



Coworker-targeted leader aggressive humor and observers' OCB: The mediating roles of observers' cognitive and affective trust and the moderating role of LMX

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Abstract

The majority of theory and research on aggressive humor has predominantly focused on the perspective of the direct victim, while the third-party viewpoint has received limited attention. Integrating social information processing theory with trust literature, we propose that coworker-targeted leader aggressive humor weakens observers' organizational citizenship behavior (OCB) by undermining the observer's cognitive and affective trust in leaders. Furthermore, we suggest that these effects critically depend on the quality of observers' LMX with leaders. Results from a field study involving 211 leader-observer dyads (Study 1) and a two-wave field study using 285 employees (Study 2) provide support for the proposed model, yielding several new insights. Specifically, the results reveal that witnessing coworker-targeted leader aggressive humor reduces observers' cognitive and affective trust in leaders, consequently hindering their organizational citizenship behavior (OCB). Furthermore, we find that while high-quality LMX between observers and leaders buffers the negative effect of coworker-targeted leader aggressive humor on observers' affective trust in leaders, it doesn't alleviate the negative effect on cognitive trust. Overall, our study extends the literature on aggressive humor and provides meaningful implications for practitioners.

Keywords Coworker-targeted leader aggressive humor · Cognitive trust · Affective trust · OCB · LMX · Third-party

Introduction

Humor is a critical component of successful leadership (Yam et al., 2018). As a lubricant in workplace interpersonal relationships, leader humor can break down communication barriers, build trust with subordinates, and enhance leadership effectiveness (Cheng et al., 2023; Cooper & Hiller, 2023; Cooper et al., 2018; Kim et al., 2016). Humor has gradually become an effective management tool recognized by leaders. Notably, Sir Richard Branson, founder of the Virgin Group, has successfully leveraged humor in his public relations

campaigns to promote his brand. Likewise, Elon Musk often uses humor on social media to garner support. However, humor can be a double-edged sword, as an expanding body of research indicates that not all humor is beneficial (Cooper & Hiller, 2023; Martin et al., 2003; Yam et al., 2018; Zhang et al., 2023). Leader aggressive humor, defined as the use of jokes by leaders to tease, belittle, humiliate, or ridicule followers (Cooper, 2008; Martin et al., 2003), has gradually attracted scholars' attention. Recent studies demonstrate that such humor can result in detrimental outcomes (Huo et al., 2012; Kim et al., 2016; Martin et al., 2003; Wei et al., 2022; Yam et al., 2018), particularly impeding employees' positive behavior like organizational citizenship behavior (OCB) (C. Yang & Yang, 2023).

While existing research has extensively studied the effects of leader aggressive humor on direct victims (Kim et al., 2016; Martin et al., 2003; Wei et al., 2022; Yam et al., 2018; C. Yang & Yang, 2023), the viewpoint of observers has received relatively little attention (Huo et al., 2012). Furthermore, the findings concerning the effects of aggressive humor are not consistently uniform. Although generally considered harmful, some scholars have proposed that in

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specific contexts, the detrimental outcomes of aggressive humor may be less pronounced, and it could even yield positive effects (Ferguson & Ford, 2008; Ford & Ferguson, 2004; Martin & Ford, 2018). Therefore, an important question arises: how and when does coworker-targeted leader aggressive humor influence the observers' attitudes and behaviors?

To address these gaps, we draw on social information processing theory (Salancik & Pfeffer, 1978), focusing on two types of trust—cognitive trust and affective trust—as the mediators that account for the relationship between coworker-targeted leader aggressive humor and observers' organization citizenship behavior (OCB). On the one hand, coworker-targeted leader aggressive humor can convey information about leaders' incompetence and unreliability, hindering the development of cognitive trust among observers. Because cognitive trust is rooted in the perceptions of the trusted party's competence and reliability (Mayer et al., 1995; McAllister, 1995; Schaubroeck et al., 2011; J. Yang et al., 2009; Zhu et al., 2013). On the other hand, such humor towards observers may signal an unsafe environment and a lack of concern for employees' feelings (Kim et al., 2016; Martin et al., 2003; Wei et al., 2022), undermining observers' affective trust in leaders, as it stems from the perception of genuine care and concern for others (McAllister, 1995; Schaubroeck et al., 2011). In turn, this erosion of both cognitive and affective trust in leaders can diminish observers' willingness to engage in discretionary tasks beyond their job scope, namely, OCB.

Aggressive humor, a blend of aggression and humor, presents a paradox that has captured the attention of numerous researchers (Ferguson & Ford, 2008; Martin & Ford, 2018). Although generally considered harmful, aggressive humor may yield fewer negative consequences than initially presumed. Indeed, it could be harmless fun if interpreted as less aggressive, especially within an in-group context (Ferguson & Ford, 2008; Ford & Ferguson, 2004; Martin & Ford, 2018). Given the inherent ambiguity in the intent behind coworker-targeted leader aggressive humor, the level of trust observers place in leaders when exposed to coworker-targeted leader aggressive humor hinges on their interpretation of its aggressiveness. We propose that leader-member exchange (LMX), the degree to which observers feel included as in-group members by their leaders (Graen & Uhl-Bien, 1995; Janssen & Van Yperen, 2004), serves as a crucial context. LMX might increase observers' acceptance and legitimization of aggressive humor (Hu et al., 2022), affecting how they perceive and react to coworker-targeted leader aggressive humor.

Our study offers several contributions to the research on leader aggressive humor, trust, and LMX. First and foremost, although much of the work on leader aggressive humor has examined its effects from the direct victim's perspective, the observers' perspective has received surprisingly little

attention (Huo et al., 2012). By shifting our focus to the observer's perspective, our research indicates a novel understanding of the spillover effects of leader aggressive humor. Secondly, based on social information processing theory, we enrich and expand the mechanism through which coworker-targeted leader aggressive humor affects observers' OCB by identifying cognitive and affective trust as critical mediators. Finally, by adopting a contingency view, we explore the moderating role of LMX in the relationships between coworker-targeted leader aggressive humor and the observer's trust, thus offering a nuanced understanding of these relationships.

Theoretical background and hypotheses development

Trust in leaders and social information processing theory

Trust is broadly conceptualized as a psychological state characterized by the willingness to embrace vulnerability based on the positive expectations of another's intentions or behavior (Mayer et al., 1995; Rousseau et al., 1998; Schoorman et al., 2007). Trusting involves evaluating the trustworthiness of another party and assessing the risks associated with such trust (Mayer et al., 1995). To fully understand how leader behaviors influence employees' trust in leaders, it is essential to integrate the concept of trust in leaders with theories specific to the dynamics inherent in the workplace.

The social information processing theory posits that employees don't function in isolation within the workplace. Instead, their processing of social information influences how they interpret and comprehend their work environment, shaping their attitudes and behaviors (Salancik & Pfeffer, 1978). In organizational contexts, leaders are one of the primary sources from which employees gather information about the job or interpersonal interaction (Lu et al., 2019). As such, the behavior of leaders emerges as a vital source of information for shaping the evaluation of the leaders' trustworthiness and the associated risk in trusting behaviors.

The mediating effects of trust in leaders between coworker-targeted leader aggressive humor and observers' OCB

McAllister (1995) develops a conceptual framework that distinguishes two types of trust: cognitive and affective trust. Cognitive trust stems from objective perceptions of the trusted party's competence and reliability. In contrast, affective trust arises when one person genuinely cares and shows concern for the welfare of another, built on the emotional bond between individuals (McAllister, 1995; Schaubroeck

et al., 2011). Coworker-targeted leader aggressive humor, characterized by sarcasm, teasing, ridicule, and derision, is likely to impede observers' cognitive and affective trust, due to the absence of competence and genuine concern for employees' welfare. Accordingly, McAllister's (1995) two-dimensional trust model may fit better in this study.

We suggest that these two kinds of trust mediate the impact of coworker-targeted leader aggressive humor on observers' engagement in OCB. In line with social information processing theory, leaders' aggressive humor towards coworkers conveys several important cues to observers: incompetence and unreliability, an unsafe environment, and a lack of genuine care and concern for employees' welfare. These cues, to some extent, hinder the development of the observer's cognitive and affective trust in the leader, respectively. In turn, we posit that the resultant cognitive and affective mistrust in leaders diminish observers' willingness to engage in OCB.

The mediating effects of cognitive trust in leaders

Drawing on social informational processing theory, we propose that witnessing coworker-targeted leader aggressive humor hinders observers' cognitive trust in leaders for two reasons. First, such humor conveys information about leaders' incompetence. By exhibiting a lack of emotional awareness and emotional regulation, aggressive humor toward coworkers sends strong social signals about their deficiency in emotional intelligence and incompetence (García-Sancho et al., 2014; Yip & Martin, 2006). Additionally, it signifies a lack of respect, support, and concern for employees, thereby raising doubts about the leader's capability to make fair and just decisions (Cooper, 2008; Cooper et al., 2018). This signals to employees that leaders who participate in aggressive humor directed at coworkers are notably deficient in competence. Because competence is a crucial factor in developing cognitive trust (Lewis & Weigert, 1985; McAllister, 1995; Schaubroeck et al., 2011; Zhu et al., 2013), such information impedes observers' cognitive trust in leaders.

Second, coworker-targeted leader aggressive humor conveys information about leaders' unreliability due to their lack of predictability and credibility. Aggressive humor, especially when targeted at coworkers, creates an unpredictable environment. Observers might question the reliability of a leader who exhibits such behaviors, uncertain about whether they might become the next target (Cooper et al., 2018). Moreover, observers perceive unprofessionalism from leaders' failure to fulfill their responsibility of respecting employees and fostering a safe working environment (Huo et al., 2012; Wei et al., 2022). Such behavior communicates strong signals about the leaders' lack of credibility. As predictability and credibility are crucial factors in cognitive trust (Mayer et al., 1995; J. Yang et al., 2009),

cues regarding unpredictability and incredibility, therefore, hinder observers' cognitive trust in leaders who engage in aggressive humor directed at coworkers.

Hypothesis 1: Coworker-targeted leader aggressive humor is negatively associated with observers' cognitive trust in leaders.

Through the effects on cognitive trust in the leader, we suggest that coworker-targeted leader aggressive humor is likely to decrease observers' OCB. OCB is defined as discretionary behavior that goes beyond formal roles (Organ, 1988). The inclination of employees to perform tasks beyond their job scope critically hinges on their perception of justice (Tepper & Taylor, 2003). Cognitive trust comes from evaluating a leader's reliability and credibility, and the perception of these attributes can enhance employees' perception of justice (Holtz, 2013; Kaltainen et al., 2017). Therefore, when confronted with coworker-targeted leader aggressive humor, the ensuing cognitive mistrust can lead observers to doubt the leader's ability to make justice decisions. This erosion of cognitive trust, in turn, undermines their perception of justice and diminishes their willingness to engage in OCB.

In addition, the decline in cognitive trust in leaders is likely to reduce observers' inclination to engage in OCB by inducing uncertainty. Specifically, cognitive trust serves as a critical factor in alleviating uncertainty (Colquitt et al., 2012), as the competence and reliability inherent in the cognition-based trust would give employees a sense of confidence when contemplating future circumstances. Occupied with uncertainty and worry, employees' focus may be diverted from OCB (Mayer & Gavin, 2005; Zhu et al., 2013). Consequently, the diminished cognitive trust in leaders stemming from witnessing leaders using aggressive humor towards coworkers can engender uncertainty, ultimately negatively impacting observers' willingness to participate in OCB. Drawing on these theoretical perspectives, we propose the following hypothesis:

Hypothesis 2: Observers' cognitive trust in leaders mediates the relationship between coworker-targeted leader aggressive humor and OCB.

The mediating effects of affective trust in leaders

Relying on social information processing theory, we propose that coworker-targeted leader aggressive humor impedes the development of observers' affective trust in leaders for two reasons. First, such humor signals leaders' lack of empathy for employees' feelings (Kim et al., 2016; Martin et al., 2003; Wei et al., 2022). For instance, the perception of disrespect and injustice resulting from leaders' using aggressive humor on coworkers can reduce affective trust. Likewise,

leaders using such humor overlook the concern for the welfare and needs of followers, eroding the emotional bond between leader and follower, which will lead to lower levels of affective trust in leaders.

The second reason coworker-targeted leader aggressive humor impedes affective trust is that it sends a strong signal of an unsafe workplace environment. Specifically, instead of fostering a supportive environment where employees feel valued and safe, aggressive humor targeted at peers can induce observers' negative emotions such as fear and anxiety (Huo et al., 2012; Martin et al., 2003). This undermines the emotional bond between leaders and employees, hindering the development of affective trust. Additionally, leader aggressive humor targeted at coworkers, a special form of abusive management (Bamberger & Bacharach, 2006), signals a potential threat to observers and indicates an interpersonal risk of humiliation. Due to perceiving such negative information, observers might question whether they can express dissenting opinions, admit mistakes, or share new ideas without facing ridicule, fostering a perception of psychological unsafety. Since psychological safety is critical for affective trust (Edmondson et al., 2004; Mayer et al., 1995), such negative signals further erode affective trust in leaders.

Hypothesis 3: Coworker-targeted leader aggressive humor is negatively associated with observers' affective trust in leaders.

We further propose that the affective mistrust induced by experiencing coworker-targeted leader aggressive humor would relate to OCB. OCB is defined as discretionary behavior that, while not formally rewarded, promotes organizational efficiency and effectiveness (Organ, 1988). Employees with a solid affective commitment to an organization maintain a 'behavioral direction' despite unmet expectations for formal rewards (Rifai, 2005). Affective commitment, thus, catalyzes for employees to exhibit spontaneous behaviors that extend beyond their job descriptions, namely, OCB. A high level of affective trust in leaders fosters strong attachment, identification, and involvement with the organization—elements of affective commitment (Gounaris, 2005; Nyhan, 1999). Therefore, affective mistrust stemming from experiencing coworker-targeted leader aggressive humor is likely to diminish affective commitment, subsequently restraining observers' willingness to perform OCB.

Furthermore, employees are more inclined to exhibit OCB when they perceive the workplace's social environment as safe and supportive. It has been argued that affective trust can contribute to creating a safe social atmosphere at work (J. Yang & Mossholder, 2010). In particular, highly considerate leadership can facilitate coworkers' interactions and group cohesion (Burke et al., 2006). In contrast, leaders using aggressive humor towards coworkers may disrupt

coworkers' interactions and group cohesion by exhibiting a lack of empathy and concern (Cooper, 2008). Given that coworker-targeted leader aggressive humor is likely to induce affective mistrust as a response, we expect affective mistrust in leaders will make observers feel uncomfortable and disinclined to engage in OCB. Taken together, we propose the following hypothesis:

Hypothesis 4: Observers' affective trust in leaders mediates the relationship between coworker-targeted leader aggressive humor and OCB.

The moderating effects of LMX

Although aggressive humor is generally considered harmful (Kim et al., 2016; Martin et al., 2003; Wei et al., 2022; Yam et al., 2018; C. Yang & Yang, 2023), it might also have fewer negative consequences than previously thought, or possible benefits, due to the ambiguity in leaders' intent behind using such humor (Ferguson & Ford, 2008; Ford & Ferguson, 2004; Martin & Ford, 2018). Aggressive humor could be harmless fun if perceived as less aggressive (Holmes & Marra, 2002; Martin & Ford, 2018). Thus, the extent to which observers mistrust leaders when exposed to coworker-targeted leader aggressive humor depends on whether observers interpret such humor as aggressive. Coworker-targeted leader aggressive humor occurs in the context of established LMX quality. We therefore argue that LMX will influence the negative relationship between coworker-targeted leader aggressive humor and observers' trust in leaders.

LMX reflects the quality of the social exchange relationship between leaders and employees (Graen & Uhl-Bien, 1995). It may function as a context, shaping how employees interpret their leaders' behaviors (Hu et al., 2022; Nishii & Mayer, 2009). High-quality LMX relationships are characterized by deep emotional bonds beyond mere transactional interactions (Graen et al., 1982; Janssen & Van Yperen, 2004). Research on the third-party response to leader mistreatment behavior has found that high-quality LMX can enhance the observers' acceptance of and lend legitimacy to such mistreatment by leaders (Hu et al., 2022). As a result, when the LMX quality is high, teasing or ridiculing are perceived as less hostile. For instance, observers closely bonded with their leaders are more inclined to view the leader's aggressive humor aimed at coworkers as a singular event, harmless fun or a (genuine) attempt to lighten the mood. It is even reasonable to presume that observers with high-LMX might interpret coworker-targeted leader aggressive humor as a legitimate exertion of authority, that is, tough love (Tepper et al., 2017). Thus, among observers with high LMX with leaders, coworker-targeted leader aggressive humor is expected to have little impact on observers' affective trust.

Conversely, low-quality LMX indicates a less effective social exchange between leaders and employees. In such relationships, leaders view observers as out-group members (Graen & Uhl-Bien, 1995). Under these conditions, observers are more likely to take the targets’ perspective and interpret the use of aggressive humor as a confirmation of the exchange relationship with leaders and their outsider status within the team. Thus, observers categorized as outsiders are less likely to perceive their leader favorably and more prone to interpret such humor as a sign of disrespect, even abusive supervision (Doden et al., 2018; Restubog et al., 2009). Thus, coworker-targeted leader aggressive humor is expected to have a negative relationship with affective trust among low-LMX observers.

Although LMX may alleviate the negative impact of coworker-targeted leader aggressive humor on observers’ affective trust in leaders, its influence on the relationship between such humor and observers’ cognitive trust is likely minimal. This distinction stems from the nature of the two types of trust: cognitive trust is based on rational assessments of a leader’s competence and credibility, making it a trust from the head. Conversely, affective trust is more relational and exchange-based, originating from the heart (McAllister, 1995; Schaubroeck et al., 2011; J. Yang & Mossholder, 2010).

Specifically, when leaders use coworker-targeted aggressive humor, it signals a deficiency in competence and reliability (Cooper, 2008), thereby undermining observers’ cognitive trust. Cognitive trust is primarily founded on a rational evaluation of a leader’s competence and reliability, rather than emotional attachment or identification with the leader (Dirks & Ferrin, 2002; McAllister, 1995; Schaubroeck et al., 2011). It stems from an assessment of a leader’s cumulative behavior and performance. However, affective elements such as LMX quality place more emphasis on emotional connections (Dulebohn et al., 2012; Graen & Uhl-Bien, 1995). Hence, even within a high-quality LMX context, observers’ cognitive trust in leaders might wane if leaders’ actions deviate from their expectations or standards. This means that the negative effect of aggressive humor on cognitive trust is predominantly objective, with limited influence from the level of LMX quality. Given these insights, we propose the following hypotheses:

Hypothesis 5a: LMX can’t alleviate the negative relationship between coworker-targeted leader aggressive humor and observer’s cognitive trust in leaders, such that the negative relationship doesn’t hinge on the LMX quality significantly.

Hypothesis 5b: LMX can alleviate the negative relationship between coworker-targeted leader aggressive humor and observer’s affective trust in leaders, such that the negative effect is weaker when LMX is high as opposed to low.

Integrated model

To integrate these relationships, we propose a moderated mediation model in which LMX moderates the indirect effect of coworker-targeted leader aggressive humor on OCB via observers’ affective trust in leaders. To elaborate, among observers with high-LMX, coworker-targeted leader aggressive humor is perceived as less aggressive or even harmless fun, resulting in a weaker influence on observers’ affective trust in leaders, and a milder indirect effect on OCB. Conversely, among observers with low-LMX, coworker-targeted leader aggressive humor is likely to negatively influence observers’ affective trust in leaders, subsequently impacting observers’ OCB.

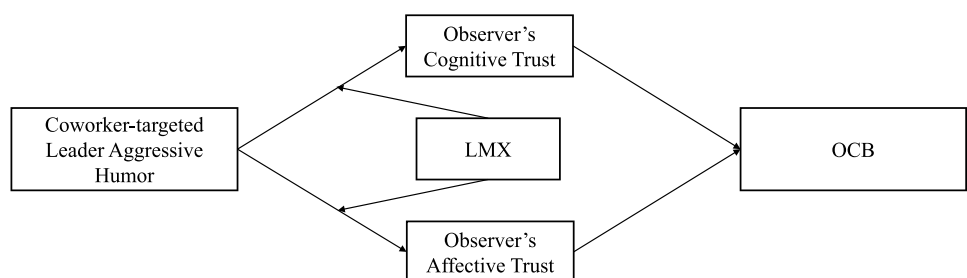
Hypothesis 6: LMX moderates the indirect relationship between coworker-targeted leader aggressive humor and OCB via observers’ affective trust in leaders, such that the negative effect of witnessing coworker-targeted leader aggressive humor on OCB via observers’ affective trust in leaders is weaker for observers with high-quality LMX than those with low-quality LMX.

Figure 1 Illustrates the study’s theoretical model

Overview of studies

To test our theoretical model, we conducted two field studies. In Study 1, we examined the complete model by testing the mediating roles of cognitive and affective trust, as well as the moderating role of leader-member exchange (LMX),

Fig. 1 Theoretical Model



using a multisource design. In Study 2, to address the potential for common method variance—where coworker-targeted leader aggressive humor, cognitive trust, affective trust, and LMX were all rated simultaneously—we employed a multi-wave design to test the overall model and mitigate potential concerns about the external validity of our findings.

Study 1

Method: participants and procedure

The participants included in this survey were employees from three entertainment and service companies in north-west China. These companies have diverse operations spanning multiple sectors, including restaurants and coffee shops.

A total of 233 staff questionnaires and 47 group manager questionnaires were distributed in this study. After excluding incomplete questionnaires, a final sample of 211 manager-subordinate dyads was obtained, with an average of 4.5 staff per manager. The overall response rate was 90.56%. Managers who responded had an average age of 26.51 years ($SD=4.87$), an average job tenure of 3.98 years ($SD=2.79$), and more than half of them (61.70%) were male. Staff have an average age of 24.11 years ($SD=4.05$), average job tenure of 1.63 years ($SD=1.84$), and the majority of them (76.30%) are female.

To prevent common method variance (Podsakoff et al., 2003), we collected the independent and dependent variables from 2 different sources. Observers rated coworker-targeted leader aggressive humor. Observers also reported their LMX with leaders and their cognitive trust and affective trust in leaders. In a different questionnaire, leaders rated the OCB of each observer.

Measures

Coworker-targeted leader aggressive humor A three-item scale developed by Martin and colleagues (Martin et al., 2003) was used to measure coworker-targeted leader aggressive humor. Sample items include: “My manager often makes fun of/jokes about my coworkers in my team”; “My manager often tries to make people like or accept him/her more by saying something funny about weakness of my coworkers in my team”. All items were scored on a 7-point Likert scale (1 = “almost never”, 7 = “a lot”).

Cognitive trust The three-item scale adapted from McAllister (1995) was used to measure cognitive trust. Sample items include “My leader approaches his/her job with professionalism and dedication”. All the items were scored on a 7-point Likert scale (1 = “strongly disagree”, 7 = “strongly agree”).

Affective trust The three-item scale adapted from McAllister (1995) was used to measure affective trust. Sample items include “We have a sharing relationship. We can both freely share our ideas, feelings, and hopes”. All the items were scored on a 7-point Likert scale (1 = “strongly disagree”, 7 = “strongly agree”).

Organizational citizenship behaviors (OCB) The 20-item scale developed by Farh and colleagues (Farh et al., 1997) was used to measure OCB. This OCB scale was designed to fit the Chinese context. Sample items include “This employee is willing to stand up to protect the reputation of the company”; “This employee is willing to assist new colleagues to adjust to the work environment.” All these items were scored on a 7-point Likert scale of agreement (1 = “strongly disagree”, 7 = “strongly agree”).

LMX The seven-item scale adapted from Graen and Uhl-Bien (1995) was used to measure LMX. Sample items include “I usually know how satisfied my leader is with what I do”; “My leader understands my job problems and needs well”; “My leader recognizes my potential fully.” All the items were scored on a 7-point Likert scale (1 = “strongly disagree”; 7 = “strongly agree”).

Control variables Age, gender and organizational tenure of leaders and observers were used as controls in this study (Cooper et al., 2018; Hu et al., 2022; Wei et al., 2022). Gender was coded 1 for male and 2 for female, while age and tenure were measured by number of years.

Preparatory analyses

Before testing our hypotheses, we conducted several preparatory analyses. This included evaluating the presence of common method variance, and assessing the validity of our measurement model.

Common method variance analysis

We performed Harman’s single-factor test, a widely used technique to address common method variance (Podsakoff et al., 2003). This test yielded seven factors, with the first accounting for 27.70% of the variance in the items. Thus, the common method variance was not a serious problem in this study.

Confirmatory factor analyses

Before testing our hypotheses, we conducted confirmatory factor analyses via Mplus 8.3 to evaluate the construct validity of our model. We first examined the hypothesized five-factor model to assess whether each of the items (or parcels)

would load significantly onto the constructs with which they were associated. We created five parcels in our analysis for each dimension of OCB. The results of overall CFA showed an acceptable fit with the data ($\chi^2(179) = 229.05$, $RMSEA = 0.04$, $CFI = 0.98$, $TLI = 0.98$, $SRMR = 0.04$). In addition, all parcels or items provided statistically significant loadings on their intended latent constructs.

Furthermore, we also tested six alternative models. As shown in Table 1, the hypothesized five-factor model was superior to alternative models, including a four-factor model in which coworker-targeted leader aggressive humor and cognitive trust were set to load on a single factor ($\Delta\chi^2 = 144.44$, $RMSEA = 0.07$, $CFI = 0.92$, $TLI = 0.91$, $SRMR = 0.12$); a four-factor model in which coworker-targeted leader aggressive humor and affective trust were set to load on a single factor ($\Delta\chi^2 = 223.66$, $RMSEA = 0.08$, $CFI = 0.89$, $TLI = 0.87$, $SRMR = 0.14$); a four-factor model in which cognitive trust and affective trust were set to load on a single factor ($\Delta\chi^2 = 16.33$, $RMSEA = 0.04$, $CFI = 0.97$, $TLI = 0.97$, $SRMR = 0.04$); a four-factor model in which cognitive trust and OCB were set to load on a single factor ($\Delta\chi^2 = 103.02$, $RMSEA = 0.06$, $CFI = 0.94$, $TLI = 0.93$, $SRMR = 0.08$); a four-factor model in which affective trust and OCB were set to load on a single factor ($\Delta\chi^2 = 168.24$, $RMSEA = 0.07$, $CFI = 0.91$, $TLI = 0.90$, $SRMR = 0.09$); a four-factor model in which coworker-targeted leader aggressive humor and OCB were set to load on a single factor ($\Delta\chi^2 = 667.18$, $RMSEA = 0.14$, $CFI = 0.70$, $TLI = 0.65$, $SRMR = 0.19$), indicating that the proposed five-factor model fits the data well and thus should be accepted.

Results

Table 2 shows the means, standard deviations, and intercorrelations. To test for multicollinearity, we performed variance inflation factors (VIFs) for each model. The VIF values ranged from 1.02 to 2.01. These were below the threshold level of 10.0, indicating that multicollinearity is not a problem (Cohen et al., 2013).

Hypothesis 1 and 3 predicted that coworker-targeted leader aggressive humor would negatively predict observers' cognitive trust and affective trust in leaders respectively. As reported in Table 3, we found a significant negative effect of coworker-targeted leader aggressive humor on observers' cognitive trust ($b = -0.18$, $t = -2.44$, $p < 0.05$) and affective trust respectively ($b = -0.18$, $t = -2.29$, $p < 0.05$), supporting Hypothesis 1 and 3.

We further test the mediating roles of cognitive and affective trust in leaders in the relationship between coworker-targeted leader aggressive humor and observers' OCB. As shown in Table 3, cognitive ($b = 0.11$, $t = 2.08$, $p < 0.05$) and affective ($b = 0.18$, $t = 3.72$, $p < 0.01$) trust in leaders relate positively to observers' OCB. To test the mediating effects of cognitive trust and affective trust, we use the Monte Carlo method with 10,000 bootstrap repetitions. And the results showed that coworker-targeted leader aggressive humor exerted significantly negative indirect effects on OCB through affective trust (coefficient = -0.033 , 95% CI $[-0.073, -0.003]$) but not through cognitive trust (coefficient = -0.019 , 95% CI $[-0.054, 0.003]$). Thus, Hypothesis 4 is supported, but Hypothesis 2 is not.

Table 1 Model Fit Results for Confirmatory Factor Analysis (Study 1 and Study 2)

Models	χ^2	<i>df</i>	$\Delta\chi^2$	CFI	TLI	RMSEA	SRMR
Study 1							
Hypothesized five-factor model	229.05	179	—	0.98	0.98	0.04	0.04
Four-factor model 1	373.49	183	144.44	0.92	0.91	0.07	0.12
Four-factor model 2	452.70	183	223.66	0.89	0.87	0.08	0.14
Four-factor model 3	245.38	183	16.33	0.97	0.97	0.04	0.04
Four-factor model 4	332.07	183	103.02	0.94	0.93	0.06	0.08
Four-factor model 5	397.28	183	168.24	0.91	0.90	0.07	0.09
Four-factor model 6	896.22	183	667.18	0.70	0.65	0.14	0.19
Study 2							
Hypothesized five-factor model	503.18	280	—	0.96	0.96	0.05	0.04
Four-factor model 1	1727.32	293	1224.14	0.75	0.72	0.13	0.15
Four-factor model 2	1611.09	293	1107.90	0.77	0.74	0.12	0.15
Four-factor model 3	1073.96	293	570.77	0.86	0.85	0.10	0.06
Four-factor model 4	1527.12	293	1023.93	0.78	0.76	0.12	0.09
Four-factor model 5	1456.87	293	953.68	0.80	0.77	0.12	0.09
Four-factor model 6	1397.50	293	894.31	0.81	0.79	0.11	0.09

$N_{\text{Study 1}} = 211$. $N_{\text{Study 2}} = 295$. Δ = change relative to measurement model; *CFI* = comparative fit index; *TLI* = Tucker-Lewis index; *RMSEA* = root mean squared error of approximation; *SRMR* = standardized root mean-square residual

Table 2 Means, Standard Deviations and Correlations of the Variables (Study 1)

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11
1. Observer age	24.11	4.05											
2. Observer gender ^a	1.76	0.43	0.10										
3. Observer tenure	1.63	1.84	0.49**	-0.15*									
4. Leader age	26.51	4.87	0.11	-0.20**	0.22**								
5. Leader gender ^b	1.38	0.49	-0.06	0.12	-0.07	0.06							
6. Leader tenure	3.98	2.79	0.09	-0.21**	0.25**	0.69**	0.12						
7. Coworker-targeted leader aggressive humor	2.23	1.30	0.10	-0.11	0.09	0.05	0.03	0.04	0.83				
8. Cognitive trust	5.02	1.39	-0.02	-0.04	-0.04	0.03	0.06	0.01	-0.16*	0.74			
9. Affective trust	4.99	1.45	0.04	-0.05	0.02	-0.02	0.09	0.02	-0.14*	0.50**	0.73		
10. OCB	5.26	0.95	0.02	-0.02	0.11	0.01	-0.06	-0.06	-0.04	0.28**	0.34**	0.91	
11. LMX	4.43	1.60	-0.03	-0.14*	-0.03	0.03	-0.01	0.01	0.01	0.41**	0.45**	0.42**	0.93

N=211. Cronbach’s coefficients were reported along the diagonal in bold

^a For observer’s gender, 1 = male, 2 = female. ^b For leader’s gender, 1 = male, 2 = female

p* < 0.05, *p* < 0.01

Table 3 Summary Regression Results of Mediating Effects (Study 1)

Variable	Cognitive trust			Affective trust			OCB			
	Model 1			Model 2			Model 3			
	<i>B</i>	<i>SE</i>	<i>t</i>	<i>B</i>	<i>SE</i>	<i>t</i>	<i>B</i>	<i>SE</i>	<i>t</i>	
Intercept	5.08**	0.99	5.12	5.32**	1.03	5.15	3.80**	0.69	5.52	
Control variable										
Observer age	0.01	0.03	0.39	0.03	0.03	1.04	-0.02	0.02	-0.92	
Observer gender ^a	-0.23	0.24	-0.95	-0.34	0.25	-1.35	0.07	0.15	0.48	
Observer tenure	-0.04	0.06	-0.59	-0.01	0.07	-0.10	0.08*	0.04	2.01	
Leader age	0.01	0.03	0.42	-0.02	0.03	-0.80	0.02	0.02	1.07	
Leader gender ^b	0.19	0.20	0.97	0.34	0.21	1.64	-0.16	0.13	-1.20	
Leader tenure	-0.01	0.05	-0.19	0.02	0.05	0.45	-0.05	0.03	-1.63	
Independent variable										
Coworker-targeted leader aggressive humor	-0.18*	0.07	-2.44	-0.18*	0.08	-2.29	0.02	0.05	0.44	
Mediator										
Cognitive trust							0.11*	0.05	2.08	
Affective trust							0.18**	0.05	3.72	
<i>R</i> ²	0.04			0.04			0.17			
<i>F</i>	1.09			1.34			4.46			

N=211. Unstandardized regression coefficients are reported

^a For observer’s gender, 1 = male, 2 = female. ^b For leader’s gender, 1 = male, 2 = female

p* < 0.05, *p* < 0.01

Hypothesis 5a and 5b proposed the moderating effects of LMX on the relationships between coworker-targeted leader aggressive humor and cognitive trust and affective trust. Moderating effects are tested using Model 7 in PROCESS. Results in Table 4 revealed that coworker-targeted leader aggressive humor and LMX interacted to positively predict

affective trust (*b* = 0.10, *t* = 2.58, *p* < 0.05), whereas the interaction did not predict cognitive trust (*b* = 0.02, *t* = 0.41, *n.s.*). Thus, Hypothesis 5a and 5b were supported.

Furthermore, we plotted the relationship between coworker-targeted leader aggressive humor and affective trust at low-quality and high-quality LMX (1 *SD* below and

Table 4 Mediated Moderation Effects of LMX on the Relationships Between Coworker-targeted Leader Aggressive Humor and Cognitive Trust and Affective Trust (Study 1)

Variable	Cognitive trust			Affective trust		
	Model 4			Model 5		
	<i>B</i>	<i>SE</i>	<i>t</i>	<i>B</i>	<i>SE</i>	<i>t</i>
Intercept	4.43**	0.90	4.91	4.69**	0.90	5.21
Control variable						
Observer age	0.01	0.03	0.31	0.03	0.03	1.01
Observer gender ^a	-0.03	0.22	-0.13	-0.15	0.22	-0.69
Observer tenure	-0.02	0.06	-0.29	0.02	0.06	0.28
Leader age	0.01	0.03	0.34	-0.03	0.03	-0.98
Leader gender ^b	0.19	0.18	1.04	0.37*	0.18	2.00
Leader tenure	-0.01	0.05	-0.12	0.02	0.05	0.47
Independent variable						
Coworker-targeted Leader aggressive humor	-0.18**	0.07	-2.67	-0.18**	0.07	-2.64
Moderator						
LMX	0.35**	0.06	6.40	0.42**	0.06	7.53
Interaction term						
Coworker-targeted leader aggressive humor*LMX	0.02	0.04	0.41	0.10*	0.04	2.58
<i>R</i> ²	0.20			0.27		
<i>F</i>	5.57			8.39		

N = 211. Unstandardized regression coefficients are reported

^a For observer’s gender, 1 = male, 2 = female. ^b For leader’s gender, 1 = male, 2 = female

p* < 0.05, *p* < 0.01

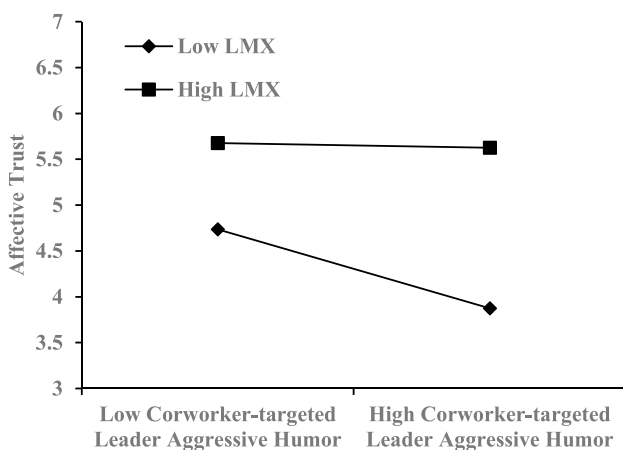


Fig. 2 The Moderating Effect of LMX (N = 211) (Study 1)

above the mean). As illustrated in Fig. 2, simple slope analysis revealed that coworker-targeted leader aggressive humor was significantly negatively associated with affective trust for observers with low-quality LMX ($b = -0.34$, $t = -3.67$, $p < 0.01$) but not for observers with high-quality LMX ($b = -0.02$, $t = -0.22$, *n.s.*). Thus, the high-quality LMX buffered the negative effect of exposing to

coworker-targeted leader aggressive humor on observers’ affective trust.

Our final hypothesis (Hypothesis 6) proposed that LMX moderates the mediation relationship between coworker-targeted leader aggressive humor and OCB via affective trust. The condition indirect effect of coworker-targeted leader aggressive humor on OCB was not significantly negative for those with high-quality LMX (coefficient = -0.004, 95% CI [-0.035, 0.029]) but was significantly negative for those with low-quality LMX (coefficient = -0.062, 95% CI [-0.121, -0.023]), thereby supporting the Hypothesis 6.

Study 2

Method: participants and procedure

The participants included in this survey were MBA students at a university in north China. Surveys were administered at two time points separated by a 2-week interval. The final sample included 295 participants with complete data across both time points. At Time 1, participants rated their leaders’ coworker-targeted aggressive humor behavior, self-reported LMX, and control variables (demographic variables,

interaction frequency with leader, and their leaders' demographic variables). At time 2, participants self-reported their cognitive trust, affective trust, and OCB.

Participants who responded have an average age of 29.20 years ($SD = 6.05$), average organization tenure of 3.56 years ($SD = 4.27$), and average tenure with leader of 2.96 years ($SD = 2.67$). Overall, 75.30% of them were male. Participants' leaders (reported by participants) have an average age of 35.53 years ($SD = 7.13$), and most of them (87.80%) were male.

Measures

We used the same translation–back-translation procedure as described in Study 1. All scales were scored on a 5-point Likert scale (1 = “strongly disagree”, 5 = “strongly agree”). We measured coworker-targeted leader aggressive humor, cognitive trust, affective trust, and LMX using the same scales as in study 1.

The only focal measure that differed from Study 1 was OCB. We measured OCB using the 10-item scale from Spector et al. (2010). Sample items included: “Gave up meal and other breaks to complete work” and “Volunteered for extra work assignments”.

Control variables We controlled observers' age, gender, organizational tenure, and leaders' age and gender (Cooper et al., 2018; Hu et al., 2022; Wei et al., 2022). In addition, we controlled tenure with leader and interaction frequency with leader, as they may affect the observers' trust in leaders (McAllister, 1995). Gender was coded 1 for male and 2 for female, while age and tenure were measured by number of years. Interaction frequency with leader was scored on a 5-point Likert scale (1 = “strongly disagree”, 5 = “strongly agree”).

Preparatory analyses

Before testing our hypotheses, we conducted several preparatory analyses. This included evaluating the presence of common method variance, and assessing the validity of our measurement model.

Common method variance analysis

We performed Harman's single-factor test, a widely used technique to address common method variance (Podsakoff et al., 2003). This test yielded five factors, with the first accounting for 33.80% of the variance in the items. Thus, the common method variance was not a serious problem in this study.

Confirmatory factor analyses

Before testing our hypotheses, we conducted confirmatory factor analyses via Mplus 8.3 to evaluate the construct validity of our model. We first examined the hypothesized five-factor model to assess whether each of the items would load significantly onto the constructs with which they were associated. The results of overall CFA showed an acceptable fit with the data ($\chi^2(280) = 503.18$, $RMSEA = 0.05$, $CFI = 0.96$, $TLI = 0.96$, $SRMR = 0.04$). In addition, all items provided statistically significant loadings on their intended latent constructs.

Furthermore, we also tested six alternative models. As shown in Table 1, the hypothesized five-factor model was superior to alternative models, including a four-factor model in which coworker-targeted leader aggressive humor and cognitive trust were set to load on a single factor ($\Delta\chi^2 = 1224.14$, $RMSEA = 0.13$, $CFI = 0.75$, $TLI = 0.72$, $SRMR = 0.15$); a four-factor model in which coworker-targeted leader aggressive humor and affective trust were set to load on a single factor ($\Delta\chi^2 = 1107.90$, $RMSEA = 0.12$, $CFI = 0.77$, $TLI = 0.74$, $SRMR = 0.15$); a four-factor model in which cognitive trust and affective trust were set to load on a single factor ($\Delta\chi^2 = 570.77$, $RMSEA = 0.10$, $CFI = 0.86$, $TLI = 0.85$, $SRMR = 0.06$); a four-factor model in which cognitive trust and OCB were set to load on a single factor ($\Delta\chi^2 = 1023.93$, $RMSEA = 0.12$, $CFI = 0.78$, $TLI = 0.76$, $SRMR = 0.09$); a four-factor model in which affective trust and OCB were set to load on a single factor ($\Delta\chi^2 = 953.68$, $RMSEA = 0.12$, $CFI = 0.80$, $TLI = 0.77$, $SRMR = 0.09$); a four-factor model in which coworker-targeted leader aggressive humor and OCB were set to load on a single factor ($\Delta\chi^2 = 894.31$, $RMSEA = 0.11$, $CFI = 0.81$, $TLI = 0.79$, $SRMR = 0.09$), indicating that the proposed five-factor model fits the data well and thus should be accepted.

Results

Table 5 shows the means, standard deviations, and intercorrelations. To test for multicollinearity, we performed VIFs for each model as in Study 1. The VIF values ranged from 1.04 to 2.35. These were below the threshold level of 10.0, indicating that multicollinearity is not a problem (Cohen et al., 2013).

Hypothesis 1 and 3 predicted that coworker-targeted leader aggressive humor would negatively predict observers' cognitive trust and affective trust in leaders, respectively. As reported in Table 6, we found a significant negative effect of coworker-targeted leader aggressive humor on observers' cognitive trust ($b = -0.13$, $t = -3.15$, $p < 0.01$) and affective trust respectively ($b = -0.16$, $t = -3.98$, $p < 0.01$), supporting Hypothesis 1 and 3.

Table 5 Means, Standard Deviations and Correlations of the Variables (Study 2)

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Observer age (T1)	29.20	6.05												
2. Observer gender ^a (T1)	1.25	0.43	0.14*											
3. Observer organization tenure (T1)	3.56	4.27	0.66**	0.09										
4. Observer tenure with leader (T1)	2.96	2.67	0.54**	0.02	0.66**									
5. Observer interaction frequency with leader (T1)	3.31	0.76	-0.07	-0.20**	-0.14*	-0.07								
6. Leader age (T1)	35.53	7.13	0.54**	0.20**	0.45**	0.44**	-0.06							
7. Leader gender ^b (T1)	1.12	0.33	0.02	0.22**	0.09	0.14*	-0.14*	0.12*						
8. Coworker-targeted leader aggressive humor (T1)	2.44	0.96	0.02	-0.05	0.13*	0.12*	-0.18**	0.07	0.09	0.89				
9. Cognitive trust (T2)	3.92	0.72	0.10	0.04	0.03	0.02	0.31**	0.15*	0.01	-0.22**	0.92			
10. Affective trust (T2)	4.02	0.68	0.12*	0.01	0.05	0.04	0.25**	0.10	0.00	-0.26**	0.72**	0.91		
11. OCB (T2)	3.53	0.79	0.18**	-0.02	0.10	0.08	0.34**	0.06	-0.06	-0.19**	0.49**	0.47**	0.94	
12. LMX (T1)	3.85	0.65	0.04	0.00	0.00	-0.03	-0.03	0.04	0.00	-0.16**	0.09	0.13*	0.10	0.88

N = 295. Cronbach's coefficients were reported along the diagonal in bold. T1/2 = Time 1/2

^a For observer's gender, 1 = male, 2 = female. ^b For leader's gender, 1 = male, 2 = female

* $p < 0.05$, ** $p < 0.01$

We further test the mediating roles of cognitive and affective trust in leaders in the relationship between coworker-targeted leader aggressive humor and observers' OCB. As shown in Table 6, cognitive ($b = 0.29, t = 3.69, p < 0.01$) and affective ($b = 0.23, t = 2.78, p < 0.01$) trust in leaders relate positively to observers' OCB. To test the mediating effects of cognitive trust and affective trust, we use the Monte Carlo method with 10,000 bootstrap repetitions. And the results showed that coworker-targeted leader aggressive humor exerted significantly negative indirect effects on OCB through cognitive trust (coefficient = -0.038, 95% CI [-0.075, -0.011]) and affective trust (coefficient = -0.038, 95% CI [-0.073, -0.012]), supporting Hypothesis 2 and Hypothesis 4.

Hypothesis 5a and 5b proposed the moderating effects of LMX on the relationships between coworker-targeted leader aggressive humor and cognitive trust and affective trust. Moderating effects are tested using Model 7 in PROCESS. Results in Table 7 indicated that coworker-targeted leader aggressive humor and LMX interacted to positively predict affective trust ($b = 0.14, t = 2.79, p < 0.01$), whereas the interaction did not predict cognitive trust ($b = 0.07, t = 1.35, n.s.$). Thus, Hypothesis 5a and 5b were supported.

Furthermore, we plotted the relationship between coworker-targeted leader aggressive humor and affective trust at low-quality and high-quality LMX (1 SD below and above the mean). As illustrated in Fig. 3, simple slope analysis revealed that coworker-targeted leader aggressive humor was negatively associated with affective trust for observers with low-quality LMX ($b = -0.22, t = -4.61, p < 0.01$) but not for observers with high-quality LMX ($b = -0.04, t = -0.74, n.s.$). Thus, the high quality LMX buffered the negative effect of exposing to coworker-targeted leader aggressive humor on affective trust.

Last, we tested the conditional indirect effects to determine whether the estimated indirect effects differed for those with higher (+1 SD) versus lower (-1 SD) LMX. The results showed that the condition indirect effect of coworker-targeted leader aggressive humor on OCB was not significantly negative for those with high-quality LMX (coefficient = -0.010, 95% CI [-0.040, 0.015]) but was significantly negative for those with low-quality LMX (coefficient = -0.052, 95% CI [-0.098, -0.017]), thereby supporting the Hypothesis 6.

General discussion

Drawing on social information processing theory and trust literature, we have constructed and empirically examined a theoretical model. This model elucidates the mediating roles of observers' cognitive and affective trust in the relationship between coworker-targeted leader aggressive humor and observers' OCB, and the moderating effects of observers'

Table 6 Summary Regression Results of Mediating Effects (Study 2)

Variable	Cognitive trust (T2)			Affective trust (T2)			OCB (T2)		
	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE</i>	<i>t</i>	<i>B</i>	<i>SE</i>	<i>t</i>	<i>B</i>	<i>SE</i>	<i>t</i>
Intercept	2.39**	0.39	6.18	3.08**	0.37	8.27	0.59	0.42	1.41
Control variable									
Observer age (T1)	0.01	0.01	0.54	0.01	0.01	1.13	0.02*	0.01	2.39
Observer gender ^a (T1)	0.08	0.10	0.80	0.01	0.09	0.09	0.00	0.09	0.00
Observer organization Tenure (T1)	0.00	0.01	0.27	0.00	0.01	0.32	0.01	0.01	0.40
Observer tenure with leader (T1)	-0.01	0.02	-0.69	-0.01	0.02	-0.33	0.01	0.02	0.36
Observer interaction frequency with leader (T1)	0.29**	0.05	5.45	0.20**	0.05	3.91	0.22**	0.06	3.94
Leader age(T1)	0.02*	0.01	2.28	0.01	0.01	1.14	-0.01	0.01	-1.60
Leader gender ^b (T1)	0.11	0.12	0.87	0.08	0.12	0.68	-0.06	0.12	-0.46
Independent variable									
Coworker-targeted leader aggressive humor (T1)	-0.13**	0.04	-3.15	-0.16**	0.04	-3.98	-0.04	0.04	-0.93
Mediator									
Cognitive trust (T2)							0.29**	0.08	3.69
Affective trust (T2)							0.23**	0.08	2.87
<i>R</i> ²	0.16			0.13			0.34		
<i>F</i>	7.04			5.49			14.47		

N = 295. Unstandardized regression coefficients are reported. T1/2 = Time 1/2

^a For observer’s gender, 1 = male, 2 = female. ^b For leader’s gender, 1 = male, 2 = female

p* < 0.05, *p* < 0.01

Table 7 Mediated Moderation Effects of LMX on the Relationships Between Coworker-targeted Leader Aggressive Humor and Cognitive Trust and Affective Trust (Study2)

Variable	Cognitive trust (T2)			Affective trust (T2)		
	Model 4			Model 5		
	<i>B</i>	<i>SE</i>	<i>t</i>	<i>B</i>	<i>SE</i>	<i>t</i>
Intercept	2.11**	0.36	5.84	2.78**	0.34	8.06
Control variable						
Observer age (T1)	0.00	0.01	0.47	0.01	0.01	1.01
Observer gender ^a (T1)	0.07	0.10	0.71	-0.01	0.09	-0.11
Observer organization tenure (T1)	0.00	0.01	0.21	0.00	0.01	0.18
Observer tenure with leader (T1)	-0.01	0.02	-0.59	-0.00	0.02	-0.15
Observer interaction frequency with leader (T1)	0.30**	0.05	5.56	0.21**	0.05	4.17
Leader age (T1)	0.01*	0.01	2.19	0.01	0.01	0.99
Leader gender ^b (T1)	0.10	0.12	0.81	0.07	0.12	0.59
Independent variable						
Coworker-targeted leader aggressive humor (T1)	-0.12**	0.04	-2.67	-0.13**	0.04	-3.19
Moderator						
LMX (T1)	0.07	0.06	1.18	0.11	0.06	1.87
Interaction term						
Coworker-targeted leader aggressive humor*LMX	0.07	0.05	1.35	0.14**	0.05	2.79
<i>R</i> ²	0.17			0.17		
<i>F</i>	5.96			5.62		

N = 295. Unstandardized regression coefficients are reported. T1/2 = Time 1/2

^a For observer’s gender, 1 = male, 2 = female. ^b For leader’s gender, 1 = male, 2 = female

p* < 0.05, *p* < 0.01

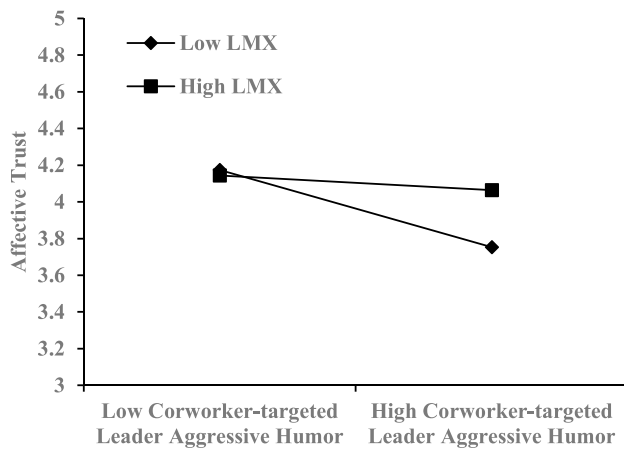


Fig. 3 The Moderating Effect of LMX (N=295) (Study 2)

LMX with their leaders on these effects. By exploring from the third-party perspective, our study contributes valuable insights to the literature on leader aggressive humor.

Implications for theory

Our study makes several theoretical contributions. First, it introduces a unique third-party perspective to explore the effects of leader aggressive humor. Much of the existing research predominantly frames such humor as an interpersonal dynamic between the performer and the target, often overlooking its impact on bystanders (Kim et al., 2016; Martin et al., 2003; Wei et al., 2022; Yam et al., 2018; C. Yang & Yang, 2023). By shifting focus to this third-party viewpoint, our work broadens the scope of leader aggressive humor studies, extending its relevance beyond the immediate victims.

Second, our research extends the existing literature on informational cues of leader humor by suggesting that leader aggressive humor may convey negative information that undermines leaders' trustworthiness. While past research has concentrated mainly on the positive aspects of social information cues in leader humor (Cooper, 2008; Karakowsky et al., 2020), there remains a significant gap in understanding the negative signals conveyed by leader humor, despite Yam et al. (2018) pointing out that it might convey norm violation acceptability cues. Furthermore, past research on leader humor predominantly focuses on the cues of a general sense of humor rather than specific humor styles, potentially leading to an interpretation of the social information of leader humor as predominantly positive. As Yam et al. (2018) highlighted, understanding the consequences of leader humor warrants more attention to the style of humor. Based on social information processing theory, our work suggests that coworker-targeted leader aggressive humor

conveys negative information that hinders the development of trust among observers.

Finally, our study contributes to the literature on leader humor by examining the moderating role of LMX. Although numerous studies have demonstrated that LMX mediates the relationships between leader humor and employees' attitudes and behaviors (Cooper, 2008), the mediational process fails to explain a number of counterintuitive findings about positive and negative leader humor (Robert et al., 2016). As suggested by Robert et al.'s (2016) work, relationship quality can act as a crucial contextual factor influencing the effects of leader humor. Our study enriches and extends this idea by suggesting that the influence of LMX may extend beyond direct employees, potentially buffering the impact of leaders' aggressive humor on third parties. In summary, we provide insights into the confusing question of "When and how leader aggressive humor directed at coworkers affects observers?" and contribute to the literature on "leader aggressive humor".

Implications for practice

Based on our findings, we propose the following practical implications for managers and their followers. First, aggressive humor by leaders can result in harmful outcomes, while positive humor can serve as a lubricant that facilitates relationships (Martin et al., 2003). It is crucial for leaders, pivotal in shaping organizational culture, to recognize the potential pitfalls of aggressive humor. Leadership development programs should underscore this issue by incorporating modules on the appropriate use of humor, emphasizing the risks of aggressive styles. Moreover, leader humor use skills can be taught (Yam et al., 2018). Thus, organizations can provide appropriate training to help leaders to maximize the benefits of affiliative humor and minimize the costs of aggressive humor.

In addition, our results highlight the spillover effects of leader aggressive humor. Recognizing this widespread fallout, organizations should reassess their approach. One immediate action is integrating humor style evaluation into the recruitment process, particularly for leadership roles. Through the use of behavioral interview techniques or psychometric assessments, organizations can ensure the selection of managers who enhance, rather than undermine, workplace environment. Furthermore, it is crucial to establish policies against aggressive humor, given its detrimental impact on trust. These policies not only counteract the negative effects of humor but also foster a workplace culture rooted in respect and collaboration.

Finally, leaders need to acknowledge the significance of high-quality LMX relationships. While high-LMX can assist in mitigating some of the negative effects of witnessing coworker-targeted aggressive humor, it is not always a

favorable buffer. This underscores the imperative for leaders to consistently establish and fortify their social relationships with followers. True leadership extends beyond building a basic connection; it demands a genuine commitment to understanding, valuing, and respecting every team member.

Limitations and future directions

This study has several limitations. First, it focuses on how leaders using aggressive humor directed at coworkers impedes observers' trust. Future research should broaden the scope of observers' reactions to such humor, such as empathy or schadenfreude. Additionally, our research did not explore observers' reactions to leader aggressive humor directed at members of external teams. Subsequent studies can enrich research on leader aggressive humor by investigating differences in the extent of negative impact on internal and external team members when witnessing leaders using aggressive humor.

Second, there is an opportunity for future research to explore more contextual factors that either enhance or mitigate the spillover effects of leader aggressive humor. One potential factor to consider is the observer's attribution of such humor, which may shape their perception of the humor used by the leader towards the coworker. Specifically, the direction of attribution may vary based on the observer's personality traits, regulatory focus, and culturally held values.

Third, our findings highlight the distinct roles of cognitive and affective trust, especially under the moderating effect of LMX. This differentiation has emerged as a critical aspect of our research, suggesting a promising avenue for future studies. Indeed, these two types of trust have distinct effects on the dynamic relationships between leadership and follower outcomes, given their unique natures. (Zhu et al., 2013). Thus, we encourage future studies to delve deeper into the nuanced interplay between these two forms of trust and LMX, exploring how they influence relational dynamics and employee outcomes differently.

Finally, despite conducting multi-source and multi-wave field studies, both of which were surveys, causal inferences among variables still need further establishment. We encourage future studies to consider more delicate designs such as field experiments, longitudinal design, or Experienced Sampling Method. Additionally, while our study draws upon two diverse samples, encompassing young and middle-aged individuals, it relies heavily on data from China. The intricate cultural nuances differentiating Eastern and Western societies could engender variances in responses to coworker-targeted aggressive humor. This cultural context may limit the global applicability of our findings. Therefore, future studies should broaden their datasets across multiple countries to enhance understanding and generalizability.

Data availability The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

Declarations

Ethics approval All procedures performed in this study were in accordance with the ethical standards of the Ethical Review Board of Southeast University, as well as with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

Consent to participate Informed consent was obtained from all individual participants included in the study.

Competing Interests The authors have no competing interests to declare that are relevant to the content of this article.

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