#### **ORIGINAL ARTICLE**



# Leader humor and employee creativity: a model integrating pragmatic and affective roles

Wenan Hu<sup>1</sup> · Jinlian Luo<sup>1</sup>

Received: 18 June 2019 / Revised: 16 January 2020 / Accepted: 17 January 2020 / Published online: 30 January 2020 © Springer Nature Limited 2020

# Abstract

This study developed an integrative model to investigate the relationship between leader humor and employee creativity through pragmatic and affective effects in the Chinese context. Through a time-lagged field study of 358 employees and their direct supervisors in 35 Chinese high-tech enterprises, we find support that leader humor is positively related to employee creativity; the mediators of this relationship are employees' task resources and affective commitment to their organizations. We also examine the moderating roles of employees' perspective taking in the relationships between leader humor and the mediating variables. In addition, we find support for the full-moderated mediation model that perspective taking moderates the mediating effect of task resources on the relationship between leader humor and employee creativity. This study makes insightful contributions and implications to the field of leader humor and employee creativity.

**Keywords** Leader humor · Task resources · Affective commitment · Creativity · Perspective taking

# Introduction

Humor is defined as a form of social communication through which individuals show abilities, attitudes, and behaviors related to amusement to others (Martin et al. 2003; Cooper 2005). In the workplace, humor can be a powerful form of interaction that promotes positive outcomes by mentioning work-related cognitive and emotional challenges (Cooper and Sosik 2012). Humor is considered to be a crucial

 <sup>☑</sup> Jinlian Luo luojl@tjhrd.com
 Wenan Hu huwenan999@163.com

<sup>&</sup>lt;sup>1</sup> School of Economics and Management, Tongji University, Shanghai, China

method for leaders to influence their subordinates, because leaders have more power and can control the degree of humor expression at work (Cooper 2005; Coser 1960).

Prior research has noted the positive relationship between leader humor and work-related outcomes, such as job performance (Avolio et al. 1999; Lang and Lee 2010), employee's trust in the leader and perceived leader effectiveness (Gkorezis and Bellou 2016; Tremblay 2017), employee commitment (Hughes and Avey 2009), and job satisfaction (Robert et al. 2016).

Although researchers have verified the impact of leader humor on personal outcomes (Decker 1987; Kim and Lee 2013; Lee 2015), they focused mostly on attitudinal or in-role performance and neglected extra-role performance such as employee creativity. Creativity could stimulate organizations and teams' innovative climate and finally overcome the diversity and dynamic of the changing environment (e.g., Lopez-Cabrales et al. 2009). However, studies on leader humor and employee creativity are scant. Moreover, these studies mainly focused on western countries, leading to limited knowledge on the effects of leader humor in non-Western contexts such as the Chinese context in the research field (Lee 2015; Li et al. 2019; Mao et al. 2017). Limited literature on leader humor in the Chinese context has been explored from the perspective of interpersonal relationship (Mao et al. 2017; Yang et al. 2015) and psychological capital (Li et al. 2019). These perspectives are conducted in isolation, and have not been systematically integrated. We need a further step to build an integrated model of leader humor to cope with the complexity of Chinese context for two reasons: first, Chinese companies have higher power distance compared with those in Western countries. Thus, leaders in China have more authority and resources than those in the West, and employees often show more obedience to their leaders. Second, employees are usually influenced mainly by their collectivist culture, which promotes resource sharing and exchanging in workplaces. Therefore, our research will explore the relationship between leader humor and employee creativity by building an integrated model in the Chinese context.

Leader humor, as a kind of interpersonal resource and an important leadership tool (McGraw 2014), can promote employees to engage in extra roles by building a high-quality leader-member exchange (Cooper et al. 2018). Employee creativity refers to the novel and useful idea generation by an employee (Shalley et al. 2004). According to the dynamic componential perspective (Amabile and Pratt 2016), social environments can stimulate or impede creativity through resources and creativity-relevant processes. This notion gives us a comprehensive picture of how to become a creative employee. Therefore, our research integrates the pragmatic perspective (task resources) and affective perspective (affective commitment) to link leader humor and employee creativity. Pragmatic perspective is resource-based and provides us with a way to understand how employees receive and transfer taskrelated resources during the interactions. Task resources can be anything that is imbedded in social interactions. For example, task resources help employees obtain concrete or symbolic, visible or invisible power (Brass and Burkhardt 1993) in workplaces, enabling them to build a solid foundation for identifying problems and implementing innovative ideas and thereby enhancing creativity.

To significantly promote creativity-relevant processes, subordinates also need to exert their affective energy toward committing to their creative working jobs (Choi et al. 2015). Affective perspective is affect-based and gives followers sufficient space to accumulate emotional resources to be proactive in the workplace. Thus, we predict that affective commitment is a pivotal indicator; employees could be emotionally attached and affiliated to their creativity-relevant processes, which could push employees to work efficiently (Meyer and Allen 1997) and creatively (Dhar 2015; Matzler and Mueller 2011).

Although prior research has shown some positive effects of leader humor, little has been explored about what employees can do to promote its favorable effects. Leader humor can offer employees intrapersonal and emotional free space, which is regarded as the source of friendliness or supportiveness during the social exchange process (Blau 1964). Leader humor may essentially stimulate task resources which subordinates exploit to recognize problems and motivate their affective commitment to engage in creativity-relevant processes. Thus, followers need to perceive correctly the meaning transferred by leader humor and adopt their leaders' essential viewpoint. For instance, employees should have a high level of perspective taking to understand a situation precisely on the basis of their values or preferences (Parker and Axtell 2001) and avoid misunderstanding. We argue that perspective taking can strengthen the positive effects of leader humor on task resources and affective commitment, thereby leading to high creativity.

Our integrative study makes several contributions. First, prior research on leader humor lacks an overarching theoretical framework (Yam et al. 2018), and the validity in non-Western contexts, such as the Chinese context, needs to be investigated. Empirical research verifying the effects of leader humor is scarce, thus calling for a deep exploration for new theoretical and empirical studies. Our study moves the humor and creativity literature forward by building an integrative theoretical framework in the Chinese context and integrating the affect theory of social exchange (Lawler 2001) and pragmatic perspective. Second, different from the past literature, we argue that leader humor is not only a kind of communication tool but can also stimulate resources related to various tasks. Third, we explore the affective and pragmatic mechanisms of leader humor on employee creativity in terms of how and when leader humor stimulates employee creativity. Moreover, we identify employee perspective taking as a cognitive capability and suggest that the effects of leader humor on creativity will be strong when perspective taking is high. Our empirical research focused on leaders and employees in the Chinese context, gives us an insightful context to explore the relationship between leader humor and employee creativity. The complexity of the Chinese context could help us examine the validity of leader humor and enrich research contexts of how leader humor stimulates employee creativity. We show our conceptual model in Fig. 1.

# Theoretical background and hypotheses

#### Leader humor

Leader humor, as a kind of social communication tool, shows employees' abilities, attitudes, and behaviors that are related to amusement (Martin et al. 2003;

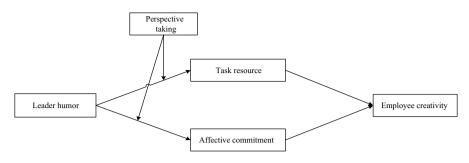


Fig. 1 The conceptual model

Cooper 2005). In the workplace, humor is considered to be a crucial method for leaders to influence their subordinates because leaders have more power and can control the degree of humor expression at work (Cooper 2005; Coser 1960). Therefore, leader humor can be a powerful form of interaction that promotes positive outcomes by mentioning work-related cognitive and emotional challenges (Cooper and Sosik 2012). Research on leader humor has noted the positive effect of such humor on work-related outcomes in Western countries, such as job performance (Avolio et al. 1999; Lang and Lee 2010), employee commitment (Hughes and Avey 2009), job satisfaction (Robert et al. 2016), and employee's trust in the leader and perceived leader effectiveness (Gkorezis and Bellou 2016; Tremblay 2017). Although researchers have explored the validity of leader humor in Western countries, we still lack the knowledge on the effects of leader humor in non-Western countries (Lee 2015; Li et al. 2019; Mao et al. 2017). For instance, limited studies have found that leader humor could promote transformational leadership (Mao et al. 2017), foster supervisor-subordinate relationship (Yang et al. 2015), and improve subordinates' psychological capital (Li et al. 2019) in Chinese context.

Overall, prior literature on humor indicates two main mechanisms: social exchange and emotion control (Cooper and Sosik 2012). Research on the effects of leader humor is separated into different perspectives and has not been systematically integrated. Such isolated perspectives make exploring the capability of leader humor to simultaneously maximize the value in multiple perspectives difficult. Just applying a perspective may result in other perspectives being ignored. Thus, to reconcile various perspectives, we need to integrate them and discern what truly drives leader humor. Moreover, the literature on leader humor has primarily focused on attitudinal or in-role contexts and neglected extra roles, such as employee creativity (Cooper et al. 2018).

According to the dynamic componential perspective (Amabile and Pratt 2016), social environments can stimulate or impede creativity through resources and creativity-relevant processes. Therefore, our research integrates the pragmatic perspective (task resources) and affective perspective (affective commitment) to link leader humor and employee creativity. This approach could give

us a comprehensive picture of how leader humor stimulates an employee to be creative in Chinese context.

#### Leader humor and employee creativity

Employee creativity refers to the novel and useful idea generation by subordinates during working processes (Shalley et al. 2004). Creativity helps employees accomplish their goals and react efficiently to opportunities, which could lead teams to get advantages and gain survival for sustainable innovation (Amabile and Pratt 2016).

Prior researchers have explored various antecedents of creativity. For instance, leader behavior, organizational culture, organizational climate, skills, and resources are five important factors related to employee creativity (Andriopoulos 2001). Many studies found that high-quality interaction between leaders and subordinates can lead to employee creativity (Liao et al. 2010; Shalley et al. 2000).

Leader humor, as a kind of intentional and social interaction tool, could be one of the pivotal antecedents of creativity by amusing employees (Cooper 2005) and weakening the potential failure of generating new ideas (Romero and Cruthirds 2006). Our study takes leader humor as an interpersonal behavior (Martin and Lefcourt 1984; Cooper et al. 2018) which contains spontaneous and verbal humor as well as the sharing of jokes or funny stories. Prior studies have shown that leader humor can facilitate employee extra roles by building a high-quality leader-member exchange (Cooper 2005; Cooper et al. 2018). Social exchange theory states that employees exchange various resources and, by relying on different kinds of resources exchanged, may develop a high-quality relationship with their leaders. Leader humor could provide socioemotional resources to employees through frequent social exchanges. Socioemotional resources are not compulsorily transferred but rather voluntarily, and thus followers who receive such resources may give voluntary and friendly feedback (Blau 1964), which could form a highly respectful and trusting relationship between leaders and employees (Cooper et al. 2018). Thus, employees would be motivated to engage in generating new ideas, which is important in cultivating and improving their creativity. Prior studies have also verified that when employees receive humor expression during exchanges, they may be positively correlated to their creative performance (Rouff 1975; Gilbert 1977; Decker and Rotondo 2001). Thus, we propose the following hypothesis:

**Hypothesis 1** Leader humor has a positive effect on employee creativity.

# Mediating role of affective commitment between leader humor and employee creativity

Humor can function as a process of affective transmission. Leader humor may facilitate employee creativity via affective commitment. Affect theory of social exchange suggests that social exchanges among different employees can perform various feelings, such as positive or negative (Lawler and Thye 1999), which employees consider respectively as either intrinsically beneficial or punishing (Lawler 2001). When employees get positive sources of feelings, they will be proactive in engaging in the workplace. Otherwise, they will be less efficient in job performance. Different resources conveyed during the exchange between leaders and employees may produce a high-quality relation. This relationship is helpful for employees to fulfill their work–role responsibilities and contribute to their jobs.

Leader humor can give employees emotional resources during the social exchange process. Intrapersonal and emotional resources are voluntarily exchanged, and they are often regarded as the source of friendliness or supportiveness (Blau 1964). Thus, through leader humor, employees can recognize more positive emotional resources in the workplace which stimulate high-quality relations to engender their affective commitment to the organization.

Employees' affective commitment can lead them to be emotionally attached and affiliated to their organizations. Affective commitment contains positive resources that promote employees to work efficiently (Meyer and Allen 1997). We predict that leader humor in the workplace will improve employees' affective commitment to the organization for interpersonal and psychological reasons.

Employees will get something joking or funny in their tasks when faced with leader humor. Thus, they will assume that the exchange with their leaders is positive and will inject passion and responsibility into their own jobs. This passion and responsibility will lead employees to invest themselves emotionally, thus strengthening their affective commitment to the organization. Furthermore, the psychological processes derived from the affect theory of social exchange argue how employees' high-level affective commitment leads to a raise in affective commitment to the whole organization. In other words, the feelings employees derive from the social exchange with their leaders who transfer a sense of humor can trigger cognitive efforts to seek out why they are faced with such feelings. These employees will also tend to translate and express these feelings with reference to the whole organization. (Lawler 2006), which is helpful in improving their affective commitment to the organization.

As affective commitment develops, employees will be motivated to engage in jobs and show positive attitudes toward generating new ideas, which is important for the organization (Dhar 2015; Matzler and Mueller 2011). Prior research found that affective commitment is positive to employee creativity in various organizations (Dhar and Dhar 2010). In addition, affective commitment plays a mediating role in the relation between HRM practices and different job outcomes, such as innovative behavior (Camelo-Ordaz et al. 2011). We further indicate that leader humor can give employees plenty of intrapersonal and emotional resources that have a positive effect on promoting their affective commitment. Thus, an affective committed employee will exert efforts on creativity. We propose the following hypothesis:

**Hypothesis 2** Affective commitment mediates the relation between leader humor and employee creativity.

#### Mediating role of task resources between leader humor and employee creativity

Task resources are mainly from social interactions between leaders and employees. If employees have greater access to task resources, then they will be regarded as powerful and influential in an organization, a role that is pivotal for improving their status (Brass and Burkhardt 1993) and producing a sense of empowerment (Spreitzer 1996). Therefore, they will be motivated to release their full potential (Seibert et al. 2001) and will try new, creative ways of doing their jobs (Alge et al. 2006).

Leader humor can give employees plenty of funny stories or amusement related to their tasks, which is a good way to connect with one another and facilitate the exchange of task resources (Sheldon 1971). Employees faced with leader humor may perceive an intimate relationship with their leaders, which can have direct and important pragmatic effects on employees (Robinson et al. 2013). Essential task resources, specifically those dominated by leaders, usually result from social interactions (Wu et al. 2012). Therefore, leader humor can give employees the opportunity to understand their jobs by offering the core task resources in a humorous way through effective communication. Accordingly, employees will likely get access to task resources and make full use of them. Instead of being excluded from organizations, leader humor, by acting as a bridge that links leaders with employees, can tighten the relations among working groups. This effect will promote employees to receive and understand essential task resources arising out of formal meetings or personal interactions (Jones and Kelly 2013).

When employees are included in such interactions, they will know about or have access to the key task resources that will enable them to generate new ideas (Kwan et al. 2018). For example, salesmen may receive the valuable resources promptly, which is a solid foundation for improving customer services. Gaining task resources can lead subordinates to regard themselves as insiders in the organization and to be more likely recognized by the organization (Leung et al. 2011). Thus, plenty of task resources received from leaders promote employees to come up with the most effective strategies, resulting ultimately in increased levels of employee creativity. Taken together, we propose the following hypothesis:

**Hypothesis 3** Task resources mediate the relation between leader humor and employee creativity.

#### Moderating role of perspective taking

Prior research has paid limited attention to personal factors that may promote the positive effects of leader humor on affective and pragmatic domains. On the one hand, employees should possess an affective commitment to building relations with coworkers in the whole organization. On the other hand, only the affective domain is not sufficient, and employees should also gain resources from their leaders to achieve their task goals (Anand et al. 2010). Perspective taking refers to a kind of cognitive activity that adopts someone's viewpoint and understands a situation on the basis of their values or preferences (Parker and Axtell 2001). We argue that perspective

taking is an important moderator in the relation between leader humor and employee affective commitment. If employees efficiently and accurately perceive their own jobs, then leader humor will be effective in stimulating their affective commitment. Perspective taking provides a psychological connection between one's self and others, which can promote employees to behave in ways like others (Longmire and Harrison 2018). Hence, employees will more likely engage in efforts to generate new ideas with their coworkers. Furthermore, when employees perceive their jobs are less valued, they will be disengaged. Thus, instead of committing and exchanging with their coworkers, employees will rather focus their attention on improving their self-consciousness within the organization (Kahn 1990). Therefore, employees with high perspective taking are more likely to understand the essence of leader humor, obtain the accurate intrapersonal and emotional resources conveyed by their leaders, and gain positive feedback from their leaders. Thus, employees will be motivated to engage in working and develop affective commitment to the organization. In sum, Hypothesis 4 is proposed as follows:

**Hypothesis 4** Perspective taking moderates the positive relationship between leader humor and affective commitment, such that the relationship is stronger when the level of perspective taking is high rather than low.

We likewise argue that perspective taking is an important moderator that can promote the positive effects of leader humor. When employees' perspective taking is high, they are more likely to understand the essence of leader humor and obtain the accurate task resources provided by their leaders. In this sense, perspective taking helps employees think in a way similar to their leaders and coworkers, and task resources will be transferred fluently and efficiently. This outcome may stimulate employees' motivation to engage in tasks and spur their initiatives to generate new ideas. As leaders are usually regarded as agents of the entire workplace, employees may perceive their leaders' styles as an indicator of the organization (Rhoades and Eisenberger 2002). Applying the perspective to the effects of leader humor and employees' perspective taking on task resources, we posit the following: when employees are faced with leader humor, a high level of perspective taking will push them to make sense of the humor and get accurate task resources in the social exchange processes. Therefore, the positive relationship between leader humor and task resources may be promoted by perspective taking. In sum, Hypothesis 5 is proposed as follows:

**Hypothesis 5** Perspective taking moderates the positive relationship between leader humor and task resources, such that the relationship is stronger when the level of perspective taking is high rather than low.

From the above analysis, we suggest an integrated model, in which affective commitment and task resources mediate the positive relationship between leader humor and employee creativity, and perspective taking moderates the effect of leader humor on affective commitment and task resources. Thus, we propose that perspective taking also moderates the strength of the mediating effect for affective commitment and task resources in the relationship between leader humor and employee creativity, specifically, a moderated mediation model. We expect strong linkages of leader humor with affective commitment and task resources when employees possess a high level of perspective taking. Hence, we argue that the mediating effects of affective commitment and task resources on the relationship between leader humor and employee creativity will also be strong among employees. Thus, we propose Hypotheses 6 and 7 as follows:

**Hypothesis 6** Perspective taking moderates the mediating effect of affective commitment on the relationship between leader humor and employee creativity, such that the mediating effect of leader humor on employee creativity through affective commitment is stronger when the level of perspective taking is high rather than low.

**Hypothesis 7** Perspective taking moderates the mediating effect of task resources on the relationship between leader humor and employee creativity, such that the mediating effect of leader humor on employee creativity through task resources is stronger when the level of perspective taking is high rather than low.

# Method

#### Sample and procedures

To examine our hypotheses, we launched a survey in two waves among employees and their direct leaders among 35 high-tech enterprises in Beijing, Shanghai, Zhejiang, and Jiangsu province in China. About 13 paired leader–member data were collected from each employee and their direct leader in each enterprise. High-tech enterprises mainly focus on innovation. Employees must tackle a complex task environment by working innovatively across business units and functions and create value for companies, making them a particularly fitting sample for our survey. In doing so, employees and their leaders are supposed to meet current needs and probe their potentiality.

The questionnaires were attached with a cover letter expounding the study's purpose and a guarantee of anonymity and confidentiality. All items measuring the variables were in English initially. We used a back-translation approach to translate all items into Chinese to maintain measurement equivalence. Specifically, we first asked a management scholar to translate from English into Chinese and then a doctoral candidate back-translated the items from Chinese into English. Finally, the English and Chinese versions were checked by another doctoral candidate, and revisions were applied to solve the discrepancies between the two versions according to their advice.

We directly sent e-mails to all employees and let them forward the e-mails to their direct leaders. Each employee and their matching leaders were numbered to ensure that we could accurately identify different matching data. By doing so, we could distinguish interested participants and mitigate social desirability biases, group pressure, or pressure from leaders. We made a special report for each participant to encourage long-term dedication to our study. We assured that the confidentiality of our study was in accordance with ethical standards.

The first period lasted 1 month. A total of 450 questionnaires for employees were distributed and 406 responded, resulting in a 90.2% response rate. Employees evaluated the demographic variables, leader humor variable, and perspective-taking variable. 2 months later, 406 leader–subordinate-paired questionnaires from the first period were distributed in the second period. A total of 358 responses from employees and their direct leaders were received, resulting in a response rate of 88.2% and a total response rate of 79.6%. Employees evaluated the task resource variable and affective commitment variable, and their direct leaders evaluated their creativity variable.

Of the 358 responses received, 43.5% were from male employees. Nearly half of the employees were aged 26–35 years (46.6%; SD=.742), and more than half of the employees had college degrees (55.6%). Within the leader sample, 54.7% of respondents were males, more than half of the leaders were aged 36–45 years (57.5%; SD=.716), and 59.2% had college degrees.

#### Measures

#### Leader humor

We adopted Cooper et al.'s (2018) three-item scale to measure leader humor. Employees were requested to assess the degree of leader humor from the intrapersonal perspective. The scale sample items for leader humor included "How frequently does your leader express humor with you at work, overall?" Cronbach's  $\alpha$  for the scale was .841.

#### Affective commitment

We measured affective commitment using Allen and Meyer's (1990) six-item scale. Employees assessed the variable. Sample items included "I really feel as if this organization's problems are my own" and "I would be very happy to spend the rest of my career with this organization." The factor loadings of the fourth and fifth items included "I enjoy discussing my organization with people outside it" and "I do not feel like 'part of the family' at my organization" were too low at below .50; therefore, we dropped the two items. Cronbach's  $\alpha$  for the scale was .826.

#### Task resources

A three-item scale was developed by Airila et al. (2014). Employees assessed the variable. A sample item was "Can you acquire knowledge and skills at work?" Cronbach's  $\alpha$  for the scale was .878.

#### Creativity

We measured employee creativity according to Farmer et al.'s (2003) four-item scale. Leaders assessed the variable. One sample item was "Suggests many creative ideas that might improve working conditions in the organization." Cronbach's  $\alpha$  for the scale was .813.

#### Perspective taking

We measured perspective taking using Davis et al.'s (1996) four-item scale. Employees assessed the variable. A sample item was "At work, I regularly seek to understand others' viewpoints." Cronbach's  $\alpha$  for the scale was .858.

### **Control variables**

Employee age, gender, and education were controlled by considering their potential demographic influences on employee creativity. These control variables were assessed by employees.

All the main variables were measured on a five-point Likert-type scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

# Results

#### **Confirmatory factor analyses**

We conducted confirmatory factor analyses with Mplus7.0. The objective was to explore the discriminant and convergent validity of the multiple-item variables (leader humor, perspective taking, task resources, affective commitment, and creativity) in our research model.

Table 1 shows the fit indices that revealed the five-factor model is the best, with the following values:  $\chi^2$  (142)=371.966, n.s., Tucker–Lewis index=.917,

Table 1 Results of commutatory factor analyses							
Model	Factors	$\chi^2$	df	TLI	CFI	RMSEA	SRMR
Model 5	LH; PT; TR; AC; CY;	371.966	142	.917	.931	.067	.066
Model 4	LH+PT; TR; AC; CY	828.032	146	.762	.797	.114	.111
Model 3	LH+PT+TR; AC; CY	1297.676	149	.607	.657	.147	.113
Model 2	LH + PT + TR + AC; CY	1557.515	151	.525	.581	.161	.117
Model 1	LH + PT + TR + AC + CY	1771.743	152	.457	.517	.173	.124

Table 1 Results of confirmatory factor analyses

*LH* leader humor, *TR* task resource, *AC* affective commitment, *CY* creativity, *PT* perspective taking "+" combing the factors

confirmatory factor index = .931, standardized root mean residual = .066, and root mean square error of approximation = .067. All factor loadings were significant, showing good convergent validity. Furthermore, the five-factor model was compared with other kinds of factor models to check the discriminant validity. The fit indexes in Table 1 show that the five-factor model fits the data considerably better than the other alternative models, revealing discriminant validity. Therefore, all the proposed constructs were applied.

#### **Descriptive statistics**

Table 2 shows that leader humor was positively correlated to task resource (r=.316, p<.01), affective commitment (r=.344, p<.01), and employee creativity (r=.379, p<.01). Task resource and affective commitment were also positively correlated to employee creativity (r=.470, p<.01 and r=.335, p<.01, respectively), thus providing initial support for our hypotheses.

#### Hypothesis testing

We used bootstrapping analysis with Mplus 7.0 to test our hypotheses. Hypothesis 1 posits that leader humor has a positive influence on employee creativity. We regressed creativity on leader humor, and the estimates of direct effects ( $\beta$ =.223, 95% confidence interval [CI] [.051, .264]) were significant, as shown in Table 3. Therefore, the results support Hypothesis 1. Hypotheses 2 and 3 predicted the mediating effects of task resources and affective commitment in the relationship between leader humor and employee creativity. We regressed employee creativity on task

Variables	1	2	3	4	5	6	7	8
1. Gender								
2. Age	117*							
3. Education	060	008						
4. Leader humor	.023	.027	.063	(.841)				
5. Task resource	.078	014	011	.316**	(.878)			
6. Affective commitment	001	009	025	.344**	.330**	(.826)		
7. Perspective taking	.007	.168**	016	.253**	.334**	.384**	(.858)	
8. Creativity	.028	122*	010	.379**	.470**	.335**	.254**	(.813)
Μ	1.560	1.750	2.110	3.741	3.855	3.874	4.021	3.742
SD	.497	.742	.658	.880	.768	.526	.613	.722

 Table 2
 Means, standard deviations and correlations

n=358. The bold numbers in the brackets on the diagonal are the internal consistency coefficients of the variables in this research. Gender: 1=male, 2=female; Age: 1=25 years below, 2=26-35 years, 3=36-45 years, 4=46 years above; Education: 1=employees held junior college degree or below, 2=employees held bachelor degree, 3=employees held postgraduate degree or above

\*\**p* < .01; \* *p* < .05

Direct path	Direct effect					
Leader humor $\rightarrow$ creativity	.223**					
95% confidence intervals	[.051, .264]					
Indirect path	Stage 1 effect	Stage 2 effect	Indirect effect			
Mediating role of task resource						
Leader humor $\rightarrow$ task resource $\rightarrow$ creativity	.392***	.363***	.142**			
95% confidence intervals	[.256, .520]	[.207, .528]	[.075, .238]			
Mediating role of affective commitment						
Leader humor $\rightarrow$ affective commitment $\rightarrow$ creativity	.487***	.276**	.134*			
95% confidence intervals	[.349, .610]	[.089, .470]	[.045, .266]			

 Table 3 Direct effects and indirect effects of leader humor on creativity through task resource and affective commitment

n = 358

\*\*\*p<.001, \*\*p<.01, \*p<.05

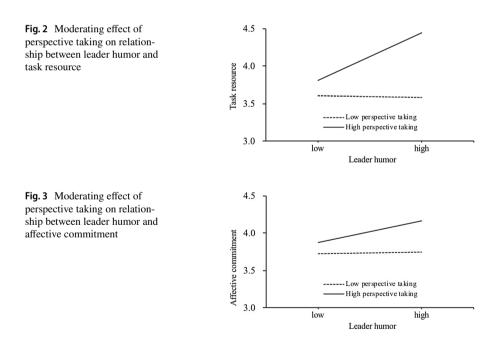
resource and affective commitment and, simultaneously, regressed task resource on leader humor and regressed affective commitment on leader humor. Table 3 shows the estimates of the Stage I effects (leader humor [independent variable] $\rightarrow$ task resource and affective commitment [mediator]), Stage II effects (task resource and affective commitment [mediator] $\rightarrow$  creativity [dependent variable]), and indirect effects (leader humor $\rightarrow$ task resource $\rightarrow$  creativity; leader humor $\rightarrow$  affective commitment $\rightarrow$  creativity). The effects of leader humor on task resource ( $\beta$ =.392, 95% CI [.256, .520]) and of task resource on creativity ( $\beta$ =.363, 95% CI [.207, .528]) were significant. The effects of leader humor on affective commitment ( $\beta$ =.487, 95% CI [.349, .610]) and of affective commitment on employee creativity ( $\beta$ =.276, 95% CI [.089, .470]) were also significant. Furthermore, task resource (indirect effect=.142, 95% CI [.075, .238]) and affective commitment (indirect effect=.134, 95% CI [.045, .266]) revealed significant mediating effects in the relations between leader humor and employee creativity. Therefore, Hypotheses 2 and 3 are supported.

We made further bootstrapping analysis to explain how perspective taking moderates the main effects of leader humor on affective commitment (Hypothesis 4) and task resource (Hypothesis 5) as well as the mediating effects of affective commitment (Hypothesis 6) and task resource (Hypothesis 7). Table 4 reveals the indirect effects for employees with high and low perspective taking and the comparison of the effects. The effects of leader humor on task resource (difference = .264, 95% CI [.079, .445]) and affective commitment (difference = .156, 95% CI [.006, .295]) differed significantly. Thus, Hypotheses 4 and 5 are supported. Figures 2 and 3 show the interaction plots. When the level of perspective taking was high, the main effects of leader humor on task resource was moderated by perspective taking (difference = .088, 95% CI [.028, .174]), thereby supporting Hypothesis 7. However, perspective taking did not have moderating effects on the mediating effect of affective commitment (difference = .025, 95% CI [-.001, .077]), thereby rejecting Hypothesis 6.

Variable	High PT employees	Low PT employees	Difference
Simple paths			
Leader humor $\rightarrow$ task resource	.330***[.205, .453]	.067[078, .211]	.264**[.079, .445]
Leader humor → affective commit- ment	.225***[.128, .313]	.070[034, .177]	.156*[.006, .295]
Task resource $\rightarrow$ creativity	.363***[.216, .533]	.303***[.150, .454]	.060[143, .210]
Affective commitment $\rightarrow$ creativity	.093[114, .301]	.230[031, .483]	137[428, .161]
Indirect effects			
Leader humor→task resource→cre- ativity	.110**[.056, .185]	.022[022, .079]	.088*[.028, .174]
Leader humor $\rightarrow$ affective commit- ment $\rightarrow$ creativity	.036[001, .090]	.011[003, .048]	.025[001, .077]
Total indirect effect	.146***[.083, .221]	.034[018, .096]	.063[017, .152]
Direct effect	.231**[.093, .372]	.114[.002, .245]	.117[074, .303]
Total effect	.609***[.339, .889]	.261*[.040, .529]	.348[025, .721]

n = 358. The square brackets contain 95% confidence intervals

\*\*\*p<.001, \*\*p<.01, \*p<.05



# Discussion

Our study takes a further step by exploring the relationship between leader humor and employee creativity in the Chinese context. Chinese culture has higher power distance compared with those in Western countries (Li et al. 2019; Mao et al. 2017; Yue 2010). Thus, leaders in China have more authority and resources than those in the West, and employees often show more obedience to their leaders. Therefore, whether leader humor works and whether employees could accurately understand the information conveyed by their leaders in the Chinese context need further study (Yam et al. 2018). Our results showed that task resources and affective commitment mediate the relationship between leader humor and employees' perspective taking into consideration as a moderator from the perspective of employees' cognitive personality. To be specific, our results showed that perspective taking moderates the relationship between leader humor and task resources. Task resources also mediate the indirect effect of leader humor on employee creativity in different levels of perspective taking; perspective taking moderates the linkage of leader humor and affective commitment.

We attempted to expound how and when leader humor influences employee creativity by building a moderated mediation model in the Chinese context. Therefore, this study not only found evidence that leader humor affects employee creativity but also further illustrated how such a relationship evolves in Chinese culture with higher power distance and collectivistic orientation. The confirmed moderating effect indicated that employees' perspective taking may be an effective strategy to deal with leader humor.

#### **Theoretical contributions**

First, our study builds an integrative model in pragmatic and affective effects of leader humor and investigates the validity of leader humor on employee creativity in the Chinese context. Prior research mainly focused on the relationship between leader humor and work-related outcomes in Western countries (Lang and Lee 2010), and concentrated on psychological effects (Hughes and Avey 2009; Gkorezis and Bellou 2016; Tremblay 2017). Our study extended humor research to a wholly new Asian context and examined how leader humor influenced employee creativity. Different from Western countries, Chinese employees are regarded as highly cautious and conservative individuals; leaders in China have more authority and resources than those in the west. Therefore, there is a higher power distance in workplaces and employees may be critical to leader humor if they are not supported by leaders (Yue 2010). Based on Chinese samples, we find that leader humor is also important in stimulating employee creativity. Both pragmatic and affective effects are essential to help leader humor play a greater role in Chinese context simultaneously. The pragmatic effects of task resources transferred by leaders can offer support to followers and motivate them to participate in a working assignment related to employee creativity (Sheldon 1971), while the affective effects indicate that affective commitment is a kind of important affective promotor of employee creativity (Meyer and Allen 1997) when employees are facing leader humor. Overall, we validate the effectiveness of leader humor in stimulating employee creativity and build a theoretical

framework in the Chinese context by integrating the pragmatic perspective and affect theory of social exchange (Lawler 2001).

Second, the present study theoretically bridges research on leader humor and creativity. We explain why leader humor has a positive relationship with employee creativity by investigating the mediating roles of task resources and affective commitment in the Chinese context. Prior studies mainly focused on the relationship between leader humor and employee job satisfaction (Robert et al. 2016), citizenship behaviors (Tremblay 2017), well-being (Martin et al. 2003), and deviance and work engagement (Yam et al. 2018) in Western countries. Although researchers have tried to explore the usefulness of leader humor in non-Western countries such as China (Li et al. 2019; Mao et al. 2017; Yam et al. 2018), studies on how leader humor influence employee creativity in the Chinese context are rare. Our findings show that leader humor is positively associated with employee creativity in the Chinese context. To be specific, leader humor can transfer task resources and cultivate employees' affective commitment, which in turn influence employee creativity. Adding creativity to an integrative model of leader humor advances the humor and creativity literature, thereby clarifying why leader humor is also vital to employees.

Third, contrary to Western countries, Chinese employees are affected by collectivism culture. Faced with such culture climate, employees need to share resources within an organization and exchange information more frequently. This requires high cognitive abilities from employees. When coping with leader humor, employees need to understand the essential meaning of humorous information transferred by leaders in specific situations. Therefore, our study found effective coping strategies that help stimulate the positive effect of leader humor on employees' affect, motivation, and behavioral outcomes. For instance, perspective taking, a kind of cognitive activity that adopts someone's viewpoint and understands a situation on the basis of their values or preferences (Parker and Axtell 2001), moderates the relationship between leader humor and task resource as well as that between leader humor and affective commitment. What's more, perspective taking could moderate the mediating effect of leader humor on employee creativity through task resources. We testify the boundary condition of leader humor from the perspective of employees' cognitive personality. We verified that perspective taking is one of the important coping strategies suitable for leader humor in the Chinese context.

#### Managerial implications

First, leaders should regard humor as a kind of intrapersonal resource to improve employees' creativity. Leaders and employees should pay attention to social exchange. Employees faced with leader humor would feel released from workplace pressure. Our findings suggest that leaders should use pragmatic and affective tools to stimulate employee creativity. For example, leaders should offer employees task resources and affective experiences by injecting something humorous in the workplace.

Second, not all employees faced with leader humor can understand the essence of humor imbedded in different kinds of tasks. Therefore, those employees who have a high level of perspective taking can acquire the benefits of their leader's humor and perceive their own jobs efficiently and accurately. Perspective taking provides a psychological connection between one's self and others, which can promote employees to behave in ways like others (Longmire and Harrison 2018). Hence, improving employees' ability to understand their leaders' words is important to stimulate organization vitality.

Third, organizations should train leaders to better understand the essence of humor. Specifically, as leaders might use humor mistakenly especially in Chinese context, which is harmful for employees in realizing their goals, leaders should command the right ways to express humor to send accurate information and resources to employees. Instead of treating themselves as authoritarian leaders, leaders might switch their leader styles according to different workplaces and try to exchange work information and resources in a more humorous and relaxed way during the interactions with employees.

#### Study limitations and future research

Our study has certain limitations. First, we only consider employees' perspective taking as a moderator in our study. We neglect other moderators, such as leader personalities, and other positive contextual factors, which may strengthen the main effects of leader humor on employee creativity. Future research can explore the influence of personalities and positive organizational climate on leader humor.

Second, though we collected data from two time points, we could not measure each variable's change in different times. The change of a variable during different time periods must be paraphrased cautiously. Employees who sensed high levels of leader humor in the first time period may have different evaluations during the next time period, an outcome that is of great importance in investigating the causality. Future research should consider the dynamics of the relations among the key variables in our study and recognize which is the primary contributor to employee creativity.

Third, the sample we used constrained the generalization of our findings. Previous studies have shown that Chinese traditional values and power distance may repress the harmful influences of mistreatment awareness (Wang et al. 2012; Liu et al. 2014). Employees in the West may react to their direct leader behaviors more powerfully than do their Chinese counterparts. Consequently, we call for a crosscultural study in which cultural factors (e.g., power distance) are the moderating role.

**Acknowledgements** This study is supported by the Shanghai Philosophy and Social Science Foundation (2019EGL015).

# References

- Airila, A., Hakanen, J. J., Schaufeli, W. B., Luukkonen, R., Punakallio, A., & Lusa, S. (2014). Are job and personal resources associated with work ability 10 years later? The mediating role of work engagement. Work & Stress, 28(1), 87–105.
- Alge, B. J., Ballinger, G. A., Tangirala, S., & Oakley, J. L. (2006). Information privacy in organizations: Empowering creative and extra-role performance. *Journal of Applied Psychology*, 91(1), 221–232.
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63, 1–18.
- Amabile, T. M., & Pratt, M. G. (2016). The dynamic componential model of creativity and innovation in organizations: Making progress, making meaning. *Research in Organizational Behavior*, 36, 157–183.
- Anand, S., Vidyarthi, P. R., Liden, R. C., & Rousseau, D. M. (2010). Good citizens in poor-quality relationships: Idiosyncratic deals as a substitute for relationship quality. *Academy of Management Journal*, 53(5), 970–988.
- Andriopoulos, C. (2001). Determinants of organizational creativity: A literature review. Management Decision, 39(10), 834–840.
- Avolio, B. J., Howell, J. M., & Sosik, J. J. (1999). A funny thing happened on the way to the bottom line: Humor as a moderator of leadership style effects. *Academy of Management Journal*, 42(2), 219–227.
- Blau, P. M. (1964). Exchange and power in social life. New York: Wiley.
- Brass, D. J., & Burkhardt, M. E. (1993). Potential power and power use: An investigation of structure and behavior. Academy of Management Journal, 36(3), 441–470.
- Camelo-Ordaz, C., Garcia-Cruz, J., Sousa-Ginel, E., & Valle-Cabrera, R. (2011). The influence of human resource management on knowledge sharing and innovation in Spain: The mediating role of affective commitment. *The International Journal of Human Resource Management*, 22(7), 1442–1463.
- Choi, S. B., Tran, T. B. H., & Park, B. I. (2015). Inclusive leadership and work engagement: Mediating roles of affective organizational commitment and creativity. *Social Behavior and Personality: An International Journal*, 43(6), 931–943.
- Cooper, C. D. (2005). Just joking around? Employee humor expression as an ingratiatory behavior. Academy of Management Review, 30(4), 765–776.
- Cooper, C. D., & Sosik, J. J. (2012). The laughter advantage: Cultivating high quality connections and workplace outcomes through humor. In G. M. Spreitzer & K. Cameron (Eds.), *The handbook of positive organizational scholarship* (pp. 474–489). New York: Oxford University Press.
- Cooper, C., Kong, D. T., & Crossley, C. (2018). Leader humor as an interpersonal resource: Integrating three theoretical perspectives. Academy of Management Journal, 61(2), 769–796.
- Coser, R. L. (1960). Laughter among colleagues: A study of the social functions of humor among the staff of a mental hospital. *Psychiatry*, 23, 81–95.
- Davis, M. H., Conklin, L., Smith, A., & Luce, C. (1996). Effect of perspective taking on the cognitive representation of persons: A merging of self and other. *Journal of Personality and Social Psychol*ogy, 70(4), 713–726.
- Decker, W. H. (1987). Managerial humor and subordinate satisfaction. Social Behavior and Personality, 15(2), 225–232.
- Decker, W. H., & Rotondo, D. M. (2001). Relationships among gender, type of humor, and perceived leader effectiveness. *Journal of Managerial Issues*, 13(4), 450–465.
- Dhar, R. L. (2015). Service quality and the training of employees: The mediating role of organizational commitment. *Tourism Management*, 46, 419–430.
- Dhar, R. L., & Dhar, M. (2010). Job stress, coping process and intentions to leave: A study on software professionals working in India. *Social Sciences Journal*, 47(3), 560–577.
- Farmer, S. M., Tierney, P., & Kungmcintyre, K. (2003). Employee creativity in Taiwan: An application of role identity theory. Academy of Management Journal, 46(5), 618–630.
- Gilbert, S. M. (1977). My name is darkness: Poetry of self-definition. *Contemporary Literature*, 18(4), 443–457.
- Gkorezis, P., & Bellou, V. (2016). The relationship between leader self-deprecating humor and perceived effectiveness: Trust in leader as a mediator. *Leadership & Organization Development Journal*, 37(7), 882–898.

- Hughes, L. W., & Avey, J. B. (2009). Transforming with levity: Humor, leadership, and follower attitudes. *Leadership and Organization Development Journal*, 30(6), 540–562.
- Jones, E. E., & Kelly, J. R. (2013). The psychological costs of knowledge specialization in groups: Unique expertise leaves you out of the loop. Organizational Behavior and Human Decision Processes, 121(2), 174–182.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. Academy of Management Journal, 33(4), 692–724.
- Kim, T. Y., & Lee, D. R. (2013). The effects of supervisor humor on employee creativity: The role of intrinsic motivation and team human capital. *Social Science Electronic Publishing*, 21(1), 1–35.
- Kwan, H. K., Zhang, X., Liu, J., & Lee, C. (2018). Workplace ostracism and employee creativity: An integrative approach incorporating pragmatic and engagement roles. *Journal of Applied Psychology*, 103(12), 1358–1366.
- Lang, J. C., & Lee, C. H. (2010). Workplace humor and organizational creativity. *International Journal of Human Resource Management*, 21(1), 46–60.
- Lawler, E. J. (2001). An affect theory of social exchange. American Journal of Sociology, 107(2), 321–352.
- Lawler, E. J. (2006). The affect theory of social exchange. In P. J. Burke (Ed.), Contemporary social psychological theories. Stanford, CA: Stanford University Press.
- Lawler, E. J., & Thye, S. R. (1999). Bringing emotion into social exchange theory. Annual Review of Sociology, 25, 217–244.
- Lee, D.-R. (2015). The impact of leader's humor on employees' creativity: The moderating role of trust in leader. *Seoul Journal of Business*, 21(1), 59–86.
- Leung, A. S. M., Wu, L. Z., Chen, Y. Y., & Young, M. N. (2011). The impact of workplace ostracism in service organizations. *International Journal of Hospitality Management*, 30(4), 836–844.
- Li, Z., Dai, L., Chin, T., & Rafiq, M. (2019). Understanding the role of psychological capital in humorous leadership-employee creativity relations. *Frontiers in Psychology*. https://doi.org/10.3389/fpsyg .2019.01636.
- Liao, H., Liu, D., & Loi, R. (2010). Looking at both sides of the social exchange coin: A social cognitive perspective on the joint effects of relationship quality and differentiation on creativity. Academy of Management Journal, 53(5), 1090–1109.
- Liu, X. Y., Kwan, H. K., & Chiu, R. K. (2014). Customer sexual harassment and frontline employees' service performance in China. *Human Relations*, 67(3), 333–356.
- Longmire, N. H., & Harrison, D. A. (2018). Seeing their side versus feeling their pain: Differential consequences of perspective-taking and empathy at work. *Journal of Applied Psychology*, 103(8), 894–915.
- Lopez-Cabrales, A., Pérez-Luño, A., & Cabrera, R. V. (2009). Knowledge as a mediator between HRM practices and innovative activity. *Human Resource Management*, 48(4), 485–503.
- Mao, J. Y., Chiang, J. T. J., Zhang, Y., & Gao, M. (2017). Humor as a relationship lubricant: The implications of leader Humor on transformational leadership perceptions and team performance. *Journal of Leadership & Organizational Studies*, 24(4), 494–506.
- Martin, R. A., & Lefcourt, H. M. (1984). Situational humor response questionnaire: Quantitative measure of sense of humor. *Journal of Personality and Social Psychology*, 47(1), 145–155.
- Martin, R. A., Puhlik-Doris, P., Larsen, G., Gray, J., & Weir, K. (2003). Individual differences in uses of humor and their relation to psychological well-being: Development of the humor styles questionnaire. *Journal of Research in Personality*, 37(1), 48–75.
- Matzler, K., & Mueller, J. (2011). Antecedents of knowledge sharing-examining the influence of learning and performance orientation. *Journal of Economics Psychology*, 32(3), 317–329.
- McGraw, P. (2014). The Washington Post. https://www.washingtonpost.com/news/on-leadership/ wp/2014/05/07/did-you-hear-the-joke-about-the-ceo/.
- Meyer, J., & Allen, N. (1997). Commitment in the workplace. Thousand Oaks, CA: Sage.
- Parker, S. K., & Axtell, C. M. (2001). Seeing another viewpoint: Antecedents and outcomes of employee perspective taking. Academy of Management Journal, 44(6), 1085–1100.
- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. Journal of Applied Psychology, 87(4), 698–714.
- Robert, C., Dunne, T. C., & Iun, J. (2016). The impact of leader humor on subordinate job satisfaction: The crucial role of leader–subordinate relationship quality. *Group & Organization Management*, 41(3), 375–406.

- Robinson, S. L., O'Reilly, J., & Wang, W. (2013). Invisible at work: An integrated model of workplace ostracism. *Journal of Management*, 39(1), 203–231.
- Romero, E. J., & Cruthirds, K. W. (2006). The use of humor in the workplace. Academy of Management Perspectives, 20(2), 58–69.
- Rouff, L. L. (1975). Creativity and sense of humor. Psychological Reports, 37(1), 1022.
- Seibert, S. E., Kraimer, M. L., & Liden, R. C. (2001). A social capital theory of career success. Academy of Management Journal, 44(2), 219–237.
- Shalley, C. E., Gilson, L. L., & Blum, T. C. (2000). Matching creativity requirements and the work environment: Effects on satisfaction and intentions to leave. Academy of Management Journal, 43(2), 215–223.
- Shalley, C. E., Zhou, J., & Oldham, G. R. (2004). The effects of personal and contextual characteristics on creativity: Where should we go from here? *Journal of Management*, 30(6), 933–958.
- Sheldon, M. E. (1971). Investments and involvements as mechanisms producing commitment to the organization. Administrative Science Quarterly, 16(2), 143–150.
- Spreitzer, G. M. (1996). Social structural characteristics of psychological empowerment. Academy of Management Journal, 39(2), 483–504.
- Tremblay, M. (2017). Humor in teams: Multilevel relationships between humor climate, inclusion, trust, and citizenship behaviors. *Journal of Business and Psychology*, 32(4), 363–378.
- Wang, W., Mao, J., Wu, W., & Liu, J. (2012). Abusive supervision and workplace deviance: The mediating role of interactional justice and the moderating role of power distance. Asia Pacific Journal of Human Resources, 50(1), 43–60.
- Wu, L. Z., Yim, F. H.-K., Kwan, H. K., & Zhang, X. (2012). Coping with workplace ostracism: The roles of ingratiation and political skill in employee psychological distress. *Journal of Management Studies*, 49(1), 178–199.
- Yam, K. C., Christian, M., Wei, W., et al. (2018). The mixed blessing of leader sense of humor: Examining costs and benefits. Academy of Management Journal, 61(1), 348–369.
- Yang, I., Kitchen, P. J., & Bacouel-Jentjens, S. (2015). How to promote relationship-building leadership at work? A comparative exploration of leader humor behavior between North America and China. *The International Journal of Human Resource Management*, 28(10), 1454–1474.
- Yue, X. D. (2010). Exploration of Chinese humor: Historical review, empirical findings, and critical reflections. *Humor: International Journal of Humor Research*, 23, 403–420.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.