Summer 2009

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Vecchio, Robert P.; Justin, Joseph E.; and Pearce, Craig L., "The Influence of Leader Humor on Relationships between Leader Behavior and Follower Outcomes" (2009). *Management Department Faculty Publications*. 70.  
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The Influence of Leader Humor on Relationships between Leader Behavior and Follower Outcomes*

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Although it is widely suspected that a leader’s use of humor can have an enhancing effect on follower performance, relatively little empirical evidence has been gathered that clearly substantiates this belief (Duncan, Smeltzer, and Leap, 1990). Generally, scholarship devoted to the topic of humor in the workplace has been suggestive of how humor might impact group climate or organizational culture (Collinson, 1988; Holmes and Marra, 2002; Linstead, 1985; Lundberg, 1969; Robinson and Smith-Lovin, 2001) or build unit cohesion (Lennox-Terrion andASHforth, 2002). In his early article, Malone (1980) argued that humor may contribute to enhancing both employee satisfaction and performance. Duncan (1982) linked humor to stimulating better communications as well as group cohesiveness, and linked these variables to better individual performance. In a later review of the literature on humor, Duncan et al. (1990) pointed to social psychological evidence of performance effects due to humor, as well as possible gender differences in response to humor. Additionally, Csikszentmihalyi (1996) provided support for the proposition that humor may stimulate creative thinking and innovation, while Ziv (1976) demonstrated that exposure to humor can enhance cre-

*The authors thank Bruce J. Avolio, Wayne H. Decker, and W. Jack Duncan for their constructive comments on an earlier draft of this paper.
ativity in a laboratory setting. More recently, Cooper (2005) suggested that humor can be a type of ingratulatory behavior that can induce a favorable mood. In her conceptual framework for understanding humor as a form of ingratiation, Cooper linked humor to employee effectiveness. Christopher and Yan (2005), in a discussion of organizational culture, suggested that humor can also help to build interpersonal work relationships and, thereby, impact larger organizational outcomes. From a broader perspective, evidence reported by Amabile, Barsade, Mueller, and Staw (2005), George (1990, 1995), and Isen, Daubman, and Nowicki (1987) indicates that positive affect and mood are related to creativity and performance in a direct, linear fashion.

In one of the few empirical studies of the role of humor in a particular organizational setting, Avolio, Howell, and Sosik (1999) assessed the attitudes and behaviors of 115 managerial leaders and their 322 subordinates in a large financial institution. Specifically, these researchers asked followers to describe their manager’s leadership behavior (on dimensions of transformational, contingent reward, and laissez-faire leadership) and use of tension-reducing humor. Analyses of the dependent measures of subordinate and work-unit performance revealed that humor had both a positive main-effect and a moderator-effect when considered in conjunction with subordinate descriptions of leader behavior. Specifically, they found that transformational leadership was more positively related to unit performance for leaders who made high use of humor (relative to low use), and that contingent reward leadership and laissez-faire leadership (contrary to their predic-

It should perhaps be noted at this point that tension-reducing humor is also the focus of the present study. However, tension-reducing humor is only one of three major theoretical perspectives for understanding the role of humor: superiority, incongruity, and relief (or tension-reducing). Superiority theories of humor contend that humor originates in feelings of perceived superiority over another (Foot, 1986). Research on this form of humor has dealt with aggressive and disparaging aspects of humor. Incongruity theories focus on humor arising from the unanticipated discovery of an inconsistency (Berger, 1976). Relief theories, however, focus on laughter as providing a discharge for pent-up energy or tension (Berlyne, 1972; Giles et al., 1976).

The Question of Context

The import of this previous theory and research is that the use of humor by a leader can have a positive impact on follower job performance through a variety of social mechanisms. As noted above, humor can provide tension release and psychic reward, as well as relieve frustration and facilitate information transfer. It should also be noted that the above-cited research occurred in for-profit firms. Whether humor can be shown to be associated with employee performance outside of a for-profit organizational setting remains an open question, as the leadership role in public institutions presents unique challenges due to a relative lack of clear,
simple measures of organizational performance and comparatively high employee entrenchment (Drake and Roe, 2003; Engel, 2004; Werther, 2004). In addition, Drucker (1990) and others (e.g., Connors, 2001; Engel, 2004; Finkelstein and Malen, 2004; Hallock, 2004; Hesselbein, 2004; Pearce et al., 2001; Riggio and Orr, 2004; Werther, 2004) make the point that educational leaders (and, more broadly, one may argue leaders in non-profit settings) have recourse to fewer extrinsic levers by which they can motivate employees (e.g., less control over financial incentives and less ease of terminating employment due to tenure arrangements). As a consequence, the use of humor may be one of the avenues through which an institutional leader can hope to reduce social tension and facilitate work effort. Quite possibly, humor may be relied on more readily as a social influence tactic in an educational setting, relative to other organizational settings, because interpersonal relations is one of the few influence mechanisms available to an educational administrator. Therefore, the use of humor may reveal stronger effects in an educational setting (vis-à-vis a for-profit setting). Alternatively, it may be otherwise true that the relative lack of motivational levers so weakens a leader in an educational setting that the use of humor has no measurable impact on performance. Nonetheless, by extending the prior published findings on humor within the for-profit sector to the educational arena, the following direct effect is posited:

Hypothesis 1: A leader’s use of humor in an educational setting is positively related to follower job performance.

The Use of Humor as a Moderator of Contingent Reward and Integrity

The findings of Avolio et al. (1999) in a financial institution suggest that humor may lighten the atmosphere at work, thereby allowing followers to discuss more openly what is expected of them in terms of their performance. Moreover, the scholarship reviewed above suggests that a leader’s use of humor may also have a more complex connection with follower performance, beyond a simple, direct positive effect. Similarly, Avolio et al. (1999) argued that the use of humor may moderate the relationship between contingent reward leadership (i.e., a set of behaviors that focus on establishing clear exchanges with followers, Bass (1985)) and follower performance. He and his colleagues found that leaders in a financial institution who used contingent personal rewards and high levels of humor were less successful in enhancing performance than leaders who used contingent rewards in combination with low levels of humor. Thus, high levels of humor for leaders who make use of contingent rewards may appear to be inappropriate to followers. This finding is actually counter-intuitive as the combination of a high level of humor and the use of contingent rewards would arguably have an enhancement effect on follower performance (of course, we cannot state categorically that the high humor/high reward circumstance resulted in lower performance in absolute terms relative to the low humor/high reward circumstance as the reported results were essentially relational). Therefore, there is a question as to the reliability of the specific form of
the interaction effect that they reported.

Based on this previous research (Avolio et al., 1999; Duncan et al., 1990; Malone, 1980), it is more broadly predicted that the use of humor will moderate the effect of contingent reward on follower performance such that the use of humor will "compensate" for the absence of leader contingent reward behavior. However, it seems likely that high humor in combination with high rewards may enhance performance, while low humor in combination with low contingent reward would reduce performance. Thus,

Hypothesis 2: A leader’s use of humor in an educational setting moderates the effect of contingent reward leadership on follower job performance, such that low humor in combination with low contingent reward will be associated with lower performance while high humor in combination with high contingent reward will be associated with higher performance.

It also seems likely (as suggested by Malone, 1980) that the impact of humor will depend on the degree to which a subordinate holds a leader in high regard. Leader ethical integrity has long been recognized as one of the most important characteristics of managers, ranking even higher than competence (Posner and Schmidt, 1984). Leaders who are judged to be lower on personal integrity and do not employ humor should have lower levels of subordinate performance. Higher levels of integrity may be able to compensate for a leader’s low use of humor. To date, there is no evidence on whether the use of humor interacts with leader integrity to influence follower job performance in either the for-profit or the not-for-profit sectors. However, it seems likely that a leader’s honesty or integrity would also enhance the process of workplace openness, and that leader integrity should be of considerable importance for enhancing leader effectiveness in both non-profit and for-profit sectors (Ciulla, 2004). Furthermore, the recent introduction of the leadership construct of authentic leadership (Avolio and Gardner, 2005; Cooper, 2005) has particular relevance for the role of leader honesty or integrity. As noted by Ilies, Morgenson, and Nahrgang (2005) in their discussion of authentic leadership, leaders of high integrity should have more positive working relationships with their followers, which may then be leveraged into higher levels of employee contribution. Followers of leaders who manifest both a high level of integrity and a high level of humor should experience higher levels of workplace well-being, which in turn should generate higher levels of follower performance (Ryan and Deci, 2000).

As the use of humor can operate as a substitution effect, wherein a high level of humor can enhance performance in the absence of effective leader behavior, we expect that there will be an interaction between leader humor and integrity. More specifically, we expect that the appropriate use of humor by a leader who exhibits a high level of integrity will enhance follower performance, while leaders who are judged to exhibit less integrity and fail to make use of humor will have comparatively lower follower performance.

Hypothesis 3: A leader’s use of humor in an educational setting moderates the effect of leader integrity on follower job performance, such that low humor in combination with low leader integrity will be associated with lower performance while high humor in combination with high leader integrity will be associated with higher performance.
Gender-specific Differences in Response to Leader Humor

In their review of the literature on humor and work, Duncan et al. (1990) identified the individual differences attribute of gender as a variable that has received substantial attention in the study of humor. As early as the 1950s, it had been demonstrated that male respondents report some forms of humor to be funnier than female respondents (More and Roberts, 1957). Subsequent research by Chapman and Gadfield (1976) and Cupchick and Leventhal (1974) also found that males provided higher ratings of “funniness” to humorous situations than did females. Chapman and Gadfield (1976) reported that disparaging remarks directed at members of one gender are (not too surprisingly) not enjoyed by members of that gender. In addition, members of a group generally feel entitled to joke within the group, whereas outsiders are not allowed (Smeltzer and Leap, 1988; Duncan et al., 1990). Males appear to be more offended than females when a friend is the target of a “put down” (Zillman and Bryant, 1974). In a study of the reported appropriateness of humor in an office setting, Decker (1986) found that males favored aggressive humor by a male manager to that of a female manager.

Research on gender differences in self-reports of humor behavior and humor preference has also provided interesting insights. For example, males have been found to engage in more maladaptive forms of humor (Crawford and Greesley, 1991; Martin et al., 1993). More recently, Martin, Puhlik-Doris, Larsen, Gray, and Weir (2003) found that males, relative to females, reported a greater tendency to engage in aggressive humor (e.g., sarcasm, ridicule, “put-downs”), self-disparaging humor, and avoidant humor. Other research on individual differences in reactions to sexist humor (Thomas and Esses, 2004) indicated that males who were higher in hostile sexism were more likely to report that they would repeat female-disparaging jokes and rated such jokes as funnier than did males with lower hostile sexism.

Although Avolio et al. (1999) speculated on the possibility of gender differences in reaction to leader humor, their sample of financial institution managers was overwhelmingly male (97%) and did not, therefore, afford sufficient variance on the attribute of leader gender to allow for empirical analysis. In a comprehensive study of the relationships among leader gender, humor, and leader effectiveness, Decker and Rotondo (2001) surveyed several hundred university alumni on their impressions of supervisor use of humor. By and large, their results did not identify substantial gender differences for a diverse sample of employment settings. Because of the diversity of workplaces sampled, it is possible that meaningful gender differences were masked by a number of sources of error variance. As a consequence, it seems important to conduct future tests for gender differences with respondents who are more homogeneous with respect to job context and content. Intriguing research on the use of humor by university faculty has found that male faculty members were 1.7 times more likely to have posted humorous material on their office door than were female faculty members (Petruso, 2006). Additional
studies of faculty postings of humor on their office doors have found that students estimate the faculty members behind such doors to be comparatively more friendly, humorous, and easy to approach (Schiavo and Miller, 1993; Schiavo et al., 1998). Faculty use of humor has also been reported to vary by academic discipline, with faculty in the humanities posting the most humor and faculty in criminal justice posting the least (Petruso, 2006).

In light of prior findings relating humor to gender differences, it seems possible that each gender will be less appreciative of the humor of a leader who is of the opposite gender (Decker and Rotondo, 2001). An important social dynamic that may contribute to same-gender pairings reporting higher levels of humor is the likelihood that both genders (across a wide range of work contexts) engage in greater levels of self-disclosure within their own gender. That is to say, members of a given gender may trade certain humorous comments and observations within their own social circle that they would not exchange with members of the opposite gender (Dindia and Allen, 1992; Lampert and Ervin-Tripp, 1998). In this instance, the nature of the topic of self-disclosure (humor) is likely to be one that is selectively deployed to promote rapport with others (Lampert and Ervin-Tripp, 2006). Stated in dyadic relational terms, we can further predict that same-gender leader-follower pairs will, therefore, have higher reports of humor than different-gender pairs.

**Hypothesis 4:** Followers in same-gender leader-follower pairs report greater use of humor than followers in different-gender leader-follower pairs.

**METHOD**

**Participants**

Public high schools served as the research setting for the study of leaders and followers, with participants recruited from California public high schools. Leadership in public high schools was selected for study as there have been recent calls for greater research on understanding organizational dynamics in educational settings (cf. Academy of Management Journal Forum, 2005) and public schools are representative of the type of organization where leaders may need to rely on social levers to motivate followers (Barnett et al., 2001; Eden, 1998; Moye et al., 2005).

The central method of the present research consisted of distributing questionnaires to a random sample of California high school principals/leaders and a teacher/follower within each principal’s school. Starting randomly, every “nth” high school, as listed in the State of California Public School Directory (Education, 2001), was selected as a target site. This technique was used to develop a random sample of high schools possessing representative principal-teacher pairs or dyads.

The questionnaire items were developed on the assumption that the principal is the central leadership figure within the school and the individual with the greatest responsibility for heading the school’s organization with respect to the effective delivery of traditional departmental curricular content. The questionnaires were initially piloted with a sample of eight school system administrators, principals, and teachers. The principal’s questionnaire was designed to focus
on the performance of the departmental “lead” teachers. The five departmental areas of English, History, Mathematics, Physical Education, and Science were listed in the principal’s survey as separate columns, and questions were designed to solicit independent assessments of each department’s “lead” (i.e., area coordinator) teacher. Extensive comparisons of the survey results and response rates by teacher functional area (via chi-square and t-tests) did not reveal significant differences. Similarly, organizational attributes (such as student-body demographic composition and academic achievement scores) of non-responding principals and responding principals did not differ significantly, nor did participating institutions differ significantly in terms of their attributes relative to statewide averages. Further, principals' performance evaluations of non-responding teachers did not differ from the performance evaluations of responding teachers.

**Procedure and Measures**

Questionnaires were mailed directly to 491 principals. The questionnaire asked each principal to provide confidential ratings of the performance of the department lead teachers as part of a study of leadership and organization effectiveness within the state education system. The response rate for principals was 45.4 percent (223 questionnaires). After each principal responded to the survey, a separate confidential, personally-addressed letter was sent directly to the respective department lead teachers. A total of 1,060 confidential questionnaires were mailed to department lead teachers after the principal had confidentially responded. This questionnaire asked for ratings of the principal on dimensions of leadership behavior, as well as job-relevant perceptions of the teachers. A total of 342 teachers responded across all institutions. As the intended level of analysis is dyadic (i.e., focusing on the unique dyadic social exchange that existed between each principal and a respective lead teacher), and in order to ensure an equal representation of responses, 179 teachers were randomly selected for 179 principals for whom complete data were available (i.e., one per principal) via a sampling procedure based on a table of random numbers (Lindquist, 1940). One principal-teacher pair was also selected from each school to avoid potential problems associated with non-independence of descriptions of a common principal. This sampling approach was utilized as “nested” data structures (where multiple respondents are embedded in a common organizational unit) can generate parameter estimates that are incorrect (Bliese, 2000; Bliese and Hanges, 2004; Hofmann, 1997). A hierarchical linear modeling (HLM) approach was not feasible in the present instance as the target group (lead teachers) had too few cases per unit (a maximum of five) to permit the use of HLM (Raudenbush and Bryk, 2002).

The survey completed by each principal included a three-item “performance rating” measure of the lead teacher that was adapted from a scale by MacKenzie, Podsakoff, and Fetter (1991). The confidential survey completed by the teachers incorporated established scales for the constructs where possible. Specifically, their survey included: (1) a three-item measure of the principal’s “use of contingent personal reward,” developed by
Podsakoff, Todor, Grover, and Huber (1984), (2) a four-item measure of the principal’s “integrity,” based on the work of Gabarro (1978), Mayer, Davis, and Schoorman (1995), Mayer and Davis (1999), and Luthans and Avolio (2003), (3) a four-item measure of the principal’s “use of humor,” developed by Avolio et al. (1999),\(^1\) and (4) a three-item measure of employee degree of “job satisfaction,” developed by Cammann, Fichman, Jenkins, and Klesh (1983). (The specific scale items are available from the authors on request.) All responses were obtained on five-point response scales (1 = strongly disagree, 5 = strongly agree).

In addition, the teachers and principals provided information on a variety of demographic variables. For the teachers, the average age and years of teaching were 48.17 (SD = 9.56) and 20.95 years (SD = 10.54), respectively, with 51.4% of the respondents being male. For the principals, the average age and years of teaching were 52.18 (SD = 6.84) and 26.35 years (SD = 7.65), respectively, with 67.8% of the principals being male. The principals had held their current administrative positions for an average of 4.29 years (SD = 3.71).

Because subordinate job satisfaction has been found to be associated with supervisor use of humor (Decker, 1987), teacher/follower job satisfaction, along with years of teaching, were used as control variables in the subsequent analyses.

**Analytic Approach**

To test the moderating effect of humor on leader behavior for the dependent variable of performance, a hierarchical regression approach was employed following mean-centering of the predictor variables (Aiken and West, 1991). The hierarchical regression analyses consisted of creating three equations. In the first equation, the variables of years of teaching and job satisfaction were entered as control variables. In the second equation, the mean-centered predictor variables of (1) leader humor and (2) either leader contingent personal reward or leader integrity were added. Finally, in the third equation, a multiplicative term (composed of the variables entered in the second equation) was added to represent the interaction of the predictors in accounting for unique criterion variance. The increment in accountable criterion variance (i.e., the increase in \(R^2\) between equations 2 and 3) was then tested for statistical significance.

**RESULTS**

In order to establish the independence of the constructs that were assessed via self-report, a confirmatory factor analysis (CFA) was conducted, wherein a single-factor model (representing the view that only general affect is manifest in the self-report data) was contrasted with a multi-factor model (representing the view that the proposed distinct factors underlie the self-report data). The results of the CFA, which are presented in Table 1, reveal that the multi-factor model provided a superior representation of the responses in that the change in chi-square indicated a significant improvement for the pro-

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\(^1\)Because of its lesser relevance and constraints on the survey’s overall length, a fifth item in the original version of the humor scale, which dealt with a presumed existing opposition group, was omitted.
posed multi-factor model over the single-factor model. The various fit indices also pointed to a superior fit for the multi-factor model. Specifically, all of the multi-factor fit indices exceeded .95 and the RMSEA was less than .08 (Bentler, 1990; Browne and Cudeck, 1993).

In addition to these analyses, internal consistency and average variance extracted values were calculated from the factor analytic results. These values (provided in Table 2) further underscore the appropriateness of treating the proposed measures as useful indices of the proposed constructs (Fornell and Larcker, 1981).

Table 3 presents the descriptive statistics, reliabilities, and intercorrelations for the outcomes, predictors, and control variables. The performance assessment given by the principals was positively associated with the teacher’s assessments of the principal’s leadership behavior and the teacher’s level of job satisfaction. Use of humor and the other leader behavior variables were positively correlated. More importantly, the correlation of the leader’s use of humor with teacher performance was comparable to that previously reported by Avolio et al. (1999) in a for-profit organizational setting (i.e., current $r = .23$, $p < .01$, versus prior $r = .24$, $p < .05$, for Avolio et al. (1999)), thereby supporting Hypothesis 1. Leader’s use of humor was correlated positively with teacher job satisfaction ($r = .25$, $p < .01$), replicating Decker’s (1987) earlier finding.

In order to test the proposed moderator hypotheses, hierarchical regression analysis was conducted for the dependent variable of teacher performance. As stated earlier, a multiplicative interaction term was created from the mean-centered predictor variables for use in the final step of a set of comparative equations. The first step included the two control variables of job satisfaction and years of teaching (as these variables have been identified as correlates of the likelihood of being rated as a superior performer due to differential attrition (Schneider et al., 1995)). Following the initial control variable step, the main effect predictors were added in a second equation, followed by the interaction term in the third equation. The results of these analyses, as displayed in Table 4 (top portion), indicate that contingent personal reward interacted with the use of humor in accounting for significant increments in variance on the outcome measure of teacher performance (change in $R^2$ of .042, beta of -.222).

In order to interpret the form of the significant interaction, procedures outlined by Aiken and West (1991) were followed, wherein cuts were made at plus and minus one standard deviation from the mean on the leader behavior predictor variable. The form of the graphed interaction reveals that the present finding for leader contingent personal reward only partially replicates the findings of Avolio et al. (1999) for the outcome variable of teacher performance. Concerning the predictor variable of contingent personal reward, performance ratings were lower with the joint combination of low use of humor by the leader and low use of contingent personal reward (see Figure I), thereby supporting Hypothesis 2 more clearly at one extreme combination of humor and contingent personal reward.

To test Hypothesis 3 (wherein leader use of humor was predicted to moderate the effect of leader integ-
Table 1

Goodness-of-Fit Indices for Confirmatory Factor Analytic Results

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>NFI</th>
<th>TLI</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-factor</td>
<td>614.01</td>
<td>77</td>
<td>.921</td>
<td>.905</td>
<td>.930</td>
<td>.198</td>
</tr>
<tr>
<td>Multi-factor*</td>
<td>122.69</td>
<td>71</td>
<td>.984</td>
<td>.990</td>
<td>.993</td>
<td>.064</td>
</tr>
</tbody>
</table>

Note: Difference in $\chi^2 = 491.32$, with 6 df, $p < .01$.

*Multi-factor Model includes Humor, Integrity, Contingent Personal Reward, and Job Satisfaction.
NFI = Normed fit index, TLI = Tucker-Lewis index, CFI = Comparative fit index, and RMSEA = Root mean square error of approximation.
Influence of Humor on followers job performance, hierarchical regression analysis was again employed. Following the same procedures used to test Hypothesis 2, mean-centered predictor variables were used along with a multiplicative interaction term in a series of three equations that initially included the control and main effect variables. The key issue is whether the introduction of the interaction term in the final equation significantly adds to accounting for an increment in criterion variance. As indicated in Table 4 (bottom portion), integrity significantly interacted with the use of humor (change in $R^2 = .049$, beta of -.253).

A graph of this interaction (employing cuts at plus and minus one standard deviation from the mean on the leader behavior predictor varia-
ble of integrity) reveals that leaders who were judged to be less honest and made less use of humor did, in fact, provide lower ratings of follower performance (see Figure II), thereby supporting Hypothesis 3.

While follower gender and leader gender were not associated with ratings of the use of humor, the gender-interaction hypothesis (i.e., Hypothesis 4, which predicted that same-gender leader-follower pairs would have reports of higher levels of humor) was tested by contrasting the mean levels of humor for the four possible combinations of leader-follower gender (i.e., male-male, $N = 58$; female-female, $N = 29$; male-female, $N = 29$; and female-male, $N = 63$). Because of the inherently dichotomous nature of the predictors,
Table 3

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Performance</td>
<td>3.15</td>
<td>1.61</td>
<td>(93)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Humor</td>
<td>3.43</td>
<td>1.03</td>
<td>.23**</td>
<td>.34**</td>
<td>.29**</td>
<td>.36**</td>
<td>.37**</td>
<td>.38**</td>
<td></td>
</tr>
<tr>
<td>3. Contingent Personal</td>
<td>3.74</td>
<td>1.04</td>
<td>.29**</td>
<td>.34**</td>
<td>.25**</td>
<td>.36**</td>
<td>.37**</td>
<td>.87</td>
<td></td>
</tr>
<tr>
<td>4. Integrity</td>
<td>3.84</td>
<td>1.55</td>
<td>.29**</td>
<td>.34**</td>
<td>.25**</td>
<td>.36**</td>
<td>.37**</td>
<td>(91)</td>
<td></td>
</tr>
<tr>
<td>5. Job Satisfaction</td>
<td>4.48</td>
<td>0.82</td>
<td>.25**</td>
<td>.26**</td>
<td>.25**</td>
<td>.36**</td>
<td>(78)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Years Teaching</td>
<td>20.95</td>
<td>10.54</td>
<td>.01</td>
<td>.05</td>
<td>.04</td>
<td>.06</td>
<td>.04</td>
<td>.04</td>
<td>.04</td>
</tr>
<tr>
<td>7. Follower Gender</td>
<td>na</td>
<td>na</td>
<td>.13</td>
<td>.00</td>
<td>.00</td>
<td>.01</td>
<td>.01</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>8. Leader Gender</td>
<td>na</td>
<td>na</td>
<td>.13</td>
<td>.01</td>
<td>.00</td>
<td>.01</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
</tbody>
</table>

Note: Coefficient alphas are on primary diagonal. **p < .01. Gender coded as male = 0, female = 1.
Table 4

Results of Hierarchical Regression Analyses for Dependent Variable of Performance

<table>
<thead>
<tr>
<th>betas</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
<th>R²</th>
<th>∆R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contingent Personal Reward</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Controls</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years Teaching</td>
<td>-.016</td>
<td>-.016</td>
<td>-.013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>.260**</td>
<td>.145†</td>
<td>.118</td>
<td>.068**</td>
<td></td>
</tr>
<tr>
<td>Predictors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humor (A)</td>
<td>.101</td>
<td>.065</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contingent Personal Reward (B)</td>
<td>.251**</td>
<td>.200*</td>
<td>.147**</td>
<td>.079**</td>
<td></td>
</tr>
<tr>
<td>Interaction</td>
<td>A x B</td>
<td></td>
<td></td>
<td>-.222**</td>
<td>.188**</td>
</tr>
</tbody>
</table>

| Integrity |        |        |        |      |     |
| Controls  |        |        |        |      |     |
| Years Teaching | -.016 | -.018 | -.005 |      |     |
| Job Satisfaction | .260** | .174* | .169* | .068** |     |
| Predictors |        |        |        |      |     |
| Humor (A) | .097 | .042 |        |      |     |
| Integrity (B) | .170† | .089 | .116** | .049** |     |
| Interaction | A x B |        |        | -.253** | .165** | .049** |

Note: †p < .10; *p < .05; **p < .01.
analysis of variance (ANOVA) was conducted for the dependent measure of leader’s use of humor. The results of this analysis (which were the same as the results yielded by a moderated regression analysis coding gender as 0, 1) indicated a partial eta-squared (increment in $R^2$) value of .017, with a significance level ($p < .10$) that did not attain a conventional level of statistical significance. Hence the observed pattern of means (see Table 5) should be cautiously interpreted as being suggestive of the proposal that same-gender leader-follower pairs report higher levels of humor relative to different-gender pairs. Therefore, Hypothesis 4 received only directional support.

**DISCUSSION**

The present results suggest that the influence of leader humor depends, in an important way, on the leader’s use of contingent reward and degree of integrity. For example, leader humor and leader behavior do not, in
The influence of humor is best described, therefore, in a contingent fashion with respect to other leader attributes. For performance ratings of followers, the interaction indicates that low humor in conjunction with low contingent reward or in conjunction with low integrity is associated with lower performance. Hence, low humor has an apparent deleterious association with performance. Alternatively, subordinate reports of low leader integrity and low leader contingent reward may be driven by one’s sense that a leader will provide poorer performance evaluations. This alternative explanation for the performance data underscores an inherent feature of the present study’s cross-sectional design. That is to say, the teacher performance evaluations provided by the principals (while independent of the followers’ judgments of the principal as a leader) were collected in close temporal proximity with the principals’ evaluations of the teachers. It is

Figure II

Humor X Integrity Interaction:
Dependent Variable = Performance
difficult to argue that the leaders were influenced by the followers’ judgments of their use of humor when providing their confidential evaluations of their teachers in such a manner that would generate the presently observed complex interactions.

It is also important to contrast the present findings for the interaction of humor and contingent reward with the findings reported by Avolio et al. (1999). Specifically, these researchers reported that contingent reward leadership was negatively related to performance when leaders used humor more often. In the present study, the interaction was reversed in that followers with leaders who made less use of humor in combination with low contingent reward had lower performance. The present pattern for the interaction findings makes more sense in that humor should reasonably have a positive main-effect on performance (as evidenced in Figure I), and the combination of lower contingent reward with low humor should have a detrimental impact on performance. The comparable pattern for the interaction portrayed in Figure II (where low integrity and low humor are linked to lower performance) also seems reasonable.

The present results, beyond demonstrating significant interactions for performance, also offer insights for understanding the dynamics of humor in the context of an educational system. As noted earlier, leaders in non-profit settings may have less recourse to financial and other moti-

<table>
<thead>
<tr>
<th>Leader Gender</th>
<th>Male</th>
<th>Female</th>
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</thead>
<tbody>
<tr>
<td>Male</td>
<td>14.26</td>
<td>12.72</td>
</tr>
<tr>
<td></td>
<td>(2.92)</td>
<td>(4.03)</td>
</tr>
<tr>
<td>N = 58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>13.63</td>
<td>14.04</td>
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<tr>
<td></td>
<td>(3.69)</td>
<td>(3.10)</td>
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<tr>
<td>N = 63</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
vational levers, and so must rely to a greater extent on aspects of social, or personal, power to motivate and inspire subordinates. Studies of the impact of a phenomena should, reasonably, be conducted where the phenomena is most likely to occur and to have a measurable impact. Therefore, research on the effects of aspects of leader personal power should include non-profit settings in order to have a greater chance of identifying certain social dynamics.

The present lack of evidence of an association between follower reports of leader use of humor and follower gender (or of leader gender and the use of humor) is interesting, especially in light of Decker and Rotondo’s (2001) earlier study of workplace humor and other prior reports of possible gender differences in the reported appropriateness of the use of humor (cf., Decker, 1986; Martin et al., 2003). However, the pattern of the observed means (Table 5) suggests that the gender similarity-difference of the source of the humor may play a role in reports of a leader’s use of humor. Therefore, future research on the topic of workplace humor should be mindful of the possibility that reports of humor may be associated, in a complex manner, with the gender of the leader and follower. Nonetheless, the present finding of only directional support for Hypothesis 4 (predicting that same-gender leader-follower pairs would reveal higher reports of a leader’s use of humor) tends to underscore the “gender-similarities perspective” recently offered by Hyde (2005). That is to say, the available empirical evidence does not support the view that the genders are greatly different on most psychological variables (i.e., a “gender-differences” hypothesis) so much as it supports a “gender-similarities” view (where claims of differences are presumed to be suspect unless substantial effect sizes can be demonstrated). Still, the pattern of means in Table 5 is suggestive that humor may be a domain where leaders display different faces to different subordinates (in accordance with the assumption of the leader-member exchange perspective that leaders do not exhibit an “average” or common set of leadership behaviors to all subordinates (see Dansereau et al., 1975; Graen and Uhl-Bien, 1995). Humor may also be a domain where gender differences are somewhat more plausible as evidence of gender differences in aggression are fairly reliable (cf. Hyde, 2005) and humor may, arguably, sometimes be a manifestation of a subtle type of aggression (Martin et al., 2003; Rodrigues and Collinson, 1995).

Managerial Implications

Avolio et al. (1999) proposed that leaders should consider the practical application of humor. Specifically, Avolio and colleagues suggested that an organization’s culture may promote the use of humor, or it may consider humor to be inappropriate. In those cultures that are not open to humor or in situations where dramatic changes in the organization or the industry are occurring, high levels

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2It is altogether possible that the present failure to attain statistical significance is partly a function of statistical power. However, it should be recalled that low statistical power introduces a conservative bias into statistical tests, thereby making the detection of effects less likely and the identification of significant associations more noteworthy.
of humor may be counter-productive. This may be especially true if humor is tied to contingent rewards. As a proactive measure, organizations may consider encouraging leaders in the use of contingent rewards, honesty/integrity, and humor, and in identifying the situations and types of employees that may be most open to the use of humor. Demographics and work history may also be factors to consider (e.g., organizational downsizing experiences or personal work situations). When justified, the training of leaders (by instructing them on the value inherent in the use of contingent reward, the importance of integrity, and the use of humor) may offer a further means of opening communication between leaders and followers and thereby enhancing performance.

Limitations and Future Research

A limitation of the present study (as well as of prior research on the use of humor by a leader) is that the measures of humor and leadership may not be completely independent since they are based on follower ratings. Such ratings, therefore, may be subject to a variety of biases, such as consistency, central tendency, or leniency/harshness (even though the order of the rating items was mixed within the questionnaires). Humor and contingent reward may be subsets of an overall, high level of communication between a leader and a subordinate. Nonetheless, the finding of complex interactions and the supportive results of the confirmatory factor analysis do argue against simple response tendencies as providing a full explanation of the present results. A further limitation of the present study might be that the performance measure was based on the impressions of the leader, rather than being based on a more objective index or multiple measures. However, the job of high school teacher is difficult to reduce to a single (or a set of) external measure(s). Moreover, the judgment of the school’s principal does, in fact, play a large role in the assessment of teacher performance.

Malone (1980) has suggested that humor can be “double-edged.” That is to say, when a leader makes effective use of humor, it can enhance outcomes, but when humor is not handled appropriately, it may have a negative impact. Therefore, workplace humor provides an odd mix of affiliation and antagonism that can enhance or erode status-based social relations (Duncan et al., 1990; Romero and Cruthirds, 2006). This mixed impact notion was not examined in the present study (in favor of studying the more potentially positive side of humor), as research by Decker and Rotondo (2001) indicates that negative humor appears to be unrelated to leader effectiveness, while positive humor is more clearly tied to leader effectiveness. Nonetheless, future research may generate new insights if both positive and negative aspects of humor are deliberately studied.

A further question that could not be addressed in the present study is: What would happen if, or when, a leader’s attempts at humor, although intended to reduce tension, are represented by the target because the attempt is seen as socially manipulative? Research that is designed to address this question likely requires a series of surveys with a cohort of leaders and followers who would be studied longitudinally. Another question of interest is how followers react to leaders
whose attempts at humor frequently fail (i.e., when a leader lacks the capacity to be funny). Are their humorous attempts appreciated (or strongly resented) by followers, and under what conditions? A still further avenue for future research lies in the study of the malicious use of humor (i.e., the “dark side” of the use of humor from a social superiority theory perspective). Interestingly, there is good theoretical rationale for explaining how this process may operate. Specifically, it seems likely that exposure to humor that is intended to severely disparage another may lower tolerance for discriminatory acts toward the targeted person through the creation of a “norm of prejudice” (cf. Ford and Ferguson, 2004). The study of this oppressive social dynamic within the workplace, however, has not received substantial empirical attention.

Conclusion

Overall, the present results suggest that the impact of humor in an educational setting, and perhaps more broadly in non-profit sector settings, may depend on the follower’s impression of the leader’s degree of integrity and the value that the follower places on the leader’s use of contingent reward. Further, the present results suggest that the findings of Avolio et al. (1999) (i.e., of the interaction of leader behaviors and the use of humor) can be extended to educational settings, and potentially to other non-profit settings.

References


