

# New insights on CEO charisma attribution in companies of different sizes and ownership structure: the role of prior company performance

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**Abstract** We extend theories on charismatic leadership by investigating the influence of prior company performance on subordinates' attributions of chief executive officer (CEO) charisma within companies of different sizes and ownership structure. First, we use an experimental design to examine the effects of prior company performance on attributions of CEO charisma. Second, in a field study with 69 companies we replicate the experimental finding and show that this relationship is moderated by the size of the company such that the relationship between prior company performance and attributions of CEO charisma is significant only in large companies. We find no evidence, however, that the ownership structure of a company could strengthen or weaken this relationship.

**Keywords** CEO charisma attribution · Company performance · Company size · Ownership structure

**JEL Classification** M1

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## 1 Introduction

Over the last two decades, charismatic leadership theories highly influenced research on organizational leadership (Conger and Kanungo 1987, 1988a, b; Shamir et al. 1993). In particular, Conger and Kanungo's (1987) charismatic leadership paradigm was highly influential (Galvin et al. 2010) by explaining that subordinates' perceptions of their leaders' behaviors determine whether they see their leader as having charisma (e.g., Kärreman et al. 2006; Nohe et al. 2013). Numerous studies have shown that charismatic leaders are more effective than their non-charismatic counterparts (e.g., Atwater et al. 1991; Howell and Frost 1989; Koene et al. 2002) and that charismatic leadership may lead to higher subjective and objective performance outcomes on different levels of analyses (e.g., Bono and Ilies 2006; Lingenfelder and Wieseke 2010; Michaelis et al. 2009; Waldman et al. 2001).

On the organizational level, substantive research has investigated how chief executive officer (CEO) charismatic leadership attribution is related to company performance (e.g., Tosi et al. 2004; Waldman et al. 2004). However, most of that research neglected to consider the possibility of a reversed causal relationship: whether a company's prior performance may engender higher levels of CEO charisma attribution (for exceptions see Agle et al. 2006; Awamleh and Gardner 1999). For instance, neither Waldman et al. (2004) nor Tosi et al. (2004) controlled for prior company performance, although various scholars (e.g., Virany et al. 1992; Waldman et al. 2001) bemoaned the lack of such controls. Waldman et al. (2004) drew their conclusions on associations between charisma and prior company performance merely on correlations without controlling for variables such as company size (Agle et al. 2006). This is surprising because company size determines executives' decision-making discretion (Hambrick and Finkelstein 1987), so that prior company performance might have different impacts on CEO charisma attribution in firms of different sizes.

Empirical evidence on the relationship between prior company performance and CEO charisma attribution is rare, incomplete, and so far based on only two studies. One study found a positive relationship between organizational performance and CEO charisma attribution (Agle et al. 2006), although they used a non-experimental design to test the assumptions and thus avoided the question of causality (Shadish et al. 2002). A second study also demonstrated that organizational performance positively affects CEO charisma attribution (Awamleh and Gardner 1999). However, the authors emphatically emphasized that their results were based on an artificial design because only undergraduate students participated in the laboratory study. Furthermore, all studies relied on data collected in only one cultural setting, the United States, and most ignored contextual factors that might affect the proposed relation. In particular, prior studies used data from large publicly listed companies and thus could not answer whether company size (i.e., small and medium vs. large) or ownership structure (publicly listed vs. family-owned) are important contingent factors.

In consequence, our study strives to answer those open questions in the field of charismatic leadership research by executing a *constructive* replication and extension of prior work (Eden 2002) in three ways. First, we further investigate

and clarify the relationship between prior company performance and CEO charisma attribution through a mixed-method design. For that purpose we first applied a laboratory study and then cross-validated the findings in a field sample of German companies of different sizes and ownership structure. Thus, to our knowledge, ours is the first study exploring prior company performance as an antecedent of CEO charisma attribution with an experimental design combined with a field study in a European sample. Consequently, in contrast with prior studies, our study design allows conclusions about causal effects and important implications for real business settings.

Second, acknowledging criticisms of prior research for failing to include firm size as a focal variable (Agle et al. 2006), we investigated two potential organizational-level boundary conditions for the impact of prior company performance on CEO charisma attribution. Specifically, our field study tested whether company size (i.e., number of employees) and ownership structure (i.e., shares held by family members) can strengthen or weaken the impact of prior company performance on CEO charisma attribution. Thereby, our study offers significant theoretical and practical implications for scholars and executives on how to transfer and apply charismatic leadership concepts to companies of different sizes and ownership structure.

Finally, establishing prior company performance as a prominent antecedent of charisma attribution extends the theoretical framework of charismatic leadership (Conger and Kanungo 1987), which neglected performance and focused rather on leader behavior as the source of charisma attribution. By considering prior company performance, we agree with suggestions (Agle et al. 2006) to further test the dimensions of the theoretical framework.

## 2 Theory and hypotheses

### 2.1 Charismatic leadership

The word *charisma* comes from *charismata*, ancient Greek for “gift” (Conger and Kanungo 1992). Sociologist Max Weber [(1924) 1947] was the first to apply the word to the scientific/secular leadership context. Conger and Kanungo (1987) modified Weber’s conception and defined charisma as “a relationship between an individual (leader) and one or more followers based on leader behaviors combined with favorable attributions on the part of the followers” (Waldman et al. 2001: 135).

We seek to validate and further develop Conger and Kanungo’s (1987) charismatic leadership model. In testing their assumption, we aim to research whether prior company performance is a key prerequisite determining whether subordinates will attribute their CEO with having charisma. Furthermore, we test whether certain organizational-level boundary conditions (i.e., company size and ownership structure) affect this relationship. The theoretical rationales for the relationships are developed in the following two sections.

## 2.2 Prior company performance and subsequent attributions of CEO charisma

Many studies have examined charismatic leadership effects on subjective and objective performance outcomes at the individual, team, and organizational levels (e.g., Michaelis et al. 2009; Rowold and Laukamp 2009; Waldman et al. 2001). For instance, CEO charisma was shown to have possible long-term effects on company performance through its effects on internal performance and external relationships (Lowe et al. 1996). However, those studies mainly considered the effects of charisma on performance and neglected to investigate the effects of prior performance on subordinates' attributions of charisma. For instance, one study suggested that subordinates' knowledge about leaders' prior performance can influence charisma attributions (Puffer 1990), which raises the possibility of reverse causation: leaders' performance as the cause of charisma attributions (Kirkpatrick and Locke 1996). However, only a few studies have examined the inverted direction of causation (e.g., Awamleh and Gardner 1999), with mixed empirical evidence and no final conclusions (Agle et al. 2006).

In our study we build on the observation that individuals attempt to understand their environment by attributing events and outcomes to prior causes. Organizations are complex environments that include ambiguous and multi-determined events that challenge individuals to make reasonable and understandable causal attributions. Subordinates searching for causes for organizational events are likely to look to the quality of their leadership for making causal attributions (Shamir 1992) and for attributing complex organizational outcomes. Organizational outcomes include, for example, prior organizational success or failure (Meindl et al. 1985). Consequently, this "attributional sense-making" process is increased by "fundamental attribution error" as individuals tend to overestimate personal factors such as leader behavior and underestimate situational factors such as general economic situations. The general attribution model (Kelley 1967), attribution theory of leadership (Calder 1997), and empirical research (Meindl et al. 1985; Shamir 1992) provide evidence that perceived organizational performance leads subordinates to attribute success to the leader, particularly to the CEO at the top (Shamir 1992).

Those findings and assumptions fit neatly into Conger and Kanungo's (1987) attribution-based model. Considering how closely their model approximates Weber's (1947) conceptualization, it is somewhat surprising that their theory has not yet integrated the performance element, although repeated success—as a validation of the leader's exceptional character—is crucial for producing and maintaining perceptions of charisma (Weber 1947). Hence, performance could be an unidentified factor in Conger and Kanungo's approach, one that also leads to charisma attributions. Thus, we assume that prior company performance is positively linked to attribution of CEO charisma, which leads to our first hypothesis:

*H1:* Prior company performance will be positively related to subordinates' attribution of CEO charisma.

This relationship might differ, however, in companies of various sizes and ownership structures. For that purpose we next consider the contextual role of company size and ownership structure.

### 2.3 The contextual role of company size

We argue that company size plays a crucial contextual role in the relationship between prior company performance and CEO charisma attribution. Company size significantly alters employee interactions and perceptions about top managers (Hambrick and Finkelstein 1987). For instance, small companies typically derive their strategies informally, inexplicitly, and intuitively (Mintzberg 1988) mainly under CEO direction (Miller and Toulouse 1986). Moreover, CEOs in small firms are highly involved in decision-making processes and thus play a critical role in adopting new technologies (Lefebvre and Lefebvre 1992). Aligned with and supporting this reasoning, researchers have argued that in small companies with less-complex organizational contexts, senior executives may have more managerial discretion and consequently have more influence and direct interaction with their employees (Agle et al. 2006; Finkelstein and Boyd 1998; Hambrick and Finkelstein 1987); in larger, professionally managed firms, CEOs are more distant and interact indirectly with most employees, often only through middle management (Lubatkin et al. 2006); The different forms of interaction are likely to affect employee perceptions of the CEO, and will affect whether they see the CEO as charismatic.

In *large* companies most employees lack personal contact with CEOs and therefore cannot evaluate their charismatic qualities on interpersonal levels. Consequently, they might take prior company performance as a substitute for attributing charisma to the CEO. In *small* companies, prior company performance might be less important for judging charisma, as most employees can use their direct personal interaction rather than substituting prior company performance.

In addition, environmental uncertainty in organizations and societies has major impact on charisma attributions (e.g., House et al. 1991). Smaller companies are clear and non-ambiguous: employees share the same expectations regarding appropriate response patterns and required knowledge and skills (Shamir and Howell 1999). In larger companies, employees feel more uncertain because they have less information and cues for judging appropriate behavior. More complex organizational structures and environments make subordinates more attentive to CEOs' prior performance as a criterion for charisma attribution. Thus, subordinates in large companies will over-attribute prior company performance when perceiving charismatic qualities. In sum, we propose a moderation hypothesis:

*H2:* The positive relationship between prior company performance and subsequent CEO charisma attributions will be stronger in larger companies.

### 2.4 The contextual role of a company's ownership structure

As a second contextual factor, we assume that a company's ownership structure plays a crucial boundary role for the relationship between prior company performance and CEO charisma attribution. Evidence grounded in managerial capitalist theory demonstrates that ownership structure plays a critical role in CEO discretion and influence (Berle and Means 1932; Marris 1964; McEachern 1975; Williamson 1964). For instance, differences in a company's ownership structure

have been found to influence diversification (e.g., Hill and Snell 1988, 1989), accounting practices (e.g., Tosi et al. 1999), the monitoring of CEO compensation (e.g., Tosi and Gomez-Mejia 1989, 1994), CEO compensation (e.g., Fong et al. 2010; Gomez-Mejia et al. 1987; McEachern 1975; Williamson 1963), sources of annual CEO pay raises (e.g., Hambrick and Finkelstein 1995), emphasis on innovation (e.g., Hill and Snell 1988), corporate R&D spending (e.g., Baysinger et al. 1991), and firm performance (e.g., Hill and Snell 1988, 1989; Hu and Izumida 2008; Hunt 1986). Those differences may occur because companies with different ownership structures place different values on organizational culture (Howorth et al. 2010), management systems (Schachner et al. 2006), and performance outcomes (Ghobadian and O'Regan 2006).

Moreover, research in the SME context has demonstrated that ownership structure influences CEO status (Jayaraman et al. 2000), which is a major source of managerial discretion (Hambrick and Finkelstein 1987). CEOs in privately owned companies, for instance, have controlling block discretion to focus on long-term performance in keeping with their stronger interests in sustainable growth, compared with CEOs of publicly owned companies (Ling et al. 2008). Aligned with that reasoning, research demonstrates that publicly owned companies often focus on short-term performance based on shareholder and stock market demands for positive quarterly financial figures. Family-owned companies, in contrast, often follow a more long-term strategy in terms of performance outcomes; when the family is the main shareholder, value turns to sustainable growth (Lumpkin et al. 2010). Furthermore, family-owned companies often have more long-term work relationships with their CEOs and focus more on integrity and sustainability (e.g., Le Breton-Miller and Miller 2006).

As such, we expect that prior company performance will be applied differently to CEO charisma attribution between the two ownership structures. Employees in publicly owned companies might take company performance as a main criterion for attributing CEO charisma, while employees in family-owned companies might use company performance as only one of many criteria because they focus more on sustainable growth and not on quarterly financial figures. Thus, subordinates in publicly owned companies will over-attribute prior company performance to their CEOs when perceiving charismatic qualities. In sum, we propose a moderation hypothesis:

*H3:* The positive relationship between prior company performance and subsequent CEO charisma attributions will be stronger in publicly owned companies.

## 2.5 Hypotheses testing

To investigate our hypotheses, we applied a mixed-method strategy. Study 1 was designed as an experimental vignette study to examine the effects of prior company performance on subordinates' attribution of CEO charisma. Study 2 was a field study to validate the prior company performance—charisma attribution relationship

and to investigate the two hypothesized organizational-level boundary conditions: company size and ownership structure.

### 3 Experimental design: study 1

Study 1 was a test of the proposed hypotheses and the causal direction of the assumed relationships.

#### 3.1 Participants and procedures

We recruited 92 public university business and psychology students; 78 were female (84.8 %), 14 were male (15.2 %), ranging from 19 to 49-years-old, with an average age of 23.03 ( $SD = 5.24$ ); 81.5 % were undergraduates, 10.9 % were graduate students, 7.6 % were professionals. Data collection took place at the University of Heidelberg, Germany, between November 2008 and May 2009. The study administrator randomly approached students and offered them four course credit points in exchange for their participation (some courses at the University of Heidelberg require students to participate in experiments for course credits). Before handing students the paper–pencil version of the questionnaire, the administrator asked them to imagine that they were employees of a German software company.

#### 3.2 Measures

##### 3.2.1 *Prior company performance*

Prior company performance was manipulated through two fictional annual reports based on the quarterly report from SAP Corporation (a German software company) from the first quarter of 2001. This report was randomly chosen and subsequently shortened, eliminating all references to the stock market, external factors, and the SAP Corporation. Furthermore, the report was reconstructed in terms of revenue and earnings before interest and taxes (EBIT). Two annual reports were generated: one for the success condition and one for the failure condition (see “[Appendix](#)”). Each report concluded with a short notice about how the company succeeded compared with other companies. In the success treatment, the notice read: “Compared with similar companies in this branch, your company has achieved above average success.” This was designed to help the participants estimate the company’s success.

##### 3.2.2 *CEO charisma*

We assessed CEO charisma ( $\alpha = 0.92$ ) by using the Conger–Kanungo scale of charismatic leadership (henceforth, the C–K-scale). We utilized a version that Rowold (2004) modified and translated into German. The scale consists of 27 items, constituting the five factors of the scale: sensitivity to member needs (six items), sensitivity to the environment (four items), personal risk (five items),

unconventional behavior (five items), and strategic vision and articulation (seven items). We primarily considered the aggregated charisma value of all items of the C–K-scale. Sample items include “has vision; often brings up ideas about possibilities for the future” and “influences others by developing mutual liking and respect.”

### 3.2.3 Manipulation check

We included a manipulation check after the annual reports to ensure effective treatment for prior company performance. We asked “How effective do you think your company is?” rated on a bipolar seven-point scale.

### 3.2.4 Control variables

First, we included participants’ age (in absolute years) as a control variable because the relationship between the leader’s age and the age of subordinates can crucially determine the effectiveness of leadership behaviors (Kearney 2008). Second, subordinates’ characteristics are critical, particularly in charismatic leadership (Conger and Kanungo 1988a, b; Conger et al. 2000), so we recorded gender. Finally, we controlled for three educational levels using dummy variables: undergraduate student, graduate student, and professional.

## 3.3 Analysis and results

Table 1 summarizes the means, standard deviations, and intercorrelations among the dependent variables, the control variable, and the manipulation check measure. The subscales of the C–K-scale were highly correlated, as expected.

For the independent variable of prior company performance, a *t* test of the manipulation check measure was conducted to determine whether the treatment was effective. The difference between company success and company failure was significant ( $t = 20.31, p < 0.001$ ). Thus, it appears that the manipulation of prior company performance was successful. We conducted analyses of variance for testing the hypothesis. A two-way ANOVA on charisma ratings on the C–K-scale with participant age and gender as covariates revealed a significant main effect of prior company performance:  $F(1, 83) = 5.73, p < 0.05$ . As predicted, participants in the company success treatment considered their CEO to be more charismatic than did participants in the company failure treatment. Thus, Hypothesis 1 was fully supported (see Table 2).

## 4 Field study: study 2

Although our experimental setting had the clear advantage of indicating the causal direction of the assumed relationships, it lacked external validity (Campbell et al. 1963). The experimental results might be biased by the specific atmosphere in the lab or the particular sample population of mostly young students. Thus, we

**Table 1** Means, standard deviations, and intercorrelations among study 1 variables

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. CKS: sensitivity to environment	2.78	0.73	(0.65)											
2. CKS: sensitivity to member needs	2.66	1.05	0.54**	(0.92)										
3. CKS: strategic vision and articulation	2.75	0.86	0.57**	0.57**	(0.86)									
4. CKS: unconventional behavior	2.60	0.78	0.40**	0.33**	0.66**	(0.83)								
5. CKS: personal risk	2.54	0.82	0.37**	0.29**	0.43**	0.44**	(0.85)							
6. CKS: charisma	2.67	0.66	0.72**	0.78**	0.88**	0.73**	0.63**	(0.92)						
7. Manipulation check measure	4.09	2.03	0.06	0.06	0.33**	0.33**	0.16	0.25*	-					
8. Participant age	23.03	5.24	-0.24*	-0.26*	-0.23*	-0.15	-0.20	-0.29**	-0.09	-				
9. Participant gender	1.15	0.36	-0.09	-0.16	-0.08	0.02	0.07	-0.08	-0.09	0.40***	-			
10. Participant graduate dummy	0.11	0.31	-0.21*	-0.15	-0.13	-0.11	-0.21*	-0.20*	-0.07	0.51***	0.24*	-		
11. Participant professional dummy	0.08	0.27	-0.29**	-0.30**	-0.23*	-0.09	-0.19*	-0.29**	0.03	0.38***	-0.01	-0.10	-	
12. Participant undergraduate dummy	0.77	0.42	0.42***	0.34***	-0.27**	0.17*	0.25**	0.38**	0.00	-0.68***	0.27**	-0.64***	-0.53***	-

*n* = 92 participants. Reliability values are in parentheses

CKS Conger-Kanungo Scale of Charismatic Leadership

\* *p* < 0.05 (two-sided)

\*\* *p* < 0.01 (two-sided)

\*\*\* *p* < 0.001 (two-sided)

**Table 2** Results of analysis of variance (ANOVA): the effects of prior company performance on CEO charisma attribution

	df	MS	F	Eta squared
CKS: charisma				
Prior company performance (B)	1	9.67	5.73*	0.07
Participant gender	1	2.41	1.43	0.02
Participant age	1	1.41	0.84	0.01
Participant graduate dummy	1	0.58	0.35	0.00
Participant professional dummy	1	2.29	1.36	0.02
Participant undergraduate dummy	1	0.42	0.25	0.00
Residual	83	1.73		
$R^2 = 0.14$				

$n = 92$  participants

CKS Conger–Kanungo Scale of Charismatic Leadership

\*  $p < 0.05$  (one-sided)

\*\*  $p < 0.01$  (one-sided)

questioned whether our results would be transferable to real company settings. Therefore, we undertook a field study to validate the main finding—that prior company performance is related to CEO charisma attribution—and additionally explore the two hypothesized organizational-level boundary conditions: company size and ownership structure.

#### 4.1 Participants and procedures

To test the prior company performance-CEO charisma attribution relationship as well as the two moderating hypotheses, we collected data, as part of a larger benchmarking study, from German-based companies that had fewer than 5,000 employees. The companies voluntarily applied to participate, and in recognition of their participation, they received a benchmarking report on their leadership and HR practices. An external professional agency managed the data collection procedure. Initially, 111 companies agreed to participate, but 44 provided insufficient data on the main study constructs, dropping the actual response rate to 62 % ( $n = 69$ ). The remaining 69 companies had 23,319 employees overall ( $mean = 347$ ; range 12–3265). Participating companies were from various industries such as production (22 %), service (54 %), grocery (4 %), wholesale (7 %), and finance (7 %). Thirty-seven of the firms were family-owned and 32 were non family-owned. We collected data from three sources to rule out risk of potential same-source bias (Podsakoff et al. 2003). First, we asked employees who reported directly to the CEO to rate their CEO's charisma, among other items. The questionnaire took about 10 min to complete. On average, 4.41 persons per company were directly reporting to the CEO (ranging from 1 to 11 per company), were mostly male (65 %), and averaged 39-years-old. Second, members of the top management team (TMT) were surveyed to gauge information on the company performance for the previous year, among

other items. This questionnaire took about 10 min to complete. Ultimately, 198 TMT members provided data on their company performance (ranging from 1 to 15 TMT members per company; average = 2.9 members), were mostly male (85 %), and averaged 45-years-old. Finally, the companies' top human resource representatives provided data on company size, ownership structure, and general information such as industry affiliation and other variables used as controls in our study. That questionnaire took about 15 min to complete.

## 4.2 Measures

### 4.2.1 Prior company performance

We assessed prior company performance at time ( $t - 1$ ) ( $\alpha = 0.90$ ;  $r_{wg} = 0.85$ ) by asking TMT members about the company's performance in the previous year with three items gauging operational performance (employee productivity, efficiency of business procedures, and employee retention and fluctuation) and three items gauging organizational performance (financial performance, company growth, and return on investment) (Kunze et al. 2011). Following prior studies (Delaney and Huselid 1996; Wall et al. 2004), the perceived performance measure was benchmarked by asking the TMT members to assess their company's performance in the prior year relative to the main competitors in their respective industries (1 = *far below average*; 7 = *far above average*). We averaged the item scores to form an overall performance score for each company.

### 4.2.2 CEO charisma

To measure the CEO charisma attribution ( $\alpha = 0.89$ ,  $r_{wg} = 0.88$ ), we used four subscales from the inventory developed by Podsakoff et al. (1990) with 18 items overall. Specifically, we considered the dimensions of providing a role model, articulating a vision, giving intellectual stimulation, and allowing individual consideration because they are aligned with the C–K-scale used in the experiment. Applying that scale also allowed a cross-validation of the performance–charisma attribution relationship with a different operationalization. All items had the respondent's direct supervisor as referent (sample item: “My direct supervisor is always seeking new opportunities for our company”), which in our sample was always the CEO. We averaged all items to form an overall charisma attribution measure.

### 4.2.3 Company size

The top HR representative in each company provided information about company size, measured by number of employees.

#### 4.2.4 Company ownership structure

As common practice in ownership research (i.e., Gomez-Mejia et al. 1987) we measured the ownership structure with a dummy variable. The top HR representative provided information about the business ownership, captured with a dummy variable (1 = <50 % family-owned company, 2 = >50 % family-owned company).

#### 4.2.5 Control variables

As in the experimental studies, we controlled for the mean age of the respondents who answered the CEO charisma items, because other studies have suggested that age might influence the perception of leadership (Pastor et al. 2002). Additionally, we accounted for the average tenure and the percentage of women answering the leadership items, which might also affect charisma attribution (Conger et al. 2000). Furthermore, to account for a potential influence of industry affiliation on the CEO charisma attribution, we controlled for five classes of industry (e.g., Dickson et al. 2006).

### 4.3 Analyses and results

We applied regression techniques to test Hypothesis 2 assuming that prior company performance leads to higher CEO charisma attribution as well the potential moderation of company size and ownership structure. We assessed the interrater reliability for the companies in which two or more raters assessed the charisma attribution and/or the performance measures by calculating  $r_{wg}$  indices (James et al. 1984), which should be above 0.70 for acceptable aggregation. That was the case for all measures in our study.

Table 3 shows the means, standard deviations, and intercorrelations of the study variables. As expected, prior company performance in the previous year was positively related to CEO charisma attribution ( $r = 0.25$ ,  $p < 0.01$ ). Furthermore, family ownership showed a negative relation to charisma attribution ( $r = -0.32$ ,  $p < 0.01$ ).

Table 4 indicates that the effect between prior company performance and CEO charisma attribution is positive and significant as shown in step 2 of the regression results ( $B = 0.13$ ,  $p < 0.05$ ), even when including control variables. Prior company performance alone explains five percent additional variance in CEO charisma attributes, which indicates a moderate effect size (Cohen 1988). These results further supported Hypothesis 1 with field study data. In an additional step (Model 3 in Table 4), we included the two interaction terms in the model. In this model the company size moderation was significant ( $B = 0.13$ ,  $p < 0.05$ ), while the family ownership moderation was not significant ( $B = -0.04$ ,  $ns$ ), thus supporting Hypothesis 2 and rejecting Hypothesis 3. The company size moderation term explained three percent additional variance in CEO charisma attribution, indicating a relevant effect size for moderation analyses (McClelland and Judd 1993). Following Aiken and West's (1991) recommendation for testing interactions we

**Table 3** Means, standard deviations, and intercorrelations among study 2 variables

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1	Prior company performance (t - 1)	5.60	0.80	(0.90)										
2	CEO charisma attribution	3.69	0.50	0.25**	(0.89)									
3	Company size	346.57	572.21	-0.13	-0.17	-								
4	Company ownership structure (dummy)	1.46	0.50	-0.07	-0.32**	0.01	-							
5	Mean age	39.55	5.26	-0.14	-0.08	0.08	-0.02	-						
6	Mean tenure	8.10	6.59	-0.25*	-0.04	0.06	0.07	0.44***	-					
7	Industry production	0.21	0.41	-0.13	0.06	0.02	-0.07	0.18	0.11	-				
8	Industry grocery	0.04	0.21	0.21*	0.14	0.09	0.20*	0.12	-0.10	-0.11	-			
9	Industry wholesale	0.07	0.26	0.00	-0.07	-0.06	0.08	0.22*	-0.22*	-0.15	-0.06	-		
10	Industry service	0.54	0.50	-0.02	0.00	0.06	0.11	-0.21*	-0.22*	-0.57***	-0.30*	-0.30*	-	
11	Industry finance	0.07	0.26	0.05	-0.05	-0.01	0.19	-0.10	0.13	-0.15	-0.06	-0.08	-0.30**	-
12	Percentage female	36.43	31.90	0.08	0.11	-0.01	-0.03	-0.08	-0.13	-0.39***	0.04	-0.16	0.35**	-0.03

n = 69 participants. Reliability values are in parentheses

\* p < 0.05 (two-sided)

\*\* p < 0.01 (two-sided)

\*\*\* p < 0.001 (two-sided)

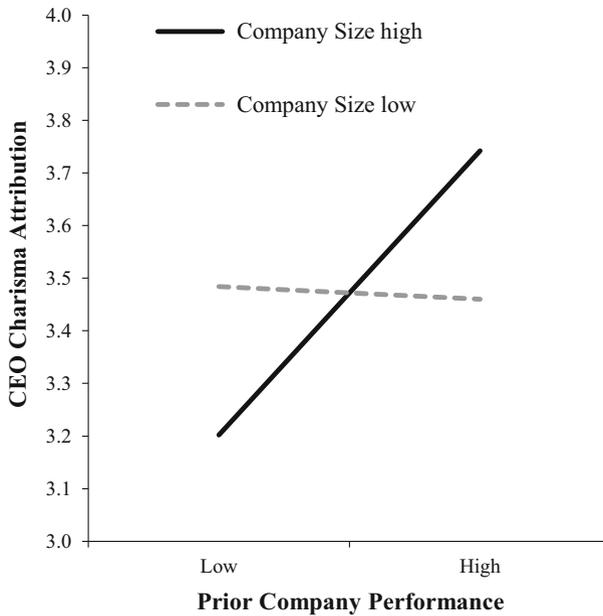
**Table 4** Results of regression analysis: the effects of prior company performance on CEO charisma attribution

Model	Variable	Model 1		Model 2		Model 3	
		B	B	B	B	B	B
1	Control variables						
	Mean age	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)
	Mean tenure	-0.01 (0.01)	-0.01 (0.01)	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)
	Industry production	0.45 (0.31)	0.45 (0.31)	0.56 (0.28)*	0.56 (0.28)**	0.60 (0.29)**	0.60 (0.29)**
	Industry grocery	0.58 (0.45)	0.58 (0.45)	0.44 (0.43)	0.44 (0.43)	0.48 (0.42)	0.48 (0.42)
	Industry wholesale	0.25 (0.36)	0.25 (0.36)	0.46 (0.35)	0.46 (0.35)	0.44 (0.35)	0.44 (0.35)
	Industry service	0.25 (0.27)	0.25 (0.27)	0.44 (0.26)*	0.44 (0.26)*	0.46 (0.26)*	0.46 (0.26)*
	Industry finance	0.18 (0.35)	0.18 (0.35)	0.46 (0.34)	0.46 (0.34)	0.46 (0.34)	0.46 (0.34)
2	Percentage female	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	Prior company performance (t - 1)			0.13 (0.07)*	0.13 (0.07)*	0.13 (0.08)*	0.13 (0.08)*
	Company size			0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
3	Company ownership structure			-0.34 (0.12)**	-0.34 (0.12)**	-0.36 (0.13)**	-0.36 (0.13)**
	Prior company performance (t - 1) * company size					0.13 (0.08)*	0.13 (0.08)*
	Prior company performance (t - 1) * company ownership structure					-0.04 (0.07)	-0.04 (0.07)
	R <sup>2</sup>		0.07	0.24	0.27	0.27	0.27
	$\Delta R^2$		0.07	0.17**	0.04	0.04	
	$\Delta F$ -value		0.55	4.05	1.43	1.43	

*n* = 69 companies

\* *p* < 0.05 (one-sided)

\*\* *p* < 0.01 (one-sided)



**Fig. 1** The moderation effect of company size in the relationship between prior company performance and CEO charisma attribution

also performed a graphical inspection of the results as well as simple slope test for the significant size moderation term. Figure 1 illustrates the moderating effect of company size. As proposed in Hypothesis 2, we observe a strong positive effect between prior company performance and CEO charisma attribution in large companies, whereas we see an almost zero relationship in small companies. These results are further substantiated through simple slope testing, where the high company size slope was positive and significant ( $\beta = 0.45, p < 0.01$ ), while the low company size slope was not significant ( $\beta = -0.03, ns.$ ). Hence, we validated Hypothesis 2 in a field-setting design. Finally, we inspected the variance inflation factors (VIFs) for our analysis, which ranged between 1.06 and 5.02 indicating that multicollinearity was not a major threat to our analysis.

## 5 Discussion

Our study contributes to the literature on charismatic leadership by investigating and clarifying the relationship between prior company performance and CEO charisma attribution through a mixed-method design in a sample of companies with different sizes and ownership structures. We applied a laboratory and field study demonstrating that prior company performance is an antecedent of CEO charisma attribution. Consequently, in contrast with prior studies, our study design allows us to draw conclusions about causal effects and simultaneously determine important

implications for real business settings. Thus, we answer Waldman et al.'s (2001) call for more systematic empirical research in the area of charismatic leadership.

Our results challenge prior field studies reporting charisma's effects on company performance by finding that reverse causality is also possible. Thus, prior studies might be strongly biased because they failed to control for knowledge of prior company performance when measuring charisma. In light of our results, prior company performance can be added as another factor leading subordinates to perceive that their leaders have charisma.

Furthermore, our study answers the call for more research on organizational-level boundary conditions in the relationship between prior company performance and CEO charisma attributions. Acknowledging previous criticisms (Agle et al. 2006), we conducted a field study to test whether company size (i.e., number of employees) and ownership structure (i.e., shares held by family members) can strengthen or weaken the impact of prior company performance on CEO charisma attribution. We found evidence that (1) the size of the company moderates the positive relationship between prior company performance and CEO charisma attributions, but the relationship is significant only in large companies, not in small companies; (2) company ownership structure does not strengthen or weaken the impact of prior company performance on CEO charisma attribution. Thereby, we provide several important theoretical and practical implications for scholars and executives on how to transfer and apply the concept of charismatic leadership to companies of different sizes and ownership structures.

### 5.1 Theoretical implications

From a theoretical perspective, our results reveal that prior company performance could be added to the attributional theory of charismatic leadership framework (Conger and Kanungo 1987). Prior company performance could be considered another crucial element inducing subordinates to attribute leaders with charisma, in addition to leaders' statements and actions (Weber 1947). Top executives might use this finding for persuading their subordinates to see them as charismatic leaders.

Second, our study illuminates organizational-level boundary conditions in the relationship between prior company performance and CEO charisma attribution. We build on previous research (Finkelstein and Boyd 1998; Hambrick and Finkelstein 1987) suggesting that senior executives in small companies have more managerial discretion and hence communicate more directly with their employees, demonstrating that company size plays a crucial contextual role for the attribution of CEO charisma. In small companies, employees are likely to interact directly with the CEO who is "actually running the business" (Garten 2001). In larger, professionally managed firms, CEOs are more distant, interact only indirectly with most employees, and thus have less-pronounced firm-wide influence (Lubatkin et al. 2006).

Thus, in small companies, prior company performance seems to be less important for judging charisma, as most employees can use their direct personal interactions to assess charisma. In contrast, large corporations are more distant institutions; CEOs tend to communicate indirectly through middle management, being more concerned

with public relations, strategy (e.g., mergers and acquisitions), and financial resources rather than with daily operations. Because employees lack personal contact with the CEO, they cannot evaluate the CEO's charismatic qualities through interpersonal interactions. Consequently, they will substitute prior company performance for attributing charisma. Confirming our hypothesis, prior company performance in large corporations had a stronger positive influence on CEO charisma attribution than it had in small companies. Thereby, our study is the first demonstrating that CEOs' managerial discretion and the associated different interactions with employees shape perceptions about CEO charismatic qualities.

Third, our results support theoretical elaborations regarding the impact of uncertain and turbulent environments on leadership processes (Shamir and Howell 1999). Large companies have typically complex organizational structures and have more uncertain and turbulent environments, so that subordinates are more likely to over-attribute prior company performance as a basis for attributing CEOs with charisma. Employees in small companies, characterized by more stable and predictable environments, are less likely to use prior performance to measure CEO charisma.

Surprisingly, our hypothesized interaction effect between prior company performance and ownership structure was not supported. Hypotheses 3 might have been rejected because of our rather crude measurement of ownership structure with a dummy variable. We might have found stronger effects if we had used information regarding CEO relations to ownership structure; that is, whether the CEO was the founder or at least part of the founding family. Therefore, we encourage future research to replicate our study with a more precise measurement of company ownership structure.

Our specific measurement might also explain why our data show a strong negative main effect between ownership structure and charisma attributions. Family-owned companies apparently provide an environment less conducive for attributing charisma to the CEO, whatever the company's prior performance. This finding indicates that our argument about different CEO foci in privately and family owned companies (i.e., CEOs in publically-owned companies focus on short-term and in family-owned businesses on long-term performance) might not hold true. Moreover, the CEO's high stature in family-owned companies (Jayaraman et al. 2000) and the associated managerial discretion (Hambrick and Finkelstein 1987) do not necessarily lead to a positive image of the CEO. Although speculative, beyond the role of ownership structure, other moderating variables such as the CEO's leadership style and behavior, the company's lifecycle stage, or the organizational culture might crucially influence the relationship between prior company performance and the attribution of CEO charisma. We therefore encourage researchers to investigate family-owned firms in more detail to discover if and when CEO charisma attributions emerge.

## 5.2 Practical implications

Findings from our study have important implications for managerial practice. First, we emphasize that leadership—especially charismatic leadership—is an

attributional and thus perceptual phenomenon. Therefore, charisma lies not within the leader, but rather within the relationship between the leader and subordinates (Klein and House 1995). To maximize their influence, leaders must strive for high performance outcomes, especially in large corporations where prior company performance is crucial for a CEO to receive high charisma attribution. In small companies, in contrast, prior company performance seems to be less relevant. CEOs should, therefore, rather focus on demonstrating their charismatic behavior through direct social interaction.

Second, our study is consistent with the “substitutes for leadership” approach and demonstrates that certain organizational characteristics such as size and ownership structure significantly influence leadership processes (Kerr and Jermier 1978), which has important implications for leadership and management development (Gray and Mabey 2005; Michaelis et al. 2012). We show that certain contextual conditions can induce a “need for leadership” in organizational members, whereas others “reduce the need for leadership.” We, therefore, encourage CEOs to be aware of environmental conditions and pay close attention to the operational environment.

Third, our findings imply that organizational characteristics are likely to influence subordinates to perceive CEO charisma and leadership capabilities. We recommend that classical leadership programs should train CEOs and top executives to go beyond increasing company performance and to also analyze and understand organizational situations and characteristics.

### 5.3 Limitations and future research implications

Despite our study’s methodological strengths in using an experimental design combined with a field study, we acknowledge some limitations. Although an experimental design was necessary to investigate the effects studied (Mook 1983), the artificial setting causes some limitations. In Study 1, participants were asked to pretend that they were real-life subordinates in an imaginary company, but most were university students. They were unlikely to have had the experience necessary to evaluate organizational outcomes in a leadership context. However, other studies have successfully used vignettes (e.g., De Cremer and van Knippenberg 2002, 2004), and the method provides some advantages, for example in terms of efficiency and economy. Furthermore, the limitations of experimental designs are not unique to our study. Some researchers even criticize the artificial design of experiments in general, positing that they threaten external validity (Campbell et al. 1963). However, we countered some concerns by cross-validating our main result (i.e., the prior company performance/CEO charisma attribution relationship) with field data in Study 2.

Although we gathered as much information as possible on the companies in our sample, we could not determine CEO tenure. As time passes, charisma is unstable, routinized, and traditionalized (Weber 1947) and declines (Yukl 1999). Thus, company performance might have the greatest impact on CEO charisma attributions earlier in a CEO’s tenure. To investigate the influence of CEO tenure on the performance–charisma relationship, CEO charisma attributions and company

performance could be measured immediately after the CEO is appointed. This design could help researchers understand the impact of prior company performance on CEO charisma attributions while reducing CEO tenure effects.

Another limitation stems from the sample size. A larger sample in the experimental setting would have strengthened the generalizability of our results, although the additional field study increased the real-world generalizability of our findings.

We also acknowledge that company size and ownership structure might be only one of numerous potential contextual factors that might affect the prior company performance–charisma attribution relationship. For example, especially in smaller companies where the relationship was not significant, the leader-member exchange (LMX) (Graen and Uhl-Bien 1995) relationship might play an important role and should be researched in more detail in future studies. Having good personal relationships with employees might be a core prerequisite for CEO charisma attribution, in particular in smaller companies. Thus, in line with our arguments from Hypothesis 2 on the higher importance of personal interaction for CEO charisma attribution in small rather than large firms, we propose a three-way interaction of prior company performance, company size, and LMX on CEO charisma attribution, with a positive slope for the relationship only if CEOs in smaller companies focus on both prior company performance and good LMX relationships with subordinates.

In sum, our study increases the understanding of charismatic leadership, particularly in the context of companies of different sizes and ownership structure, and further illuminates past research concerning causal relationships between charismatic leadership and company performance. The study provides perspectives for fruitful future research that will contribute to a more widespread understanding of the dynamics of charismatic leadership.

## Appendix

The successful test condition of the quarterly report reads as follows:

“The company’s revenue in the first quarter of 2008 increased by 29 % to € 15.48 million. In the first quarter of 2007, revenue were still at € 12 million. Earnings before interest, taxes, depreciation, and amortization (EBITA) rose to € 2.59 million. In the first quarter of 2007 a loss of € 620,000 still had to be recorded.

These results exceeded our goals by far.”

The non-successful test condition of the quarterly report reads as follows:

“The company had a revenue decline in the first quarter of 2008 by 29 % to € 8.52 million. In the first quarter of 2007, revenue were still at € 12 million. Earnings before interest, taxes, depreciation, and amortization (EBITA) decreased in the first quarter of 2008 to a loss of € 620,000. In the first quarter of 2007 a profit of € 2.59 million could still be recorded.

These results failed our goals by far.”

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