance, and affective organizational commitment. The direction of causality has been proved by our manipulations. On the other hand, a weakness of study 1 is that we used just one item to measure each independent variable, and we had to measure OCB as behavioral intentions. Furthermore, our results are based on responses to a hypothetical 'paper leader'; so we cannot be certain how well our hypotheses would be supported when workers respond to their real leaders (although Locke (1986) convincingly argued that results from laboratory studies are highly generalizable to the field). We also need more evidence about a direct main effect of self-sacrifice on elevation. All these issues will be addressed in the next study.

Study 2

We had three goals in this study: (1) to replicate our findings from study 1, using better measures of our major constructs; (2) to investigate further the relationship between leader self-sacrifice and elevation (H1); and (3) to extend results of study 1 to natural work settings.

Method

Procedure and participants

We created a questionnaire and gave it to 356 nurses at a public hospital near Padua. The order of the measures in the questionnaire was counterbalanced (half questionnaires provided independent – rather than dependent – measures first). Demographic information were always asked in the last part of the questionnaire. Nurses returned the questionnaire in a box located in the main entrance of the hospital. Completed questionnaires were returned by 275 nurses (21% male, mean age = 39.8), who participated in the

study on a voluntary basis. Respondents had worked at this hospital, on average, for 16.8 years and reported that they work in close contact with their leader/supervisor for an average of 22.2 h per week.

Measures

Data were collected on Likert scales ranging from 0 to 7. Items were then summed to form overall measures. The items taken from scales originally written in English were translated into Italian by a researcher and then translated back to English by another researcher. Differences between the two English versions were used to fine-tune the translations.

Interpersonal fairness. The construct was measured by means of a 4-item scale from Colquitt (2001) and operationalized as politeness, respect, dignity, and propriety. Examples of items are: 'My boss is polite,' 'My boss treats his/her employees with dignity.'

Self-sacrifice. We used a 5-item scale from Conger and Kanungo (1998) and Choi and Mai-Dalton (1999). Self-sacrifice was operationalized as the willingness of the leader to suffer the loss of types of things (e.g., leisure time, benefits, and career) and to engage in behaviors that put him or herself at risk to serve the goals and mission of the group or organization. Examples of items are: 'My boss is willing to make personal sacrifices in the team's interest', 'My boss is willing to stand up for the team members' interest, even when it is on the expense of his/her own interest'.

Elevation, OCB, and affective organizational commitment. Measures of elevation, OCB, and affective organizational commitment were the same as in study 1, with some notable differences. First, while in study 1 we measured intentions of OCB, in this study, we measured self-reported actual citizenship behaviors. Second, while in study 1 we measured elevation as a 'on-line' emotion, as it was felt just after the manipulation, in this study, we collected retrospective reports, asking participants to recall what they felt when they worked close to their bosses. Then, as further refinements of the scale, we added an item to the first component of elevation ('Admiration for my boss', see Algoe and Haidt (2009)). After these refinements, the scale to measure elevation was composed of three items for each component (Affective reactions: *While you have been working with your boss, how many times did you feel: Admiration for your boss, feeling of goodness/generosity, feeling of openness toward others*; Physical sensations: *While you have been working with your boss, how many times did you*

feel the following sensation? Warmth in chest, Lump in throat, Muscles relaxed; Motivational reactions: *While you have been working with your boss, how many times did you feel the desire to: Do something good for other people, be like your boss, become a better person*).

Results

Validating the elevation scale

A model with three factors and three observed variables each, though very close to common limits of acceptability, did not fit the data adequately ($\chi^2_{(24)} = 117.96$, $p < 0.001$, SRMR = 0.08, CFI = 0.92). Loadings of the first two items of the Physical sensations component were close to zero. This could be due to the fact that nurses rarely recalled physical sensations as responses to moral behaviors of their supervisors. Indeed, the scale mean of the Physical sensations component ($M = 1.71$) was much lower than those of the Affective reactions and Motivational reactions components ($M_a = 4.08$, $M_m = 4.34$; $F_{(2,532)} = 307.08$, $p < 0.001$). Therefore, we excluded the Physical sensations component of elevation from subsequent analyses. A two-factor model of the scale adequately fit the data ($\chi^2_{(8)} = 47.9$, $p < 0.01$, SRMR = 0.052, CFI = 0.96). The mean standardized item loadings were 0.90 (Affective reactions component) and 0.59 (Motivational reactions component). The Affective reactions and Motivational reactions components of elevation correlated highly ($r = 0.80$), thus we summed all six items to form an overall measure of elevation.

Hypotheses testing

We followed the same analysis strategy as in study 1. Before the SEM estimation, we deleted six multivariate outliers, leaving a total of 269 cases.[5] Variables in the analysis had acceptable skewness and kurtosis, and were centered around their mean (Aiken & West, 1991). Descriptive statistics, internal consistencies, and intercorrelations among the study variables are presented in Table 4.

Parameters were estimated with the maximum likelihood method. Given the significance of the interaction effect we found in study 1, we first specified and estimated a model in which the interaction between fairness and self-sacrifice was present as a predictor. In this model, all regression parameters involving it were nonsignificant. Therefore, we concluded that the interaction effect in this study was not different from zero and we specified a second model without interaction, which is provided in Figure 4. This analysis provided strong support to all our hypotheses.[6] We observed a mean correlation among OCB components of 0.41 and a mean correlation of

Table 4. Study 2: Means, standard deviations, internal consistencies (alpha), and intercorrelations of study variables.

		Mean	SD	Mean/number of items in the scale[a]	1	2	3	4	5	6	7
1	Fairness	23.02	4.86	5.75	*0.90*						
2	Self-sacrifice	18.44	9.76	3.68	0.60	*0.94*					
3	Elevation	17.31	2.67	2.89	0.65	0.75	*0.86*				
4	Altruism	17.92	2.58	5.97	0.27	0.26	0.34	*0.80*			
5	Courtesy	16.13	3.21	5.37	0.37	0.39	0.48	0.41	*0.68*		
6	Compliance	15.77	3.78	5.25	0.13	0.25	0.29	0.40	0.43	*0.69*	
7	Commitment	23.62	10.80	3.93	0.31	0.44	0.49	0.21	0.37	0.41	*0.94*

Notes: All correlations are significant at the 0.01 level. Internal consistencies are provided in the main diagonal (in italics).
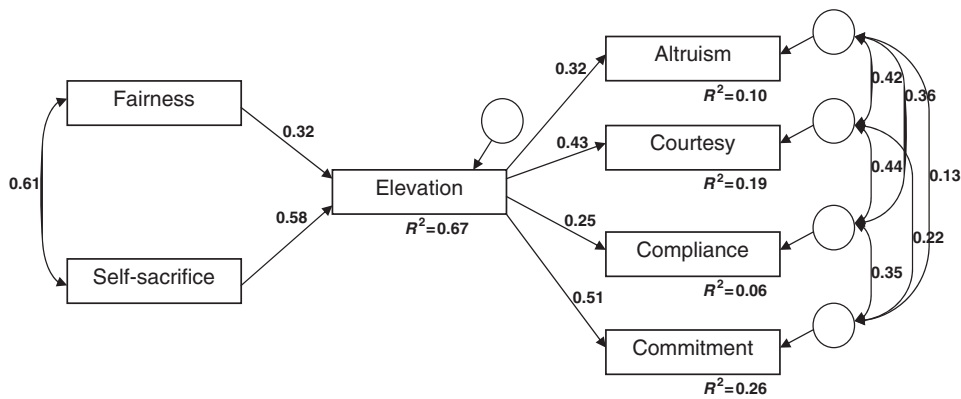[a]Range: 0–7.

Figure 4. Path diagram of the relations analyzed in study 2. Values provided in the path diagram are standardized and significant. Some labels and parameters have been omitted for clarity.

Table 5. Study 2: Sobel and bootstrapping tests of the effects of mediation.

Criterion (y)	Predictor (x)	Z	$p_{(z)}$	95% CI[a] (low–up)
Altruism	Self-sacrifice (X1)	5.54	<0.001	0.04–0.13
	Fairness (X2)	4.39	<0.001	0.04–0.17
Courtesy	Self-sacrifice (X1)	6.64	<0.001	0.05–0.13
	Fairness (X2)	4.89	<0.001	0.08–0.20
Compliance	Self-sacrifice (X1)	4.43	<0.001	0.01–0.11
	Fairness (X2)	3.76	<0.001	0.05–0.23
Commitment	Self-sacrifice (X1)	7.82	<0.001	0.18–0.45
	Fairness (X2)	5.32	<0.001	0.51–0.96

Note: [a]Bias corrected and accelerated confidence intervals of the indirect effect estimated according to Preacher and Hayes (2008).

0.23 between commitment and OCB's dimensions. As in study 1, direct paths between our independent and dependent variables were fixed at zero (James et al., 2006). This model is highly compatible with the data ($\chi^2_{(8)} = 13.12$, $p = 0.10$; CFI = 0.99, SRMR = 0.026). In addition, we tested the significance of each mediated effect by means of both a Sobel (1982) and boot-strapping test (Preacher & Hayes, 2008). Results (Table 5) show that all indirect (mediated) effects of fairness and self-sacrifice on citizenship and commitment are high and significant. Hence, we can accept Hypothesis 5. Fairness and self-sacrifice together accounted for 67% of elevation's variance, and regression paths between them were significant ($\gamma_{51} = 0.32$; $\gamma_{52} = 0.58$, $p_s < 0.01$); so we can accept hypotheses H1 and H2. The relations between the mediator and our dependent variables are significant as well. We found that elevation alone accounted for

10% of altruism's variance, 19% of courtesy's variance, and 6% of compliance's variance (the mean of the three regression paths is equal to 0.33) and we therefore accepted Hypothesis 3. Finally, we observed that elevation accounted for 26% of commitment's variance ($\beta_{54} = 0.51$); so Hypothesis 4 is strongly supported. In summary, we found that interpersonal fairness and self-sacrifice both elicit elevation, which in turn influences all OCB's dimensions and AC. If followers do not feel elevation, leader's fairness and self-sacrifice have no effect on their organizational citizenship and AC.

Discussion of study 2

In study 2, the actual leader's interpersonal fairness and self-sacrifice were found to be predictors of elevation (H1 and H2), which in turn predicted all our outcome variables (H3 and H4). Further, fairness and self-sacrifice did not have direct (unmediated) effects on OCB and commitment (H5).

A goal of study 2 was to look again at the hypothesized relationship between leader's self-sacrifice and elevation, which in this study was completely supported. While study 1 showed that the positive effects of self-sacrifice were present only when the leader was fair, in this study self-sacrifice turned out to be a strong elicitor of elevation even in the absence of other variables. We suspect that the interaction effect emerged in study 1 but not in study 2 because it is very unlikely for a real leader to be at the same time unfair and self-sacrificial. We think that a theoretical moderation effect of interpersonal fairness on self-sacrificial behaviors can still be hypothesized, but it is rarely seen in real situations.

A most important goal was to test our hypotheses in a more ecologically valid way, collecting data from workers, reporting on their feelings and attitudes toward their own supervisors, and workplaces. Our findings in study 2 show that the relationships we observed in study 1 can be generalized from a scenario study to a natural work setting. This result extends to actual leader–follower relationships not only results of study 1, but also De Cremer's (2006) finding that positive emotions play a mediating role between leader self-sacrifice and positive outcomes in followers. The mediated effects are much stronger here than in study 1. The portion of elevation's variance accounted for by fairness and self-sacrifice is more than three times bigger than that of study 1, while regression paths from elevation to OCB and AC (testing H3 and H4) are comparable. In addition, study 2 provides further evidence of a strong emotion-mediated impact of interpersonal fairness on OCB and affective organizational commitment.

Study 3

In this study, we directly compare the predictive power of elevation to that of happiness, serenity, and positive affect.

Method

Participants and procedure

Participants were 42 female full-time pre-school teachers who participated in the study on a voluntary basis. Their mean age was 42.10 (SD = 8.5), and they had been in service, on average, for 18.21 years before their participation in the study (SD = 9.5). Three well-trained interviewers provided them with a brief introduction to the study and a questionnaire. All responses were collected by means of Likert scales ranging from 1 to 6. Independent variables were measured in the first part of the questionnaire. Participants were asked to think back over the past year and to rate how frequently, in their working days, they felt happiness, serenity, and elevation for their school principals. The second part of the questionnaire was dedicated to our dependent (outcome) variables. Participants were asked to think back over the past year and to rate (1) their average level of organizational commitment and (2) how frequently they adopted a series of behaviors relating to altruism, courtesy, and compliance.

Measures

We employed the three-factor retrospective measure of elevation we used in study 2 ($\alpha = 0.93$). Happiness, serenity, and positive affect were respectively measured by 5, 3, and 5 items of the PANAS-X (Watson & Clark, 1994; $\alpha_{h} = 0.71$, $\alpha_{s} = 0.74$, $\alpha_{pa} = 0.75$). OCB and commitment measures were the same as in studies 1 and 2.

Results

We estimated a hierarchical multiple regression for each dependent variable. Elevation was entered first, and then happiness, serenity, and positive affect were entered in different blocks. Table 6 shows the amount of variance accounted for by each predictor (ΔR^2), and its significance. Results show that the contribution of serenity and positive affect is trivial in all models. Elevation is the only significant predictor of commitment, courtesy, and compliance. Happiness is only a significant predictor of altruism, of which it accounts for a relevant quote of variance which is not already accounted for by elevation.

Table 6. Study 3: Hierarchical multiple linear regression models.

Dependent variable	Independent variables			
	Elevation	Happiness	Serenity	Positive affect
Altruism	0.25**	0.14**	0.00	0.05
Courtesy	0.30***	0.00	0.00	0.05
Compliance	0.13*	0.06	0.00	0.00
Commitment	0.26**	0.05	0.00	0.01

Notes: The table shows the amount of OCB and AC variance accounted for by elevation, happiness, serenity, and positive affect.
$*p < 0.05$; $**p < 0.01$; $***p < 0.001$.

Discussion of study 3

This study showed that the predictive power of elevation cannot be achieved by other discrete emotions such as happiness and serenity, or by a measure of generalized positive affect. Among all the competing constructs, only happiness was found to add a relevant contribution to the prediction of altruism. This result underlines the uniqueness of elevation as an antecedent of OCB and affective organizational commitment.

Furthermore, we obtained a reliable three-factor retrospective measure of elevation. While in study 2, we found that in a retrospective measure of elevation the physical sensations scale was too weakly related to the other components; in this study, we found that a composite measure of the three components is internally coherent. The only difference between the two scales is that in this study we provided participants with a specific time frame of 1 year, in which they had to recollect what they felt while working with their bosses. So far, we do not know if a specific time frame is causally related to an increased overall reliability of our measure, or if participants of study 3 simply had more vivid memories of their emotional experiences. However, we suggest to use a specific time frame of 1 year until future research will provide definitive conclusions on this issue.

General discussion and conclusion

Although the importance of positive emotions in organizational behavior was emphasized nearly 20 years ago by Isen and Baron (1991), most emotion research focused on negative emotions and their *toxic* effects on workers' wellbeing, and organizational functioning (cf. Ashkanasy & Ashton-James, 2007). However, positive emotions have been found to impact many important outcomes such as employment and quality of work, income, work satisfaction, organizational citizenship, withdrawal and turnover, conflict resolutions and cooperation, creativity, problem solving, and performance (Lyubomirsky et al., 2005).

Dealing with positive emotions, organizational researchers measured both discrete emotions such as happiness, and composite measures of positive affect (Barsade & Gibson, 2007; Cropanzano & Wright, 2001; Lyubomirsky et al., 2005; Wright, Cropanzano, & Meyer, 2004), but not much attention has been devoted to moral emotions.

Further, despite great interest in emotional links between leaders and followers (e.g., Ashkanasy & Tse, 2000; Bass, 1990; Conger & Kanungo, 1998; George, 2000), and despite the recent interest in positive emotions and leadership (e.g., Damen, B. Van Knippenberg, & D. Van Knippenberg, 2008; Dasborough, 2006; Johnson, 2008), very little empirical research exists examining the effects of leaders' behaviors on followers' positive emotions. In this article, we highlighted the emotional process underlying the influential effects of leader's moral behaviors on followers' positive outcomes.

We found that leaders' fair and self-sacrificial behaviors elicit elevation in followers. Interpersonal fairness was a strong predictor of elevation in both our studies. In study 1, the effect of self-sacrifice was limited to the condition in which the leader was also interpersonally fair, whereas in study 2, which explored responses to real leaders, the effects of self-sacrifice were independent of fairness. Our findings confirm and extend previous studies in several ways. Bono, Foldes, Vinson, and Muros (2007) provided evidence that in a natural work setting leaders' transformational behaviors positively influence employees' experiences of happiness, enthusiasm, and optimism, as well as a positive emotions composite score. De Cremer (2006) demonstrated that positive affect mediates the impact of self-sacrifice on followers' motivation to work with the leader. We detail and extend these findings by proposing a specific moral emotion (instead of a set of basic emotions) as a mediator between leaders' behaviors and followers' responses, and we provide evidence that the effects of elevation go beyond reciprocity with the leader to influence behaviors and attitudes directed toward the whole organization.

Theoretical and practical implications

Taken together, our studies provide a demonstration of one way that leaders, by means of their ethical behavior, can promote virtuous upward spirals in their employees and organizations. A complete mediation of elevation implies that fair and self-sacrificial leaders cannot expect prosocial and virtuous behaviors from their followers if they do not make them feel morally elevated. We revealed an underlying emotional process by which ethical leaders potentially influence their followers' conduct, expanding and enriching the set of mediators traditionally considered. This finding has both a theoretical and a practical implication. First, it provides new issues concerning the ethical and moral components of leadership. Second, it suggests that managers in natural work settings should devote the right attention to the moral emotional mechanism involved in their capability of influencing employees.

Furthermore, the full mediation effect of elevation we found in studies 1 and 2 supports Weiss and Cropanzano's (1996) AET as well as Fredrickson's (2001) *broaden-and-build* theory of positive emotions. Elevation is completely responsible of the emotional effects that organizational antecedents such as leader's virtuous behaviors exert on employees' behavior and attitude. Moreover, elevation seems to activate an upward spiral which reverberates at a social level. Although measures were all at the individual level, some of them were organization-oriented (OCB and AC). Hence, we observed that the prosocial and self-enhancing motivation elevation causes in the individuals increase their citizenship behavior beneficial to the organization and their AC to the organization. From a practical point of view, the knowledge that leaders can enhance the organizational functioning by means of positive moral emotions may help managers to foster positive behavior and ethical conduct. From a theoretical point of view, our studies provided evidence of the emotional process linking the individual perceptions of leader's behavior with a set of employees' behaviors (altruism, courtesy, and compliance) and attitude (AC) directed to the organization.

As regards interpersonal fairness, a contribution is offered to the flourishing literature on the link between affect and organizational justice as well as to the debate about fairness as a moral issue. The strong effects we observed of leader's interpersonal fairness on employee's elevation (1) support the argument that interactional fairness produces particularly intense emotional reactions, (2) encourage more research on positive emotional responses to fairness perceptions, and (3) suggest that the moral issue has much to do with organizational fairness, especially when interactional fairness is concerned. Our findings indeed support both the deontic approach to organizational justice (Cropanzano et al., 2001, 2003; Folger, 2001)

and the conceptual framework linking moral emotions to (un)fairness perceptions proposed by Horberg and Keltner (2007). Yet, we propose a shift to positive emotions, and highlight the moral motivating power inherent in organizational justice.

The moderating effect of interpersonal fairness on self-sacrifice shown in study 1 deserves a special remark. The few existing articles on the interaction between self-sacrificing leadership and fairness suggest that their effects on followers' perceptions and behaviors are stronger on their own than in conjunction (De Cremer & Van Knippenberg, 2002; Janson, Levy, Sitkin, & Lind, 2008). As far as fairness is concerned, study 1 confirmed these findings. On the other hand, self-sacrifice in this study elicited elevation only when the leader was also high in fairness. Thus, interpersonal fairness alone seemed sufficient to give rise to the moral emotional response, and its single effect was stronger than in conjunction with self-sacrifice, while self-sacrifice did need interpersonal fairness to elicit elevation. We think that this result was due to the particular dependent variable we considered. Elevation is the emotional response to moral excellence. Leaders, who sacrifice themselves for the common good but at the same time are interpersonally unfair with their subordinates, would be perceived as morally ambiguous. This would easily reduce the followers' trust in them and interfere with the perception of moral integrity that is the source of elevation. Such a result provides an original contribution to the literature on the interaction between fairness and self-sacrifice, suggesting that the direction of the effect may depend on the type and nature of the outcome considered. Instead, consistently with previous research, the perceived moral value of leader's interpersonal fairness appeared not to be reduced by a self-benefiting behavior. This finding further strengthens our argumentation on the moral value of interpersonal fairness, supporting the proposition that organizational fairness – first and foremost in its interactional component – has a promising and relatively unknown power in fostering positive affect and virtuous behavior in organizations.

Another contribution of this article concerns the choice to consider a specific discrete positive emotion instead of general 'positive affect' or a composite 'positive emotion' score. The clear and strong effects of elevation on organizational citizenship and commitment, and its supremacy over happiness, serenity, and positive affect that we observed in study 3 suggest that organizational research on positive emotions should profitably shift from dealing with positive emotions as a family to differentiating between discrete emotions and their distinct identifiable correlates.

Finally, these studies contribute to the definition of the construct of moral elevation, with both operational and theoretical improvements. We provided a scale

specifically addressed to organizational settings – but easily adaptable to different contexts – drawing on the theoretical model that Algoe and Haidt (2009) recently proposed on the basis of three studies using recall, video induction, daily diary, and letter-writing methods to induce positive emotions. The scale is reported in Appendix 2. We adopted a three-component model of emotions and measured elevation in its basic affective reactions, its physiological reactions, and its motivational tendencies. We observed that in organizational settings, the physical sensations scale could be used only as a component of on-line measures, because in retrospective reports some physical sensations might not be recalled. A good measure should demonstrate content validity, construct validity, predictive validity, and internal consistency (Hinkin, 1995; Pedhazer & Schmelkin, 1991; Schwab, 1980). Our measure of elevation predicts important organizational outcomes such as AC, altruism, compliance, and courtesy. Further, the measure showed good internal consistencies and a unique factor structure across studies.

Limits and directions for future research

A first limitation of these studies regards a not completely resolved issue about the different findings of study 1 and study 2. As already argued, we interpreted the absence of an interaction effect between self-sacrifice and fairness in study 2 referring to the very low likelihood for a real leader to be at the same time self-sacrificial and interpersonally unfair. Future research could profitably be addressed to better understand whether and how, considering different kinds of criteria, leader's self-sacrifice, and interpersonal fairness do interact.

Another general limitation of this article has to do with the choice of variables, both independent and dependent. Being the first attempt to deal with elevation in work and organizational domain, a selection should be made between several likely organizational elicitors and outcomes of this moral emotion. We recommend that future research will identify other antecedents and consequences of elevation in work settings, expanding the frame of both leaders' and employees' virtuous behaviors linked to this positive emotion and better explaining the role of elevation in organizational moral and ethical issues. Specifically, trust has been important in theoretically accounting for the lack of a main effect of self-sacrifice, which might elicit elevation only in conjunction with interpersonal fairness. A strong link between transformational leadership, interactional fairness, and trust in leadership has been demonstrated (see Dirks & Ferrin, 2002, for a meta-analysis). Transformational leadership behaviors – such as self-sacrifice – build trust because of the care and concern perceived in the

leader–follower relationship. Similarly, employees' trust in their leaders will be influenced by the level of justice perceived in the organizational practices or decisions.

From a methodological point of view, we recognize three main limitations of our studies. First, our measure of elevation still needs to be related with other positive and negative emotions, in order to find evidences of convergent and discriminant validity. Second, the risk of a common-source bias was in fact inherent in all of our studies. Yet, the possibility that an artifact drove our results is rather weak because we observed strong effects across studies using different methodologies. Then, if it is true that in the past some established notions have to be revisited due to common-source bias (e.g., Dionne, Yammarino, Atwater, & James, 2002), some direct comparisons between same-source and multiple-source measures suggest that the common-source bias concern might have been consistently overestimated (see, e.g., Brewer, 2006). Third, we hope that future research will use a prospective design, to capture effects of organizational elicitors of elevation on individual and organizational behavior as they occur.

Conclusions

Moral and emotional meanings are salient and pervasive in organizations and work settings. Employees devote a great deal of attention to their leaders' ethical behavior and respond with intense positive emotions to the display of fairness and moral integrity. This article highlights the powerful role played in organizations by the positive other-praising emotion of moral elevation, showing that this emotion – rather than happiness, serenity, or positive affect – is responsible of strengthening positive attitudes, and enhancing virtuous organizational behavior.

Notes

1. The performance of the chi-square statistic is affected by several factors, among them sample size, non-normality, and outliers. Applying non-robust estimation methods and test statistics to non-normal data impacts on the estimates, their standard error, and the probability of accepting the model (sometimes increasing and sometimes decreasing it). Yet, though deleting outliers is the best method to deal with them, it is usually looked at with suspicion; so we also estimated a model with outliers in. At this aim, we used the best estimation method for non-normal variables and our sample size (which, according to Bentler and Yuan (1999) is the Asymptotically Distribution Free) and the most robust chi-square test (the Yuan–Bentler asymptotically robust goodness-of-fit test statistic). The full mediation model is still the best ($T^*_{(12)} = 1.7$, $p = 0.88$).

2. The most common method for analyzing data coming from a classic 2×2 factorial design with a mediator

variable would have been a multivariate analysis of covariance (MANCOVA), with two factors (self-sacrifice and interpersonal fairness), four dependent variables (altruism, courtesy, compliance, and commitment), and a covariate (elevation). There are two important shortcomings deriving by the use of this analysis. (1) MANCOVA would only evaluate moderation effects, whereas our main interest is on the *mediation* effect of elevation; (2) MANCOVA suffers from stringent limitations and potential ambiguity in interpreting results. One of these limitations is 'homogeneity of regression.' In MANCOVA (and analysis of covariance (ANCOVA) as well), it is assumed that the regression between covariates and dependent variables in one group is the same as the regression in other groups so that using the average regression to adjust for covariates in all groups is reasonable. If heterogeneity of regression is found, and then there is a relation between the independent variables and the covariate, a different adjustment should be made for each group and MANCOVA is inappropriate. In this case, we tested the homogeneity of regression following the procedure described in Tabachnick and Fidell (2001) and found that significant relations between elevation and our independent variables ($F_{(3,101)} = 2.80$, $p = 0.044$) would violate MANCOVA's assumptions. Hence, we preferred SEMs and bootstrapped confidence intervals around the indirect effects.

3. Testing the hypothesis that chi square of the full mediation model is different from zero also tests the full mediation model against the partial mediation model, which is a saturated model with all relations hypothesized and estimated, no degrees of freedom and chi square = 0.

4. We chose the version in which the product of the error variances is subtracted, thus:

$$z = \frac{a \times b}{\sqrt{(b^2 \times \mathrm{SE}_a^2) + (a^2 \times \mathrm{SE}_b^2) - (\mathrm{SE}_a^2 \times \mathrm{SE}_b^2)}},$$

where a is the beta coefficient of the relationship between x and m, b the beta coefficient of the relationship between m and y, SE_a the standard error of a, and SE_b the standard error of b.

5. As in study 1, the analysis conducted leaving outliers in did not change neither the acceptance of the full mediation model nor the estimates.

6. We also controlled for age, gender, job tenure, and time working with one's supervisor entering them as predictor of IVs and elevation. The only significant relationships we found are between job tenure and fairness ($\beta = -0.18$, $p < 0.05$) and between age and elevation ($\beta = 0.12$, $p < 0.01$).

7. This component might be skipped in retrospective measures, since its relationships with the other components might be negatively affected by different levels of awareness that characterize them (as observed in study 2, physical sensations might be less vivid in respondents' memory).

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Appendix 1

Study 1: The self-sacrifice/high fairness and self-benefit/low fairness scenarios

Common information across experimental conditions

Massimo Castelli is the new General Director of the Boselli–Marbles and Granites Ltd., and you're one of his employees. Boselli–Marbles and Granites Ltd., has always been considered a leader in its sector. It specializes in mining and selling high-quality marble and granite and it currently has more than 200 employees. In the last 20 years the company has grown steadily, mainly because of its products' quality. But recently many other companies have entered the market and foreign competition has grown substantially. Last year, the company reported a big loss because many clients left to buy from cheaper companies. Now Boselli–Marbles and Granites Ltd., runs the risk of going bankrupt, and employees fear being dismissed.

Manipulations

[Self-Sacrifice condition] As the new General Director, Massimo Castelli chose to do everything possible in order to save the company. He lowered his own salary substantially, and he gave up all benefits. For instance, he waived his use of the company's car and he devoted the car to the employees' professional use. Furthermore, he cut unnecessary expenses, such as the money earmarked for managers' dinners and informal meetings. Finally, he invested his own personal money to save the company in this difficult period. Obviously, all the time and energy he put into the company made him sacrifice his personal life. His acquaintances say that recently all his concerns are about the company and the employees, rather than his own interests.

[High Fairness condition] Furthermore, Massimo Castelli does everything possible to involve each employee in the management of this crisis, and his door is always open to employees, to whom he is always kind, fair, and respectful. He is also able to understand the needs of whomever he is talking to. One day, in a company-wide meeting, he asked all of you (the employees) to be patient and to cooperate in this difficult period.

[Self-Benefit condition] As the new General Director, Massimo Castelli did not do very much to save the company. None of you (the employees) have ever seen him working beyond contractual working hours, not even for new projects. Indeed, people who have known him for years, say that his only commitment is to maximize his personal benefit. This new appointment will let him make new acquaintances, which could open doors for him at other companies.

[Low Fairness condition] Furthermore, Massimo Castelli did not inform anyone of his decisions. Meetings are rarer and rarer, and it seems he does not want to listen to questions or suggestions, keeping the focus on his personal aims. He is not interested in the needs of the person he is talking to, and it

seems he does not understand his employees' fears and difficulties. Finally, he is quite unkind.

Note: Text in italics was not provided to participants.

Appendix 2

Elevation scale

(Affective reactions)

In this moment/Right now, how much do you feel: (On-line measure)

In the last 12 months, while you have been working with your boss, how many times did you feel: (Retrospective measure)

> *Admiration for your boss.*
> *Feeling of goodness/generosity.*
> *Feeling of openness toward others.*

(Physical sensations)[7]

In this moment/Right now, how much do you feel the following sensations? (On-line measure)

In the last 12 months, while you have been working with your boss, how many times did you feel the following sensation? (Retrospective measure)

> *Warmth in chest.*
> *Lump in throat.*
> *Muscles relaxed.*

(Motivational reactions)

In this moment/Right now, how much you would like to: (On-line measure)

In the last 12 months, while you have been working with your boss, how many times did you feel the desire to: (Retrospective measure)

> *Do something good for other people.*
> *Be like your boss.*
> *Become a better person.*

All questions use a Likert response scale ranging from 0 ('Not at all' in the on-line measure, 'Never' in the retrospective measure) to 7 ('Very much' in the on-line measure, 'Always' in the retrospective measure).