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## Do you feel what I feel? Mood contagion and leadership outcomes

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### ABSTRACT

This research examines the role of mood and mood contagion in a leadership situation. In phase 1 of the study participants received a positive or negative mood induction and completed a leadership speech describing how to complete a hiring task. In phase 2, participants watched one of the speeches from phase 1, completed ratings, and performed the hiring task. Followers in the positive mood condition had higher levels of positive mood and lower levels of negative mood, rated their leaders as more charismatic, and performed better than followers in the negative mood condition. Followers' mood mediated the relationship between leader mood and follower outcomes. In the third phase of the study, participants read transcripts of the speeches from phase 2 but experienced no change in mood or performance, suggesting the previous effects found in phase 2 were due to mood contagion rather than the content of the speeches.

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Affect has been theoretically linked to charismatic leadership since Weber (1920) referred to the emotion, passion, and devotion that ensue from charismatic authority. Furthermore, affect remains central to modern theories of charismatic and transformational leadership (e.g., Bass, 1985; Bass & Avolio, 1995; Conger & Kanungo, 1994; Gardner & Avolio, 1998; House, 1977; Shamir, House, & Arthur, 1993). Leaders' affect not only influences leadership perceptions (Gaddis, Connelly, & Mumford, 2004; Lewis, 2000; Newcombe & Ashkanasy, 2002) and follower performance (George, 1995; George & Bettenhausen, 1990), but can also influence followers' affect through emotional/mood contagion (Bono & Ilies, 2006; Cherulnik, Donley, Wiewel, & Miller, 2001; Johnson, 2008; Lewis, 2000; Sy, Côté, & Saavedra, 2005). This study builds closely from past research on leadership, mood, and mood contagion (Bono & Ilies, 2006; Sy et al., 2005; Towler, 2003) by examining the effects of both leader positive and negative mood on followers' mood, perceptions of charismatic leadership, and performance in a controlled laboratory experiment (Fig. 1).

### 1. Charismatic leadership

Charismatic leadership theory, based on the conceptions of Weber (1920), House (1977), Burns (1978), and Bass (1985), explains the unique connection between leaders and followers that results in outstanding follower performance. Bass and Avolio (1994) distinguished among three facets of charismatic leadership. Attributed charisma reflects the personal power and confidence associated with charismatic leadership. Idealized influence involves leader behaviors related to serving as a role model for followers by stressing values and beliefs, moral behavior, and a strong sense of the collective mission. Inspiration motivation refers to leader behaviors aimed at adding meaning to followers' work, typically resulting in an increase in follower enthusiasm. Through these attributes and behaviors, charismatic leaders make each follower feel special, give each follower needed support, and engage each follower in a personal relationship (Fuller, Patterson, Hester, & Stringer, 1996; Kets de Vries, 1988) encouraging followers to exhibit greater effort, satisfaction, and commitment (DeGroot & Kiker, 2000), and take on greater responsibility (Bass

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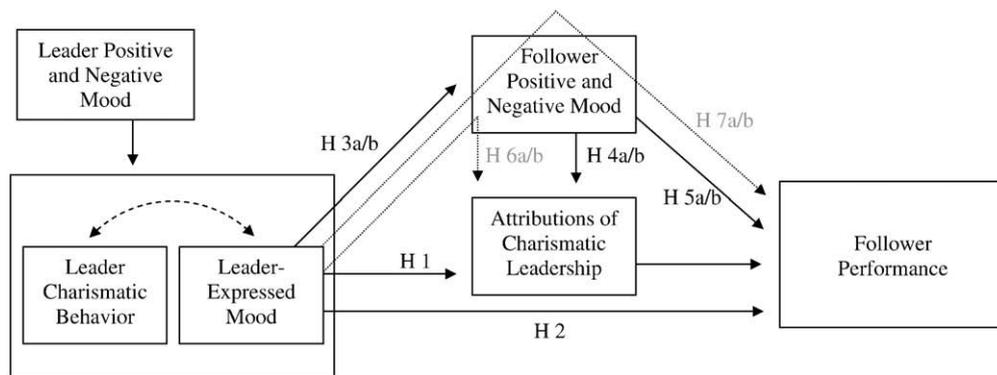


Fig. 1. Proposed model of the relationships between leader mood, follower mood, follower ratings of charismatic leadership, and follower performance.

& Avolio, 1994). Changes in followers' attitudes and behavior result in improved performance (DeGroot & Kiker, 2000; Lowe, Kroeck, & Sivasubramaniam, 1996).

## 2. Affect and leadership

The current research examines the relationship between leader mood, follower mood, and charismatic leadership. Mood is a subjective feeling that is relatively low in intensity, diffuse, and not directed toward a specific object (Lazarus, 1991). Based on the Circumplex Model of affect (Larsen & Diener, 1992), mood differs on two affective dimensions: valence and arousal (Russell, 1980). The first dimension, valence, ranges from negative to positive and the second dimension, arousal, ranges from deactivated to activated, resulting in four quadrants of moods or emotions: negative deactivated (e.g., bored), positive deactivated (e.g., calm), negative activated (e.g., distressed), and positive activated (e.g., elated). The distinction between high and low arousal of positive and negative mood is particularly relevant to mood contagion because contagion is more likely to occur with high arousal moods than with low arousal moods (Hatfield, Cacioppo, & Rapson, 1994). This study focused on two quadrants of the circumplex: positive activated and negative activated.

Moreover, both experienced and expressed mood are examined in the current study. Specifically, leader mood will be induced and it is expected that the expression of that mood will influence follower experienced mood. Drawing from Gross, John, and Richards' (2000) process model of emotion experience and expression, it is expected that individuals' moods are affected by environmental situations which give rise to expressed mood. Therefore, the induction of leader positive and negative moods should give rise to the expression of those moods.

### 2.1. Affective Events Theory

The theory that has most strongly focused on the role of affect at work is Affective Events Theory (AET, Weiss & Cropanzano, 1996). AET suggests that positive and negative workplace situations serve as affective events, giving rise to changes in employees' affect, attitudes, and behaviors. AET is implicated in leadership research in at least two important respects. First, leaders have the ability to reduce the impact of negative affective events on follower reactions (Pescosolido, 2002) and performance (Pirola-Merlo, Hartel, Mann, & Hirst, 2002). Second, leaders' behavior, including their expressed moods, can serve as affect events for their followers (Dasborough, 2006; Johnson, 2008). Moreover, leaders may intentionally manipulate their expressed moods and emotions in order to elicit desired responses in their followers (Ashkanasy & Tse, 2000; Mio, Riggio, Levin, & Reese, 2005). In the subsequent section, I will provide greater detail as to how and why leaders' expressed mood is expected to impact followers' attitudes, performance, and mood.

## 3. Hypothesis development

### 3.1. Follower ratings of charismatic leadership

It is expected that leaders who express more positive mood will be perceived by their followers as more charismatic than leaders who express more negative mood. Generally, people who express positive moods are more likeable and perceived more positively than persons in less positive or more negative moods (Cialdini, 1984). While this is true for all individuals, leaders' moods are likely to have a disproportionate impact on others' perceptions because of leaders' salience as organizational members (Connelly, Gaddis & Helton-Fauth, 2002). Indeed, leaders expressing a positive mood are perceived positively (Ashkanasy & Tse, 2000; Dasborough & Ashkanasy, 2002) whereas leaders expressing a negative mood are perceived negatively (Gaddis et al., 2004; Lewis, 2000; Newcombe & Ashkanasy, 2002).

Further, Bono and Ilies (2006) note that the outcomes associated with facilitating positive mood in followers are quite similar to the outcomes associated with charismatic leadership. They suggest that the contagion of positive affect may be one of the

psychological processes linking charismatic leadership to follower outcomes. Further, they note that research on personality points to the fact that the charismatic personality (e.g., extraverted, expressive, high in positive affectivity) is also likely to facilitate positive affect in followers (Bono & Ilies, 2006). Finally, in terms of charismatic leadership, the expression of positive mood is a behavioral indicator for charismatic leadership (Bass, 1985). As such, it is expected that leaders who express more positive mood and less negative mood will be perceived as more charismatic.

**Hypothesis 1.** Leaders expressing a positive mood will be attributed greater levels of charismatic leadership from followers than leaders expressing a negative mood.

### 3.2. Follower performance

Leader mood has also been shown to impact follower performance (Gaddis et al., 2004; George, 1995; George & Bettenhausen, 1990), although the mechanisms behind this relationship are largely unexplored. One possibility is that leaders who express positive moods are more well-liked (Cialdini, 1984), and their followers are willing to exert extra effort for them. Followers who dislike their leaders can derail them by refusing to comply with their wishes (Ashford, 1989) and performing poorly (Bass, 1990). Another possible explanation is that followers interpret leader positive mood as optimism about their performance, increasing followers' self-efficacy (Shea & Howell, 1999; Towler & Dipboye, 2001) and performance (Eden, 2003). Conversely, leader negative mood may lead followers to believe that the leader is pessimistic about their future performance, leading to a decrease in self-efficacy and performance. Therefore, the leader positive and negative moods are expected to impact follower performance (Gaddis et al., 2004).

**Hypothesis 2.** Leaders expressing a positive mood will elicit better performance from followers than leaders expressing a negative mood.

### 3.3. Follower mood

Finally, leaders' moods can impact followers' moods through mood contagion. Mood contagion is the automatic and unconscious transfer of mood between individuals (Hatfield, Cacioppo, & Rapson, 1992) which is thought to occur as a result of individuals' tendency to mimic others' nonverbal behavior, cueing the target to experience the mood that he or she is mimicking (Chartrand & Bargh, 1999). Just exhibiting a particular facial expression can elicit the corresponding mood or emotion in the individual (Adelmann & Zajonc, 1989). There are reasons to believe that mood contagion is particularly relevant in leadership contexts. In general, high status individuals are more likely to successfully influence others' moods than are low status individuals (Anderson, Keltner, & John, 2003). Moreover, leaders are highly salient group members (Connelly et al., 2002) and should therefore have a greater impact on followers' moods than non-leaders (Fredrickson, 2003). Indeed, recent work has demonstrated mood contagion in leadership contexts (Bono & Ilies, 2006; Cherulnik et al., 2001; Johnson, 2008; Lewis, 2000; Sy et al., 2005).

**Hypothesis 3a.** Leaders expressing a positive mood will elicit more positive mood from followers than leaders expressing a negative mood.

**Hypothesis 3b.** Leaders expressing a negative mood will elicit more negative mood from followers than leaders expressing a positive mood.

### 3.4. Follower ratings of charismatic leadership

The role of mood contagion in a leadership situation is particularly important given the potential effects of followers' moods on their attitudes and performance. The theory of mood congruent learning suggests that people are likely to learn information that is of the same affective tone as their current affective state (Bower, Gilligan, & Montiero, 1981) and the theory of state dependent learning suggests that people exhibit better recall of information that is learned and retrieved in the same affective state (Bower, Montiero, & Gilligan, 1978). If followers are in a positive mood, then they should learn and remember more positive information about their leader than if they are in a negative mood. In addition, the affect-as-information principle suggests that individuals use their mood at the time they make a judgment as an indicator of their feelings toward a given stimulus (Schwarz, 1990). Moreover, as followers' moods are affected by their leaders, followers should attribute their moods to their leaders, causing them to believe that leaders who induce a positive mood are more charismatic than leaders who induce negative moods (Johnson, 2008).

**Hypothesis 4a.** Followers' positive mood will be positively associated with ratings of charismatic leadership.

**Hypothesis 4b.** Followers' negative mood will be negatively associated with ratings of charismatic leadership.

### 3.5. Follower performance

Recent research also has demonstrated the potential for mood to impact performance in leaderless (Jordan, Lawrence, & Troth, 2006) and lead (Sy et al., 2005) groups, as a result of the impact of mood on group process and coordination. The findings from

group research can be extended to individual-level performance, as well, through the impact of mood on individuals' cognition, motivation, and behavior. The cognitive explanation for the mood–performance relationship suggests that positive moods lead to better decision-making (Isen, Means, Patrick, & Nowicki, 1982) because positive moods cause individuals to rely on useful heuristics (Sinclair & Mark, 1992) and promote simplification of complex tasks (Isen et al., 1982).

The motivational explanation for the mood–performance relationship suggests that mood impacts individuals' arousal, increasing the initial effort that they put into a task and their persistence on that task (George & Brief, 1996). That is, the energy associated with positive mood can lead individuals to exert greater effort. Positive mood also results in an increase in individuals' expectancy motivation (Erez & Isen, 2002) and self-set goals (Ilies & Judge, 2005), possibly because people in a positive mood experience increases in: perceived control over future outcomes (Alloy & Abramson, 1979), self-serving bias (Fiske & Taylor, 1991), and probability estimates of positive future events (Bower & Cohen, 1982). For these reasons, mood has also been shown to impact self-efficacy (Baron, 1990) which positively impacts performance (Eden, 2003).

The behavioral explanation for the mood–performance relationship is based on the idea that positive moods cause individuals to be more cooperative (Gouaux, 1971; Griffitt, 1970) and helpful (Isen & Levin, 1972), making them more willing to work hard for their leader. The mood maintenance hypothesis suggests that persons in a good mood are likely to help others in order to prolong their good mood (Isen, Shalke, Clark, & Karp, 1978). Conversely, individuals in a negative mood may help others to alleviate their negative mood. Positive moods lead to increases in organizational citizenship behavior (OCB, George, 1991; Lee & Allen, 2002) and negative mood leads to decreases in OCB (Johnson, 2008). In the current study, the participants' performance task consists of ranking resumes based on a set of criteria and writing a letter to recruit the top candidate. This task is expected to tap all three processes by which affect impacts performance. The behavioral and motivation processes may encourage participants to spend more effort completing the tasks. Increased cognitive processing should help participants rank order the resumes according to the criteria. Therefore, the following hypotheses were formed.

**Hypothesis 5a.** Follower positive mood will be positively associated with performance.

**Hypothesis 5b.** Follower negative mood will be negatively associated with performance.

The main contribution of the current study is the integration of previous research and theory to examine how the relationship between leader mood, follower mood, follower ratings of charismatic leadership, and follower performance function together. It is suggested that the relationship between leader mood and follower ratings of charismatic leadership is partially mediated by follower positive and negative moods, as suggested by charismatic leadership theory. Only a partial mediation is expected because other factors are also likely to mediate the relationship between leader mood and follower ratings of charismatic leadership. For example, followers' implicit theories of charismatic leadership should also explain why leaders' mood impacts followers' ratings of charismatic leadership.

It should be noted that other research has demonstrated that leader charisma influences follower affect (Dasborough, 2006; McColl-Kennedy & Anderson, 2002), just as follower affect impacts followers' perceptions of charismatic leadership. Both processes are likely to be true. More charismatic leaders (who likely exhibit high levels of positive affect) will likely have followers who experience greater levels of positive affect and followers who perceive them to be more charismatic (Fig. 1). It is expected, however, that followers' affective reactions to their leaders' charismatic/positively emotive behavior precedes the cognitive reaction of followers' perceptions of charismatic leadership. Indeed, there is evidence that affect precedes cognition in the evaluation of stimuli (Zajonc, 1980).

**Hypothesis 6a.** Follower positive mood will partially mediate the relationship between leader mood and follower ratings of charismatic leadership.

**Hypothesis 6b.** Follower negative mood will partially mediate the relationship between leader mood and follower ratings of charismatic leadership.

Similarly, in line with previous research (McColl-Kennedy & Anderson, 2002) followers' moods are expected to partially mediate the relationship between leader mood and follower performance. There are competing theories as to why leader mood should impact follower performance, including increases in followers' affection for the leader or increases in follower self-efficacy. Therefore, only a partial mediation is expected of follower positive and negative moods on the relationship between leader mood and follower performance.

**Hypothesis 7a.** Follower positive mood will mediate the relationship between leader mood and follower performance.

**Hypothesis 7b.** Follower negative mood will mediate the relationship between leader mood and follower performance.

#### 4. The current research

The current study examined the impact of mood and mood contagion in a leadership context. In the first phase of the study, participants' moods were manipulated and they completed a leadership speech. Although previous research has generally used actors to manipulate leader mood (e.g., Gaddis et al., 2004; Lewis, 2000; Newcombe & Ashkanasy, 2002), actors may portray unrealistically strong moods. In organizations, the display of negative moods are generally unacceptable (Ashforth & Humphrey,

1995). That is not to say that individuals *never* express negative moods at work, but individuals are often successful at controlling the expression of negative mood at work (Pugh, 2001; Gross, 1998).

The current research strove to capture more natural affective displays by manipulating leader mood rather than instructing leaders to display positive or negative moods. The result is a more realistic portrayal of how leaders express mood that is more applicable to organizational situations. In phase 2, followers watched one of the leadership speeches from phase 1 and completed the selection task explained by the leader along with several self-report measures. Finally, in phase 3, participants read one of the transcripts from the leaders used in phase 2 and completed the same task and measures used in phase 2. This last step was designed to examine the extent to which the effects found in the second phase could be attributed to the content of the leaders' speeches, rather than their delivery.

## 5. Phase 1

Participants included Masters in Business Administration (MBA) students from a small private university who were recruited from a core business course with required enrollment for all first year students. Forty-two students volunteered to participate: 30 (71.4%) men and 12 (28.6%) women. Participants identified themselves as Caucasian ( $n = 23$ , 54.8%), Asian ( $n = 11$ , 26.2%), Hispanic ( $n = 4$ , 9.5%), and African American ( $n = 2$ , 4.8%). Two additional participants failed to indicate their race ( $n = 2$ , 4.8%). Ages ranged from 22 to 32 ( $M = 27.44$ ,  $SD = 2.40$ ). All participants had previous work experience with an average of 4.85 years ( $SD = 1.94$ , range 1–9 years). The majority of participants also reported previous supervisory experience (73.8%). Participants came from a wide variety of industries including consulting, finance, marketing, and sales.

Participants underwent a mood induction procedure, consisting of winning or losing a small gift (\$5 gift certificate to a local coffee shop). They were told that roughly half of the participants would receive a gift certificate, based on random chance. The experimenter presented the participants with two envelopes. One envelope contained the winning certificate ("Congratulations, you won the gift certificate") and the other contained the losing certificate ("Sorry, you did not win the gift certificate"). Although it could be argued that not winning the certificate does not actually imply that the individual *lost* anything, I argue that the participant did lose, in the same way one loses a coin toss by choosing the wrong side of the coin. They chose the wrong envelope, and therefore, lost the gift certificate. Moreover, they were fully aware of their loss. The experimenter was blind to which envelope contained the winning certificate. Participants chose one of the two envelopes, randomly assigning them to one of the two conditions.

Providing a small gift to induce positive mood has been widely used in previous research (e.g., Isen & Shalker, 1982). Receiving the gift certificate was expected to induce a positive mood because success is an effective mood elevator, whereas losing was expected to lead to a negative mood because failure is an effective mood depressor (Henkel & Hinsz, 2004). While there is some concern that the positive mood manipulation may have also induced the norm of reciprocity (Cialdini, 1984), previous research has demonstrated that the manipulation of receiving a small gift produces similar results to other mood manipulations (Erez & Isen, 2002).

After the mood induction, participants were asked to self-report their positive and negative mood and were given a set of written instructions. The instructions told them to imagine that they were a recruitment manager and that they were to explain how to complete a selection task to recruiters in their company. They were given 60 min to read the stimulus packet containing information about a new recruiting procedure and prepare a speech explaining the process. Data were taken on how long the participants prepared for the speech. These speeches were then delivered to a video camera operated by a second experimenter who was blind to the participants' conditions. Participants were given no guidelines as to the length of the speech, and data were also collected on the length of the speeches. This task has been used in previous research and has demonstrated validity as a leadership task (Towler, 2003). These speeches were designed to be used during the second phase of the study so participants acting as followers could complete the selection task.

### 5.1. Job Affect Scale (JAS)

The JAS was used to determine if the mood manipulation impacted leaders' experienced mood states. The JAS (Brief, Burke, George, Robinson, & Webster, 1988) consists of 20 items describing positive and negative mood and is based on the framework provided by Watson and Tellegen (1985). Participants are asked to indicate how they feel "right now" as a measure of state mood. In addition to the distinction between positive and negative mood, the scale can be divided between high and low levels of arousal (ranging from deactivated to activated). In this study the positive activated mood (Cronbach's  $\alpha = .88$ ) and negative activated mood (Cronbach's  $\alpha = .78$ ) scales were used because they are more likely to lead to contagion. Sample items for the negative activated mood scale are: distressed, nervous, hostile. Sample items for the positive activated mood scale are: active, elated, enthusiastic. Answers are recorded on 5-point scale ranging from *very slightly or not at all* (1) to *very much* (5).

### 5.2. Ratings of expressed mood

As a manipulation check of leaders' expressed moods, four coders watched all 42 speeches, in random order, and rated each speaker on six items judging the extent to which he or she expressed positive and negative moods. Raters received a brief training sessions on how to identify positive and negative mood through various sources of information (tone of voice, facial expression, etc.). Rather than counting specific behaviors, followers were asked to make more global judgments about the leaders' mood to allow them to use all available information to make their judgments. Using multiple channels of mood information, including face, voice, and whole body expressions can enhance individuals' ability to decode mood (Van den Stock, Righart, & de Gelder, 2007).

A sample item for the positive mood questionnaire was, “The leader looks like s/he is in a good mood.” A sample item for the negative mood questionnaire was, “The leader looks like s/he is in a bad mood.” To measure agreement between raters, intraclass correlations were run. ICC is conceptualized as the ratio of between-groups variance to total variance (Shrout & Fleiss, 1979) and was calculated using SPSS's one-way random effects model testing for consistency, rather than absolute agreement in the computation. There was an adequate level of agreement between raters for both the positive (ICC = .76) and negative (ICC = .72) mood scales. Also, both the positive (Cronbach's  $\alpha = .96$ ) and negative (Cronbach's  $\alpha = .96$ ) scales had a high level of internal consistency.

### 5.3. Manipulation checks 1 and 2

Because the goal of phase 1 was to create stimuli for the second phase that differed on expressed mood, several sources of information were gathered to ensure that the manipulation of leader mood was successful. First, the leaders self-reported their mood. Second, raters coded all of the leaders' moods. In addition, after stimuli were selected for use in phase 2 of the study, two additional measures of leader expressed mood were taken for the chosen leaders. Table 1 contains the means, standard deviations, and intercorrelations of all of the variables examined in phase 1. The effects of the mood manipulation on leader expressed and experienced mood were examined with correlations. First, examining the self-report data, leaders in the positive mood condition experienced less negative mood than leaders in the negative mood condition ( $r(41) = .39, p < .05$ ). The mood manipulation did not, however, affect leaders' experienced positive mood ( $r(41) = .13, p > .05$ ).

Examining the rater data, leaders in the positive mood condition expressed more positive mood ( $r(41) = .31, p < .05$ ) and less negative mood ( $r(41) = -.33, p < .05$ ) than leaders in the negative mood condition. These data are based on all 42 of the leaders. Additional measures were taken after the focal stimuli were selected.

### 5.4. Stimulus choice

From the 42 leader speeches collected in phase 1, four speeches were chosen for use in phase 2. A coding process was conducted to choose leaders who were similar to each other in appearance, only the 20 white men were considered for use to avoid potential effects of leader race and gender. Of the 20 white men, five were eliminated based on dress, four on age, two for facial hair, one for accent, and one whose speech was very long. After these eliminations, there were two leaders remaining in the negative mood condition and five leaders remaining in the positive mood condition. From the five leaders in the positive mood condition, the two with the highest self-reported positive mood were chosen for use in the study. These steps were taken to avoid threats to construct validity that can occur as a result of bias in stimulus sampling (Wells & Windschitl, 1999). Specifically, the goal was to choose individuals from each condition that were representative of the condition so that the effects can be generalized to represent positive and negative mood in general, rather than being limited to the chosen stimuli from a condition.

To test whether the chosen leaders differed from their respective conditions several measures were taken. The data were divided by condition and the two chosen stimuli were compared to their conditions using independent samples *t*-tests. The chosen leaders did not differ from their respective conditions on expressed or self-reported positive or negative mood, time spent preparing or delivering their speeches ( $ps > .05$ ). In addition, the speeches were scored for the extent to which they covered the major details of the task (using transcriptions) and for nonverbal behavior. There were no differences between the chosen stimuli and their conditions on either of these dimensions ( $ps > .05$ ). Therefore, it appears that the chosen leaders were representative of their conditions.

### 5.5. Manipulation checks 3 and 4

After the four focal leaders were selected, two additional manipulation checks were conducted to ensure that the chosen leaders differed on expressed mood. First, twelve coders watched all four leaders' speeches and rated them on their expressed positive and negative mood. The items for both the positive (Cronbach's  $\alpha = .89$ ) and the negative (Cronbach's  $\alpha = .94$ ) expressed

**Table 1**

Means, standard deviations, and intercorrelations between variables in phase 1 (leaders' mood induction).

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1. Mood condition <sup>a</sup>	0.50	0.51	1								
2. Expressed positive mood	3.23	0.92	.31*	1							
3. Expressed negative mood	2.36	0.94	-.33*	-.88***	1						
4. Self-reported positive mood	3.00	0.77	.13	.39*	-.40**	1					
5. Self-reported negative mood	1.55	0.51	-.33*	-.07	.15	-.20	1				
6. Speech preparation time	5.61	2.63	.31*	.05	-.01	.03	-.06	1			
7. Speech length	24.45	14.62	.33*	.08	-.05	.32*	-.08	.06	1		
8. Transcript rating	0.53	0.21	.22	-.22	.17	.08	-.20	.246	.32*	1	
9. Nonverbal behavior	3.95	0.82	.19	.20	-.18	.43**	-.19	-.06	.24	.04	1

Note.  $n = 42$ .

<sup>a</sup> Mood condition was coded as 0 = negative mood ( $n = 21$ ), 1 = positive mood ( $n = 21$ ).

\*  $p < .05$ .

\*\*  $p < .005$ .

\*\*\*  $p < .001$ .

mood questionnaires were the same as the manipulation check used in phase 1. Coders received similar training to those who rated all of the 42 leader speeches on expressed mood. The *t*-test for expressed positive mood revealed a significant difference between conditions  $t(46) = -2.53, p < .05$ . The two leaders in the positive mood condition were rated as expressing more positive mood ( $M = 3.64, SD = .72$ ) than the two leaders in the negative mood condition ( $M = 3.14, SD = .64$ ). The *t*-test for expressed negative mood also revealed a significant difference between conditions  $t(46) = 3.77, p < .001$ . The two leaders in the positive mood condition were rated as expressing less negative mood ( $M = 1.64, SD = .67$ ) than the two leaders in the negative mood condition ( $M = 2.39, SD = .71$ ).

In addition, two *t*-tests were run to determine whether there were any differences between the two stimuli within each condition. As expected, there was no difference between the two stimuli in the positive mood on expressed positive  $t(22) = .37, p > .05$  or negative  $t(22) = 1.70, p > .05$  mood. Similarly, there were no differences between the two stimuli in the negative mood condition on expressed positive  $t(22) = -.42, p > .05$  or negative  $t(22) = -.19, p > .05$  mood.

As a final manipulation check, the participants who acted as followers in phase 2 also rated their leader's positive mood. The followers rated the leaders on positive mood using the same three-item scale used prior (Cronbach's  $\alpha = .93$ ). The followers' manipulation check was tested using an independent samples *t*-test to compare the differences between conditions  $t(198) = 5.56, p < .001$ . Followers in the positive mood condition reported that their leaders expressed more positive mood ( $M = 3.44, SD = .98$ ) than leaders in the negative mood condition ( $M = 2.64, SD = 1.04$ ). Two additional tests were conducted to examine whether there were differences between the two stimuli within each condition on the manipulation check. There was no difference between the two stimuli in the negative mood condition ( $t(90) = 1.58, p > .05$ ) or between the two stimuli in the positive mood condition ( $t(106) = -.42, p > .05$ ).

In sum, all of the manipulation checks revealed significant differences between conditions on expressed positive and negative mood and experienced negative mood, but not experienced positive mood.

## 6. Phase 2

Phase 2 consisted of 200 participants from two universities in the southwest who participated in the study for course credit. The majority of the participants were women ( $n = 120, 59.1\%$ ), and Caucasian ( $n = 120, 59.1\%$ ). There were also 26 Asian (12.8%), 19 Black (9.4%), and 26 Hispanic (12.8%) participants. Twelve (5.9%) participants failed to indicate their race. The participants ranged in age from 17 to 51 years ( $M = 23.84, SD = 6.79$ ). The majority of the participants were undergraduate students ( $n = 147$ ), but there were also 53 graduate students. Most of the participants had previous work experience ( $n = 168, 96.1\%$ ) with the average being 5.63 years ( $SD = 6.53$ ). Eighty-five (41.9%) of the participants had previous supervisory experience.

### 6.1. Procedure

Participants viewed one of four leadership stimuli tapes from phase 1 and completed a series of measures, including self-reported mood (JAS), a rating of their leader's charismatic leadership (MLQ), and a performance task in that order. Followers also completed a manipulation check (described previously) in which they rated leader mood. The task was a selection exercise adapted from Towler (2003). Instructions on how to complete the task were conveyed to the followers by the taped leadership speeches. Although the individuals delivering the speeches had no relationship with the followers, they should be considered "leaders" because they had the sole responsibility of explaining the task to, and eliciting task performance from, the followers (Davis & Luthans, 1979). As Chemers (1997, p. 1) said, "Leadership is a process of social influence in which one person is able to enlist the aid and support of others in the accomplishment of a common task."

Further, as suggested by leadership categorization theory, the mere labeling of someone as a leader is enough to evoke followers' leadership prototypes and impact followers' attitudes toward the "leader" (Lord, Foti, & De Vader 1984). The followers were given 45 minutes to complete the selection task which involved scanning 12 resumes for a position in a management training program. The followers were asked to rank order each of the resumes and to write a letter to the top candidate offering the individual the job, and trying to recruit him/her to accept the position at the company. As an overall measure of performance the z-scored average of the followers' performance on ranking the resumes and their score on the letter's quality was taken.

### 6.2. Instructions and task

As described previously, the leaders in phase 1 read a stimulus packet in which they were asked to assume the role of a recruitment manager, explaining how to conduct a selection process for a management training program. The participants in this phase of the study were to complete the selection task based on 12 resumes, according to the leaders' instructions. Performance was scored based on the accuracy of their candidate rankings and quality of their recruitment letter.

#### 6.2.1. Performance accuracy

In the original development of this task, experts rated each of the applicants for the management training program (Towler, 2003). The first measure of performance was the agreement between the rankings produced by the participants and those determined by the coders. The agreement score was calculated by taking the absolute value of the difference between the "correct" rankings and the given rankings. The sum of the values was taken and the total was multiplied by negative one so a higher score indicates a better score.

### 6.2.2. Letter

The second measure of performance was the quality of the participants' recruitment letter. Participants wrote a letter to their top candidate, persuading him or her to join their organization. Each letter was rated by three coders on quality. A sample item is "The letter was high quality." There was an adequate level of agreement between raters (ICC = .76) and the scale had high internal consistency (Cronbach's  $\alpha = .92$ ).

## 6.3. Measures

### 6.3.1. Job Affect Scale (JAS)

Same as phase 1. Again, the positive and negative activated scales were used. The positive mood scale had an adequate level of internal consistency (Cronbach's  $\alpha = .88$ ). The internal consistency for negative mood was not adequate (Cronbach's  $\alpha = .58$ ), as it was lower than the accepted standard of .70 (Guion, 1998). To examine the reason behind the low level of internal consistency the items from the negative activated mood scale were subjected to an exploratory factor analysis, which yielded two factors. The first factor represented two items (hostile, scornful) which had an adequate level of reliability (Cronbach's  $\alpha = .71$ ). The remaining four items clustered together as a second factor, although they still had a low level of internal consistency (Cronbach's  $\alpha = .57$ ). Therefore, only the first factor was used to represent the negative mood scale.

### 6.3.2. Multifactor Leadership Questionnaire (MLQ-5X/short form)

Three subscales from Bass and Avolio's (1995) leadership questionnaire were used to measure Charismatic Leadership: Idealized Influence, Inspiration Motivation, and Attributed Charisma. The scale consists of 12 items and ratings are made on a 5-point Likert-type scale anchored with 0 = not at all and 4 = frequently, if not always. Because of the high level of internal consistency of the scale (Cronbach's  $\alpha = .90$ ) and the theoretical basis for the conceptual connections between the subscales (Bass, 1985), an overall measure of charismatic leadership was used. The use of an overall charisma measure is supported by current theory development of charismatic leadership (Bass & Riggio, 2006).

## 6.4. Results and discussion

### 6.4.1. Test of hypotheses

The first 5 hypotheses were tested using correlations (Table 2). Hypothesis 1 was supported such that leaders expressing positive mood were attributed greater levels of charismatic leadership ( $r(199) = .38, p < .001$ ) than leaders expressing negative mood. As suggested by Hypothesis 2, leaders expressing positive mood also elicited better performance from followers ( $r(199) = .25, p < .001$ ) than leaders expressing negative mood. Finally, in accordance with Hypothesis 3a and 3b leaders expressing positive mood elicited more positive mood ( $r(199) = .26, p < .001$ ) and less negative mood ( $r(199) = -.21, p < .01$ ) from followers than leaders expressing negative mood.

Examining the effects of follower mood on follower outcomes, Hypotheses 4a and 4b suggested that follower positive and negative mood would impact follower ratings of charismatic leadership. Both hypotheses were supported: follower positive mood was positively related to ratings of charismatic leadership ( $r(199) = .40, p < .001$ ) and follower negative mood was negatively related to ratings of charismatic leadership ( $r(199) = -.19, p < .01$ ). In support of Hypothesis 5b, follower negative mood was negatively related to follower performance ( $r(199) = -.23, p < .01$ ). Hypothesis 5a was not supported as follower positive mood was not significantly related to follower performance ( $r(199) = -.01, p > .05$ ).

### 6.4.2. Tests of mediation

Several partial mediations were also hypothesized. To test for mediation, the steps outlined by Baron and Kenny (1986) were followed. Hypotheses 6a and 6b suggested that follower positive and negative mood would partially mediate the relationship between leader mood and follower ratings of charismatic leadership. The initial criteria for mediation were satisfied with correlational data (Table 2). Leader mood (the IV) was significantly related to follower positive and negative mood (the mediators) and follower ratings of charismatic leadership (the DV). In addition, follower positive and negative mood were related to follower

**Table 2**

Means, standard deviations, and intercorrelations between variables in phase 2 (followers watching leaders' videos).

	M	SD	1	2	3	4	5
1. Mood condition <sup>a</sup>	0.54	0.50	1				
2. Follower positive mood	2.27	0.85	.26 ***	1			
3. Follower negative mood	1.26	0.55	-.21 **	-.07	1		
4. Charismatic leadership	2.03	0.84	.38 ***	.40 ***	-.19 **	1	
5. Follower performance	0.04	1.47	.25 ***	-.01	-.23 **	.08	1

Note.  $n = 200$ .

<sup>a</sup> Mood condition was coded as 0 = negative mood ( $n = 92$ ), 1 = positive mood ( $n = 108$ ).

\*  $p < .05$ .

\*\*  $p < .005$ .

\*\*\*  $p < .001$ .

**Table 3**

Mediating effects of followers' mood on the relationship between leaders' mood and charismatic leadership in phase 2 (followers watching leaders' videos).

	B	R <sup>2</sup>	ΔR <sup>2</sup>
DV = Charismatic leadership			
Step 1			
Mood condition <sup>a</sup>	.63***	.14	.14***
Step 2			
Mood condition <sup>a</sup>	.46***		
Follower positive mood	.32***		
Follower negative mood <sup>b</sup>	.17	.25	.07***

Note.  $n = 200$ .

<sup>a</sup> Mood condition was coded as 0 = negative mood, 1 = positive mood.

<sup>b</sup> Followers' negative mood was reversed by multiplying the variable by a negative 1 so that all values would be positive.

\*  $p < .05$ .

\*\*  $p < .005$ .

\*\*\*  $p < .001$ .

ratings of charismatic leadership. To establish the next criteria for mediation, leader mood was entered as the first step in a regression equation and follower positive and negative mood were entered as the second step, with follower ratings of charismatic leadership entered as the dependant variable.

The effect of follower positive mood on ratings of charismatic leadership remained significant after accounting for leader mood ( $\beta = .32$ ,  $t(196) = 4.98$ ,  $p < .001$ ), although the effect of follower negative mood on ratings of charismatic leadership no longer reached conventional levels of significance when controlling for leader mood ( $\beta = -.17$ ,  $t(196) = 1.74$ ,  $p = .08$ ). To test whether the effect of leader mood on follower ratings of charismatic leadership was significantly reduced, a Sobel test (Sobel, 1982) was conducted. The test revealed a significant decrease in the relationship between leader positive mood and follower ratings of charismatic leadership when accounting for follower positive mood ( $z = 3.02$ ,  $p < .001$ ). The relationship between leader positive mood and follower ratings of charismatic leadership remained statistically significant, however, providing evidence of partial mediation (Table 3).

To test Hypotheses 7a and 7b that follower positive and negative mood would partially mediate the relationship between leader mood and follower performance, an additional test of mediation was conducted. The criteria for mediation were established for follower negative mood. Leader mood (the IV) related to follower performance (the DV), leader mood related to follower negative mood (the mediator), and follower negative mood related to follower performance. The criteria were not established for follower positive mood, however, which was not significantly related to follower performance (Table 2). Therefore, the mediation test was only conducted for follower negative mood. The remaining criteria for partial mediation were tested by adding leader mood into a regression equation as the first step and follower negative mood into the regression equation as the second step, with follower performance as the dependent variable. The relationship between follower negative mood and follower performance was statistically significant ( $\beta = .50$ ,  $t(197) = 2.65$ ,  $p < .01$ ), and the relationship between leader mood and follower performance was reduced, although it remained statistically significant. A Sobel test revealed that this reduction was statistically significant ( $z = 1.98$ ,  $p < .05$ ) providing evidence for a partial mediation (Table 4).

In sum, leader mood influenced follower positive and negative mood, follower ratings of charismatic leadership, and follower performance. Follower positive mood partially mediated the relationship between leader mood and follower ratings of charismatic leadership while follower negative mood partially mediated the relationship between leader mood and follower performance.

## 7. Phase 3

The second phase of the study largely supported the hypothesized relationships, although there is some ambiguity as to why leader mood impacted follower outcomes. Because the leader stimuli were the result of mood inductions, rather than standardized

**Table 4**

Mediating effects of follower mood on the relationship between leaders' mood and followers' performance in phase 2 (followers watching leaders' videos).

	B	R <sup>2</sup>	ΔR <sup>2</sup>
DV = Follower performance			
Step 1			
Mood condition <sup>a</sup>	.73***	.06	.06**
Step 2			
Mood condition <sup>a</sup>	.61**		
Follower negative mood <sup>b</sup>	.50**	.09	.03**

Note.  $n = 200$ .

<sup>a</sup> Mood condition was coded as 0 = negative mood, 1 = positive mood.

<sup>b</sup> Followers' negative mood was reversed by multiplying the variable by a negative 1 so that all values would be positive.

\*  $p < .05$ .

\*\*  $p < .005$ .

\*\*\*  $p < .001$ .

stimuli, they differed in both the content and the delivery of their leadership speeches. It was unclear if it was what the leaders said, or how they said it, that resulted in changes in follower mood, ratings of charismatic leadership, and performance. Previous research has demonstrated that both leaders' content and delivery can affect followers' ratings of charismatic leadership and performance (Awamleh & Gardner, 1999; Johnson & Dipboye, 2008; Kirkpatrick & Locke, 1996). To address this concern, a final phase of the study was conducted in which the leaders' speeches were transcribed and participants read the speeches (rather than watching a videotape) and completed the post measures and performance task.

## 7.1. Method

To determine the number of participants needed for the final phase of the study a power analysis was conducted. Based on the effects reported in phase 2, a medium effect size was used ( $d = .50$ ). To ensure a 90% chance of finding an effect (with  $p < .05$ ,  $\delta = 3.30$ ), there was a need for 66 participants. Data were collected from 71 (34 men) undergraduate business students at a large public university who participated in the study for course credit. Participants were randomly assigned to a condition and to one of the two leader stimuli from that condition. All participants read a transcript of one of the leadership speeches from phase 2 and then completed measures and performance task.

### 7.1.1. Measures

All of the measures used were the same as in phase 2. On the manipulation checks, participants reported high levels of internal consistency on both the positive mood (Cronbach's  $\alpha = .84$ ) and negative mood (Cronbach's  $\alpha = .87$ ) scales. Similarly, the positive activated mood (Cronbach's  $\alpha = .85$ ) and negative activated mood (Cronbach's  $\alpha = .75$ ) scales of the JAS and the MLQ (Cronbach's  $\alpha = .82$ ) had high levels of internal consistency.

### 7.1.2. Performance

The same performance task and scoring method was used as in phase 2. The performance score consisted of the z-scored average of participants' score on ranking the applicants and their score on the letter writing task. The letters were again rated by three coders, blind to condition, who had a high level of agreement (ICC = .83) and the scale had high internal consistency (Cronbach's  $\alpha = .97$ ).

## 7.2. Results and discussion

Intercorrelations of the study variables are reported in Table 5. First, the manipulation checks were tested using two independent sample  $t$ -tests. There were no differences between the positive and negative mood conditions on participants' perceptions of the leaders' positive mood  $t(69) = .68, p > .05$  or negative mood  $t(69) = .19, p > .05$ . Two additional  $t$ -tests were conducted to test for differences between the stimuli for each condition. For the negative mood condition, participants reported no differences between the two negative mood stimuli on the positive  $t(33) = .70, p > .05$  or negative  $t(33) = -.72, p > .05$  mood manipulation check. Similarly, for the positive mood condition, participants reported no differences between the two positive mood stimuli on the positive  $t(34) = -1.46, p > .05$  or negative  $t(34) = 1.49, p > .05$  mood manipulation check. Participants were unable to distinguish the positive mood leaders from the negative mood leaders, but also reported no differences between the two stimuli from each condition.

All hypotheses from phase 2 were tested in phase 3. Hypothesis 1, that leaders expressing positive mood would be attributed greater levels of charismatic leadership than leaders expressing negative mood was again supported ( $r(70) = .25, p < .05$ ). Unlike phase 2, Hypotheses 2, 3a, and 3b were not supported. Leaders expressing positive mood did not elicit better performance ( $r(70) = .04, p > .05$ ), more positive mood ( $r(70) = .20, p > .05$ ), or less negative mood ( $r(70) = .08, p > .05$ ) from followers than leaders expressing negative mood.

Although leaders' mood did not impact follower mood, the hypotheses related to followers' mood were tested. Hypothesis 4a, that followers' positive mood would positively impact followers' ratings of charismatic leadership, was supported ( $r(70) = .54, p < .001$ ). However, Hypothesis 4b, that followers' negative mood would negatively impact followers' ratings of charismatic leadership was not supported ( $r(70) = -.04, p > .05$ ). Finally, neither Hypotheses 5a ( $r(70) = -.04, p > .05$ ) nor 5b ( $r(70) = -.15,$

**Table 5**

Means, standard deviations, and intercorrelations between variables in phase 3 (followers reading leaders' transcripts).

	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Mood condition <sup>a</sup>	0.51	.50	1				
2. Follower positive mood	3.00	.79	.20	1			
3. Follower negative mood	1.75	.71	.08	.15	1		
4. Charismatic leadership	2.47	.62	.25*	.54***	-.04	1	
5. Follower performance	0.00	.65	.04	-.04	-.15	-.03	1

Note.  $n = 71$ .

<sup>a</sup> Mood condition was coded as 0 = negative mood ( $n = 35$ ), 1 = positive mood ( $n = 36$ ).

\*  $p < .05$ .

\*\*  $p < .005$ .

\*\*\*  $p < .001$ .

$p > .05$ ), that followers' positive or negative mood impact performance were supported. In sum, leaders' mood (through the transcripts) only affected follower ratings of charismatic leadership. Leaders' mood did not impact followers' mood or followers' performance. The results from phase 3 suggest that the effects in phase 2 were largely caused by the delivery of the leaders' speeches, rather than the content of those speeches, although the leaders' charisma did translate into their transcribed speeches.

## 8. General discussion

The research presented here demonstrates that mood contagion from leaders to followers can have an important impact on follower outcomes. Brief and Weiss (2002, p. 289) said that, "the organizational literature is populated with many more ideas about the leader's role in the production of moods and emotions than it is with relevant data." The current study provides a thorough and rigorous test of the effects of leaders' expressed moods on organizationally relevant follower outcomes. In terms of AET (Weiss & Cropanzano, 1996), leaders' moods can elicit corresponding affective, attitudinal, and behavioral responses in followers. Indeed, leaders' mood was found to impact follower positive and negative mood, ratings of charismatic leadership, and performance on a selection task. More importantly, the resultant follower positive mood partially mediated the relationship between leader mood and follower ratings of charismatic leadership, and the resultant follower negative mood partially mediated the relationship between leader mood and follower performance.

Although not examined in this study, the effects of leader mood on follower mood may be moderated by leader expressiveness, such that more expressive individuals are likely to be better senders of mood (Friedman & Riggio, 1981). Individuals who are more expressive are more likely to emerge as leaders and are perceived more positively as leaders (Groves, 2005; Kellert, Humphrey, & Sleeth, 2006). Leader trait positive affectivity (Rubin, Munz, & Bommer, 2005) and extraversion (Bono & Judge, 2004) are also linked to effective leadership. That is not to say that leaders must always experience positive moods, but they should work to regulate their expressed mood to lead followers most effectively. Leaders use their moods and emotions to influence followers (Ashkanasy & Tse, 2000; Mio et al., 2005) and leader emotional intelligence is related to leadership emergence and success (Kellert et al., 2006; George, 2000; Goleman, 1998, 2000, Wolff, Pescosolido, & Druskat, 2002).

### 8.1. Follower mood

The findings from this study also advance what Barsade, Brief, and Spataro (2003) call the "affective revolution" in organizational behavior. In this study, follower negative mood impacted follower performance, whereas follower positive mood, which was unrelated to negative mood, was not related to follower performance. One explanation for this finding is that negative moods tend to have stronger specific action tendencies ("fight or flight") than do positive moods, whereas positive mood tends to have more diffuse and vague responses (Fredrickson, 2001). Follower positive mood had a stronger impact on follower ratings of charismatic leadership than did follower negative mood. However, the effects of mood on ratings of charismatic leadership might be attenuated in situations in which followers already have a well-formed impression of their leader. In terms of Forgas' (1995) Affect Infusion Model, mood is less likely to influence perceptions in direct access processing, in which one has a preexisting evaluation of the person he or she is evaluating. Mood is most likely to influence perceptions in situations, such as this laboratory study, in which one engages in heuristic processing or substantive processing.

Yet, when relationships between leaders and followers begin, followers have to engage in heuristic and/or substantive processing to form initial impressions. In those early interactions, follower mood may influence impressions of the leader. Employers may seek ways to boost employees' mood at work, such as providing flex-time or small inducements to employees. They might also look for ways to alleviate negative mood, such as relieving stressful situations and uncomfortable working conditions. Indeed, previous research has shown that even small changes to the environment can impact individuals' mood (Baron, 1990). Future research is needed to examine the relationship between mood and performance in different work settings.

However, it should be noted that the expectation that negative affect leads to negative outcomes and positive affect leads to positive outcomes is not universally true. In some instances, negative affect may lead to favorable outcomes (Connelly et al., 2002), and in others positive affect can lead to unfavorable outcomes. For example, charismatic leadership is often associated with the rejection of the status quo (Conger & Kanungo, 1998), which may require leaders to display negative affect or anger. Lerner and Keltner (2000) found that anger can result in optimistic judgments toward future events. Similarly, Zhou and George (2002) and George and Zhou (2002) found that high levels of negative affect can result in greater levels of creativity than low levels of negative affect under certain conditions. Moreover, positive mood can result in greater reliance on stereotypes because of the association between positive affect and heuristic processing (e.g., Park & Banjai, 2000). Future research should continue to examine the situational determinants and boundary conditions of the affect–performance relationship.

### 8.2. Limitations and implications

There were several limitations to the current study. In terms of the methodology, it is important to note that all of the comparisons of mood were between positive and negative mood rather than comparing each to a neutral mood condition. Therefore, it is unclear whether the effects were driven by leaders' negative mood, or positive mood. In addition, the directionality among the follower variables (e.g., follower mood affects follower ratings of charismatic leadership) is not without question. It is possible that the ratings were influenced by halo bias resulting from the mood contagion experienced by followers and followers'

responses on the first questionnaire (self-reported mood) influenced their responses on the second questionnaire (ratings of charismatic leadership).

However, in phase 3 of this study, leader mood impacted follower ratings of charismatic leadership, but did not impact follower mood. This suggests that halo bias or ordering effects were not the cause of follower ratings of charismatic leadership in phase 3, making it less likely that was the case in phase 2. Bono and Ilies (2006) also found that leader positive mood lead to better ratings of charismatic leadership, but did not impact other ratings of the leader (attractiveness) suggesting that halo was not the cause of the ratings. Also there is evidence that individuals' affective reactions to stimuli often precede their cognitive evaluation of stimuli (Zajonc, 1980). For the relationship between follower mood and performance, the study was designed so that followers completed all of their measures before beginning their performance task, supporting the directionality of this relationship as well. In addition, it should be noted that difference in leader behavior in phase 1 could have been the result of some process other than induced affect, such as demand characteristics of the experiment.

Of concern was the non-significant manipulation check for self-reported positive mood among leaders in phase 1, as a result of the affect induction. There is evidence that individuals do not always have access to their moods and emotions and may be influenced by social desirability in responding when self-reporting their moods and emotions (Barrett, 1996). It is possible that even individuals who received the negative mood induction chose to report experiencing more positive mood, because it is the more socially desirable response. The same should also have been true for negative mood, although there were differences reported there. There were differences in expressed positive and negative mood, which should be relatively accurate measures of mood (Gross et al., 2000).

A related problem is the self-report measure of follower negative mood in phase 2. The measure of high negative affect had low levels of internal consistency and multiple factors emerged from its factor analysis and the resulting measure represented anger more than negative affect. The structure of the measure could reflect individual differences in valence or arousal focus and social desirability in responding (Barrett, 1996). Another possibility is that, since follower affect was induced through mood contagion, followers may actually have “caught” the emotion of anger from leaders, rather than general negative mood. Emotional contagion research has indicated differences in the contagion of discrete negative emotions, rather than more general valence contagion, such as negative mood (Doherty, 1997).

The difficulty with the measure presents a problem for the generalizability of the findings for anger to negative mood in general. That is, this study did not demonstrate the effect of *negative mood* on performance, but rather, demonstrated the effect of anger on performance. However, the focus on anger does allow us to compare our work to previous leadership work. McColl-Kennedy and Anderson (2002) found that follower frustration mediated the relationship between transformation leadership and follower sales performance. Followers of more transformational leaders experienced lower levels of frustration and, therefore better sales performance. Further, other research has demonstrated that anger negatively impacts social information processing, whereas the negative emotion of sadness has no effect on information processing (Bodenhausen, Sheppard, & Kramer, 1994). Therefore, it is possible that the effects of negative mood in the current study would not have been produced had a different negative state (i.e., fear, sadness, general negative mood) been induced. All of these concerns result in a more general concern about the interpretation of the findings. It is possible that leaders who did not receive the gift became angry, did a poor job of leadership, and therefore, had more negative follower outcomes (mood, charisma ratings, performance).

In addition, the use of students as leaders and followers and the lack of interpersonal interactions between the leaders and followers raise concern over the generalizability of the findings. The laboratory environment may explain the non-significant relationship between follower ratings of charismatic leadership and follower performance, despite a wealth of other evidence demonstrating this relationship (Lowe et al., 1996). However, using leaders and followers with a history of interaction would make it difficult, if not impossible, to isolate the role of mood contagion and follower mood on follower ratings of their leader's charismatic leadership and performance. Moreover, Locke (1986) has demonstrated high levels of similarity between laboratory and field research. And, as noted by Mook (1983), laboratory experiments provide insight on what can happen in various situations, rather than what does happen.

### 8.3. Conclusion

Despite these limitations, the current findings significantly advance our understanding of mood contagion in leadership. While previous theory has suggested that leaders may influence their followers via mood contagion, the current study tested this hypothesis quantitatively in a controlled laboratory setting. These findings demonstrate compellingly that leaders' moods can influence follower positive and negative mood through mood contagion, and that follower subsequent mood influences their ratings of charismatic leadership and performance. Follower mood may, therefore, explain some of the effects of leader mood on follower outcomes.

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