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ORIGINAL PAPER

The Value of Speaking for "Us": the Relationship Between CEOs' Use of I- and We-Referencing Language and Subsequent Organizational Performance

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Abstract

CEOs have been argued to play a critical role for organizational performance. However, CEOs cannot achieve success singlehandedly. They rely on other organizational members to execute and implement their agenda and to contribute to organizational success. In the present research, we propose that CEOs serve as identity leaders of their organization who are able to enhance organizational performance by representing and cultivating a sense of shared collective identity ("us") with those they lead. One way for leaders to do so is through the use of we-referencing (as opposed to I-referencing) language. We examine this idea in a pre-registered study of organizations listed in the DAX (i.e., leading German stock index) between 2000 and 2016, assessing the impact of CEOs' use of we- and I-referencing language in letters to the stakeholders ($N = 378$) on objective indicators of organizational financial performance. In line with hypotheses, results show a positive relationship between CEOs' use of we-referencing language and key indicators of financial performance: return on assets and sales per employee (while there was no evidence of an association with return on sales). At the same time, results indicate that the use of I-referencing language was unrelated to organizational performance. These findings advance the literature on strategic leadership and on the social identity approach to leadership by suggesting that CEOs' thinking and acting in collective terms is associated with greater organizational financial performance.

Keywords CEO leadership · Identity entrepreneurship · Financial performance · Social identity approach to leadership · We-referencing language · Linear mixed-modeling

> The leaders who work most effectively, it seems to me, never say 'I'. And that's not because they have trained themselves not to say 'I'. They do not *think* 'I'. They think 'team'. They understand their job to be to make the team function… There is an identification (very often quite unconsciously) with the task and with the group. (Drucker 1992, p. 14).

CEOs are the figureheads of their organization. Their choices and behaviors have been argued to be critical for the performance of organizational members and the organization as a whole (Boal and Hooijberg 2001; Finkelstein et al. 2009; Hambrick and Mason 1984). Although CEOs have direct influence on strategic decisions (e.g., acquisitions), they rely on *other* organizational members to execute and implement their agenda. Accordingly, without the engagement and support of followers, CEOs' visions and goals will count for little because they will not be translated into material reality (Bennis 1999; Haslam and Platow 2001). In simple terms, this is

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because it is not a CEO's vision that makes and sells products and services, but the hard work of the people they employ.

So how do CEOs win the support of their followers? One answer, suggested by social identity theorizing, is by cultivating a sense of shared social identity—a shared sense of "us"—among organizational members (Haslam et al. 2011; Steffens et al. 2014b). This is argued to encourage the internalization of group membership (Haslam et al. 2003) by those followers in ways that restructure their perceptions and behavior so as to align them with the interests and goals of the group and ultimately lead them to contribute to the achievement of shared group goals (Ellemers et al. 2004; Turner 1991). In the present paper, we advance the social identity approach to leadership by examining the relationship between CEOs' representation and cultivation of a sense of "us" through the use of we-referencing language (opposed to I-referencing language) and the financial performance of the organizations they lead. This study also contributes to the strategic leadership literature by extending the scope of strategic leadership theories beyond characteristics of the CEO as an individual to consider and understand the CEO as a member of a social group (i.e., their organization; e.g., Boal and Hooijberg 2001). In this way, the present study addresses Hambrick's (2007) call for the strategic leadership literature not to "glorif[y] elites" (p. 341) by focusing on the characteristics that set leaders apart from their followers but rather to advance the understanding of what enables strategic leaders to connect to followers.

The Social Identity Approach to Leadership

Traditionally, the strategic leadership literature has focused on what makes leaders special as individuals (i.e., as "great I's"; Boal and Hooijberg 2001; Booth et al. 2016; Finkelstein et al. 2009; Hambrick 2007; Hambrick and Mason 1984). More recently, though, researchers have increasingly seen leadership as a social group process (i.e., a "we-thing"; Dinh et al. 2014; Yammarino et al. 2012). According to this perspective, leaders have been argued to be influential not because they are special as individuals (e.g., highly charismatic) or because they hold a particular position of power, but rather because they think and act in terms of a bigger "we" and are able to cultivate a shared identity with those they seek to influence (Ellemers et al. 2004; Haslam et al. 2011; Hogg 2001; Hogg et al. 2012; Steffens et al. 2014b; van Knippenberg and Hogg 2003).

Informed by principles set out in both social identity theory (Tajfel and Turner 1979) and self-categorization theory (Turner 1991; Turner et al. 1987; see Haslam 2004), the social identity approach to leadership sees this as an influence process that is grounded in a sense of shared social identity between leaders and followers (Ellemers et al. 2004; Haslam et al. 2003; Haslam et al. 2011; van Knippenberg and Hogg 2003). In line with these claims, extensive research points to the importance of leaders being seen to be prototypical of the group they want to lead (Barreto and Hogg 2017; Haslam et al. 2011; Hogg et al. 2012; van Knippenberg 2011) such that they embody the norms, values, and ideals that make the group special and distinct from other groups (van Knippenberg 2011; van Knippenberg and Hogg 2003). In particular, perceived group prototypicality has been shown to underpin (a) endorsement of leaders (Steffens et al. 2013; Ullrich et al. 2009), (b) trust in leaders (Giessner and van Knippenberg 2008), (c) perceived leader effectiveness (Giessner et al. 2009; van Knippenberg and van Knippenberg 2005), and (d) perceived leader charisma (Platow et al. 2006; Steffens et al. 2014a).

At the same time, scholars have asserted that successful leaders do not simply accept received social identities as given but instead actively seek to create and promote a particular version of group identity (Augoustinos and de Garis 2012; Huettermann et al. 2017; Reicher et al. 2005; Reicher and Hopkins 2001). In other words, "leaders have to be masters of identity, not merely slaves to it" (Haslam et al. 2011, p. 162). Among other things, this means that, as identity entrepreneurs, leaders work hard to construct social identity in ways that enhance both a sense of shared identity within the groups they lead as well as their own prototypicality. They do this, for example, by defining shared norms, values, and ideals that align group members with their own agenda (Reicher et al. 2005). This, in turn, is likely to render the social identity more accessible and explicit for group members, promoting social identification (Riantoputra 2010). In this way, identity entrepreneurship facilitates collaboration between organizational members (e.g., inter alia stimulating trust and helping behavior; Ellemers et al. 2004; van Knippenberg and Hogg 2003) making organizational success more likely (Carton et al. 2014; Castanias and Helfat 1991; Fiol 2001; Millward and Postmes 2010). Consistent with these sets of ideas, a study of customer business managers in the UK showed that organizational identification among members of the organization was a substantial predictor of both individual and team performance (as indicated by sales turnover; Millward and Postmes 2010). Yet, by the same token, if leaders neglect the power of social identities by, for example, promoting their individual authority rather than their collective interests, their attempts to lead a group in a particular direction (or any direction at all) are likely to fail (Haslam and Reicher 2007).

CEOs' I- and We-Referencing Language and Organizational Performance

In line with the preceding points, social identity theorizing suggests that as strategic leaders of an organization, CEOs are more likely to be effective to the extent that they develop

a sense of shared social identity ("Us"; Haslam et al. 2011; Reicher and Hopkins 2001). One potential way in which CEOs can express, create, and shape a shared social identity is through we-referencing language (by referring to "we," "us," "our," or "ours"), which stands in contrast to I-referencing language (by referring to "I," "me," "my," or "mine") as a means to express and stress their personal identity. Language carries meaning that organizational members use to make sense of organizational life and their part in it (Finkelstein et al. 2009; Fiol 2002; Haslam and Reicher 2007). For example, using collective pronouns has been shown to induce a shift in individuals from a personal to a more collective self-definition (i.e., as a member of a group; Brewer and Gardner 1996). In addition, using collective pronouns is also a sign of a person's own identification with a social group (Mael and Ashforth 1992; Rousseau 1998). Indeed, this idea is underscored by the fact that the most widely used organizational identification scale—developed in the seminal work by Mael and Ashforth (1992)—includes the item: "When I speak about [group under study], I usually say 'we' rather than 'they'". In line with these ideas, we argue that there is likely to be a dual process at play such that leaders' use of we-referencing language serves both (a) to be an indication of, and signal, the leader's own social identification with the collective (Mael and Ashforth 1992; Rousseau 1998) and (b) to create a shared sense of identity among those they lead and to clarify who we are, what we stand for, and who we want to be in the future (Haslam et al. 2011; Huettermann et al. 2017; Riantoputra 2010). These in turn should inspire identification among members of the organization (Schuh et al. 2012; van Dick et al. 2007; Wieseke et al. 2009) as well as mobilize members' behavior towards a common goal (Haslam and Reicher 2007).

Supporting these ideas, research on leaders' use of we- and I-referencing language has shown that this matters for a range of important follower and organizational outcomes. Speaking to the importance of we-referencing language, experimental studies by Platow et al. (2006) showed that leaders were more likely to be perceived as charismatic when they used we-referencing language (see also Hornsey et al. 2005). Furthermore, recent research by Weiss et al. (2018) showed that the extent to which leaders of health care teams used we-referencing language was positively associated with team members' voice behavior (i.e., discretionary communication of ideas, suggestions or concerns about work-related issues with the intent to bring about improvement or change; Morrison 2014), while I-referencing language was unrelated to their voice behavior. There is also evidence for the positive effect of leaders' we-referencing language from the political domain. Specifically, an analysis of Australian federal elections has shown that candidates' use of we-referencing language is positively related to followers' support (with 80% of elections being won by the candidate who uses we-referencing language the most; Steffens and Haslam 2013). At the same time, the candidates' use of I-referencing language was unrelated to the election outcome. Relatedly, in the business domain, research by Chatterjee and Hambrick (2007) showed that CEOs' use of I-referencing language in interviews (referencing "me, myself & I")—as indicator of their self-preoccupation and narcissism—failed to have a positive influence on organizational performance.

Even though there is a growing body of research on the relevance of leaders' we- and I-referencing language, our knowledge is limited in at least two important ways. First, prior research that has explored the use of we-referencing language has tended to focus on settings of supervisory leadership (Platow et al. 2006; Weiss et al. 2018) and political leadership (Steffens and Haslam 2013; see also Augoustinos and de Garis 2012; Gleibs et al. 2017) rather than strategic leadership in organizations. We therefore know little about the extent to which processes implicated in we-referencing language have any bearing on the leadership success of senior leaders of organizations. In addition, while exploring a range of outcomes (e.g., perceptions of charisma and voice behavior) little work has examined the relationship of we-referencing language and tangible measures of (organizational) performance. As a result, it is unclear whether CEOs' use of we-referencing language as a means of creating a shared "we" among organizational members relates to organizational functioning and performance—one of (if not the) key indicator of CEOs' leadership success. Moreover, it is unclear exactly how the use of I-referencing language is associated with measures of leadership success. All three, Chatterjee and Hambrick (2007), Steffens and Haslam (2013) as well as Weiss et al. (2018), report statistically non-significant results using null-hypothesis testing which do not allow for the inference that I-referencing language does not matter (i.e., null results do not provide evidence in support of the null hypotheses). Using a Bayesian approach, the research presented here seeks to provide a test of whether the assumed null-effect is more likely than its alternatives (i.e., a positive or negative relationship).

The Present Research

One common and visible place for CEOs to communicate their narrative about organizational identity is in stakeholder letters in organizations' annual reports (Prasad and Mir 2002; Smith and Taffler 2000). Such letters are addressed to multiple stakeholders (e.g., shareholders, employees, and customers) and in them CEOs typically seek to explain where the organization currently stands ("who

we are") and to delineate future pathways ("who we want to be"). On the basis of social identity theorizing, we propose that CEOs' use of we-referencing language in these letters both is indicative of their own identification as well as stimulates a sense of shared identity that encourages other members of the organization to identify both with the CEO and with the organization as a whole (Brewer and Gardner 1996; Platow et al. 2006; Riantoputra 2010; Rousseau 1998; van Dick et al. 2007). This stronger identification with the organization, in turn, is a basis for members to align their attitudes and behaviors in ways that contribute to shared organizational goals (Ellemers et al. 2004; Haslam et al. 2011; Lee et al. 2015).

It is also likely that, through a cascading effect of social identification, customers and other stakeholders will feel enveloped in a shared sense of we-ness and thereby identify more strongly with the organization in ways that encourage them to contribute to the organization's performance (e.g., by making more use of the organization's products and services; Schuh et al. 2012; Wieseke et al. 2009). More formally, then, we hypothesize:

> *Hypothesis 1*: CEOs' use of we-referencing language (i.e., first-person plural pronouns) in letters to the stakeholders will be associated with higher organizational financial performance.

At the same time, Gupta et al. (2018) suggest that *I-focused* CEOs "create environments of passive followership" (p. 12) rather than engaged followership within their organization (Haslam and Platow 2001). In this regard, high levels of CEO's use of I-referencing language (i.e., first-person singular pronouns)—which signals CEOs' strong personal identity—should fail to engage organizational members' and other stakeholders' sense of shared social identity (Fiol 2002) and thereby fail to engender improved performance. In line with social identity theorizing, we can posit that this is because CEOs who think "I" will act (and be seen to act) in ways that serve their personal needs rather than those of the organization (Boivie et al. 2011), and thereby put collective efforts in jeopardy (De Cremer and van Dijk 2005; Steffens et al. 2018a; Weiss et al. 2018). Indeed, Chatterjee and Hambrick (2007) found that high levels of CEOs' personal self-references in interviews were not related to (better or worse) performance (but to greater variance in organizational performance). In the realm of politics, too, there was no evidence that candidates' use of first-person singular pronouns was related to the result (i.e., win or loss) in Australian federal elections (Steffens and Haslam 2013). This leads to our second hypothesis:

> *Hypothesis 2*: CEOs' use of I-referencing language (i.e., first-person singular pronouns) in letters to the stakeholders will not be associated with higher organizational financial performance.

Method

Open Science Practices

Enhancing the confidence in the present findings (e.g., Banks et al. 2019), the study was pre-registered on the Open Science Framework (i.e., study design, hypotheses, and analysis strategy were pre-registered prior to data collection and analysis). All data and materials will be made available online upon publication: https://osf.io/znwu5.

Sample

We analyzed a sample of CEOs of large, multi-national corporations listed in the DAX (i.e., Germany's leading stock index; as of November 2017) between 2000 and 2016. We chose this sample for two main reasons: First, in regard to the choice of time frame, annual reports were available online for a much larger number of organizations after 2000 than in prior years. In our initial sample, the majority (18 of the 30) of organizations provided annual reports for the entire period examined (2000–2016), while all but one organization provided reports for the last 10 years (2007–2016) or more. In total, 434 (of 510; 85.1%) annual reports were available. Second, the vast majority of studies on CEOs has been conducted with American samples limiting the generalizability of findings to other countries (e.g., Crossland and Hambrick 2007). Despite the fact that today's organizations compete in a globalized economy, national differences in informal (e.g., norms and values) and formal (e.g., laws and rules) institutions affect CEOs' leadership (Crossland and Hambrick 2007, 2011). For example, CEOs of American organizations have greater latitude of action and less constraints in their role than their counterparts in other countries such as Germany (Crossland and Hambrick 2011). In consequence, due to the limitation of their power as individual, CEOs of German organizations rely even more strongly on winning the support and participation of followers (i.e., creating collective power within their organization; Ellemers et al. 2004). At the same time, results from the GLOBE project show that the two societies differ little in the degree to which they value group cohesiveness, group loyalty, and collective action (i.e., institutional collectivism; USA: 4.17 and Germany: 4.68; average GLOBE score: 4.73 on a 7-point scale; Gelfand et al. 2004), while evidence from the ILI-Global Project (van Dick et al. 2018)

demonstrates that identity leadership (as measured by the Identity Leadership Inventory; Steffens et al. 2014b) has the same meaning in Germany and the USA (indicated by metric invariance between the two groups). Thus, we selected a sample that matches prior samples in its core characteristics (i.e., publicly traded and multi-national) from an appropriate context for the specific phenomenon under study.

A letter to the stakeholders accompanied 432 annual reports. Twenty-six letters were excluded from the sample for one of the following reasons: 15 letters were co-authored by either two CEOs ($n = 14$; Deutsche Bank 2012–2015, RWE 2002, SAP 2000–2002 and 2008–2013) or the CEO and the chair of the board (Henkel 2008). All reports for Vonovia between 2004 and 2012 were excluded because the organization only turned into a publicly traded company in 2013. The financial data from the first available report of each organization was not matched by a CEO letter and therefore excluded. The final sample encompassed 378 observations. In this final sample, letters were written by 73 different CEOs (all Caucasian males). An average of 5.18 letters per CEO was included (SD = 2.96, range = 1–12). These CEOs held their position for an average of 7.14 years (SD = 3.90, range = 1–16).

Procedure and Measures

Annual reports are typically published 3 months after the end of the preceding financial year (for 27 of the 30 organizations in our sample the financial year corresponds to the calendar year). For example, Adidas published the annual report corresponding to the financial year 2014 on 5 March 2015. In the present analysis, we therefore used indicators of we- and I-referencing language in a given year as predictors of organizational performance of the subsequent financial year (ending about 9 months after the publication of the preceding annual report). This means that in the present design, there was time lag of 9 months between our independent and dependent variables.

Two sets of information were extracted from each annual report. First, we recorded the number of first-person singular ("I," "me," "my," "mine") and first-person plural pronouns ("we," "us," "our," "ours") within each CEO letter. For this purpose, we specified a word count algorithm in EXCEL that ran over each letter to identify all references (cf. Tausczik and Pennebaker 2010).[1] All references within a letter were combined to obtain indicators of CEOs' use of I- and we-referencing language, respectively. For example, in the following passage from the 2014 letter to the stakeholders by Siemens CEO Joe Kaeser (Siemens 2014), seven first-person plural pronouns (i.e., we, us, we, our, our, our, our) and four first-person singular pronouns (I, my, my, my) were recorded:

> **We**'ll be working on the three areas outlined above. They describe the key factors that are enabling **us** to lead Siemens into a successful future. Throughout this process, **we** will gear all **our** actions to the requirements of **our** customers, **our** owners and **our** employees as well as to the values of society. **I** personally intend to ensure that the next generation will inherit a better Company. That's **my** vision. That's **my** responsibility. That's **my** promise. (emphasis added; p. 9)

Second, for each year reported, the following variables were documented: (a) total sales, (b) earnings before interest and tax (EBIT), (c) net profit, and (d) total capital.[2] These were used to obtain two commonly used accounting-based financial performance indicators (e.g., Agle et al. 2006; Richard et al. 2009): Return on assets (ROA = net profit divided by mean total capital of the current and previous year) and return on sales (ROS = EBIT divided by total sales). We focused on ROA and ROS as indicators of financial performance because CEOs have been observed to have greater control over accounting-based indicators, via their decisions and behaviors, than over market-based indicators (Agle et al. 2006; Richard et al. 2009). Not least, this is because market-based performance indicators, such as Tobin's Q, reflect investors' evaluations of the organization's growth prospects rather than their actual performance (Haslam et al. 2010). ROA is an indicator of how efficiently an organization uses its assets to generate earnings, while ROS is known as an organization's operating profit margin. Table 1 provides an overview of descriptive statistics.

Analytic Strategy

The study data had a nested (panel) structure: That is, it contains observations of a set of variables obtained over multiple time periods for the same organizations and individuals. In order to account for the nested data structure in our analyses (and hence, the non-independence of our observations), we used linear mixed-effects modeling (Bauer et al. 2006; Faraway 2016). We specified the number of I- and we-references in CEOs' letters to the stakeholders as predictors of financial performance at the end of a given financial year (i.e., 9 months after the publication of the annual report). We ran separate analyses for the effect of I-referencing and we-referencing language on each outcome variable (i.e., ROS and ROA, as well as sales per employee). The use of I- and we-referencing language was entered as fixed effect (i.e., systematic predictor), respectively. The total number of words used was entered as covariate (i.e., fixed effect). For 69 CEOs (94.52% of all CEOs; $M = 5.18$,

[1] Fifteen CEO letters were presented as written interviews. In these cases, we isolated only those portions that represented the CEO's words.

[2] In all but one case (Fresenius Medical Care) numbers were provided in Euro. For Fresenius Medical Care, figures were converted from US-Dollar to Euro based on the exchange rate at the reporting date.

Table 1 Means, standard deviations, and within-CEO correlations of focal variables

	Variable	*M*	*SD*	1	2	3	4	5	6
1	Use of I-referencing language	5.37	5.37	–					
2	Use of we-referencing language	62.27	29.90	.21***	–				
3	Total no. of words in letter	1132.06	507.18	.32***	.80***	–			
4	Return on assets (in %)	3.34	4.66	.00	.08	− .04	–		
5	Return on sales (in %)	10.36	12.74	− .01	− .00	− .01	.17**	–	
6	Sales per employee (Euro in thousand)	398.42	289.90	− .03	.13*	.08	.29***	− .04	–

$N = 378$ letters by 73 CEOs. Correlations are based on raw within-CEO scores.* $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed)

SD = 2.96) we had multiple measurements (i.e., different years) in our sample. Accordingly, we included a random intercept for CEO to allow for variations between CEOs. Moreover, we had multiple measures for each organization (*M* = 12.60, *SD* = 4.18, range = 3–16) and therefore included organization as random intercept to model differences between organizations.[3] In a second model, we also tested the generalizability of our results beyond our selected period by introducing year as random intercept, which expresses the variation between years.[4]

The internal validity of random effect models is threatened when random effects are specified without testing their statistical justification (Antonakis et al. 2010). For this reason, prior to estimating our models, we determined the appropriateness of our random effect models using the Breusch-Pagan Lagrangian Multiplier Test (Breusch and Pagan 1980) and the consistency of the estimator using the Hausman Test (Hausman 1978) implemented in the plm package (Croissant and Millo 2008) in R (R Core Team 2017). The Breusch-Pagan Test was significant for all models ($\chi^2(1) > 133.12$, $p < .001$), justifying the use of random effects. The Hausman Test was non-significant for all models ($\chi^2(2) < 5.37$, $p > .068$), pointing to the consistency of the estimator. Overall, statistical assumptions for modeling random effects were met.

For each analysis, we specified two models: a null model that excluded, and an alternative model that included, the fixed effect of the predictor use of language. The models were identical in all other respects. We used the likelihood ratio test statistic to compare the two nested models. Parametric bootstrapping ($n_{bootstrap} = 1000$) was applied to determine *p*-values for the likelihood ratio test (Faraway 2016). We present marginal R^2 values based on Nakagawa et al. (2017), which only consider the variance of the fixed effects. We used the lme4 package (Bates et al. 2015) in R (R Core Team 2017) for subsequent analyses.

Hypothesis 2 proposes a null effect. This cannot be tested using conventional statistical analysis (i.e., null hypothesis significance testing) because the failure to reject a null hypothesis does not yield evidence in favor of it. We therefore used a Bayesian approach that can compute the odds favoring the null hypothesis over its alternative hypothesis predicting an effect. Accordingly, to test Hypothesis 2, we additionally determined a Bayes factor (i.e., BF_{01}) for the hypothesis that the regression coefficient for the use of I-referencing language is equal to zero based on a weakly informative prior using the brms package (Bürkner 2017).

Results

Confirmatory Analyses

Use Of We-Referencing Language

For our first model, comparison of the null model and the alternative model indicated that CEOs' use of we-referencing language was significantly and positively associated with subsequent ROA ($\chi^2(1) = 10.676$, $p = .001$, $SE = .001$, $R^2 = .023$), raising ROA by 0.047% (*b*) ± .014 (*SE b*) per additional we-referencing pronoun used. This corresponds to an average increase in organizations' net profit of approximately 820,000 EUR (*SE* ≈ 245,000 EUR) per additional we-referencing pronoun. For ROS, the null model and the alternative model did not differ significantly ($\chi^2(1) = 0.909$, $p = .331$, $SE = .015$).

For the second model, we added *year* as random effect. As shown in Fig. 1, this yielded substantially identical results. Specifically, comparison of the null model and the alternative model revealed a significant relationship of CEOs' we-referencing language and ROA ($\chi^2(1) = 8.019$, $p = .003$,

[3] Deviating from the pre-registered protocol, we applied this procedure instead of group-mean centering the dependent variable to control for differences between organizations because this procedure is a more consistent application of the linear mixed-effect modeling approach. The pattern of results, however, does not differ across the two approaches.

[4] In a third model, following the pre-registered protocol, we added random slopes by-CEO and by-year to account for inter-individual differences in the effect of use of language. For all dependent variables, this model failed to converge. Diagnostic procedures revealed parameter estimate singularity (i.e., values close to zero) as cause for the convergence problems (Bates et al. 2018). Because this analysis suggested that this model was too complex to be estimated properly, we did not test it further.

SE = .002, ΔR^2 = .017). Thus, the association between we-referencing language and subsequent ROA was not influenced by the year and can be generalized beyond the period in our sample. The strength and direction of the obtained coefficient is also similar to that of our first analysis (b = 0.040, *SE* = .014). Again, the comparison of a null model and the alternative model did not relate to ROS ($\chi^2(1) = 0.613$, $p = .458$, *SE* = .016). The results of the second set of models are summarized in Table 2.

Use of I-Referencing Language

We ran the same set of analyses for I-referencing language. For our first model (i.e., random factors for CEO and organization), neither ROA ($\chi^2(1) = 0.573$, $p = .464$, *SE* = .016) nor ROS ($\chi^2(1) = 0.314$, $p = .573$, *SE* = .016) were related to I-referencing language. The BF_{01} was 10.49 and 1.96, respectively, suggesting that given these data, the null hypothesis (i.e., a null effect) is more likely to be true than the alternative hypotheses (i.e., an effect). Both outcomes were also unchanged when adding *year* as random factor to the model (ROA: $\chi^2(1) = 1.705$, $p = .174$, *SE* = .012, $BF_{01} = 8.96$; ROS: $\chi^2(1) = 0.630$, $p = .415$, *SE* = .016, $BF_{01} = 2.18$).

Exploratory Analyses

We ran several additional analyses to test the robustness of the results. First, we introduced an alternative predictor variable based on the ratio of the total number of words to the number of pronouns. Second, we tested the effects of language on an additional key accounting-based outcome variable: sales per employee. Third, we examined how the focal relationships changed when controlling for organizational performance in the preceding year. And fourth, we tested the reverse relationship, that is financial performance predicting CEOs' use of we-referencing language. We also examined a set of several exploratory analyses examining additional questions (e.g., change of use of I- and we-referencing language over time, analysis of CEOs' demographic variables, inspection of CEOs' communication profiles) which are described in more detail in the online supplement and only briefly summarized here.

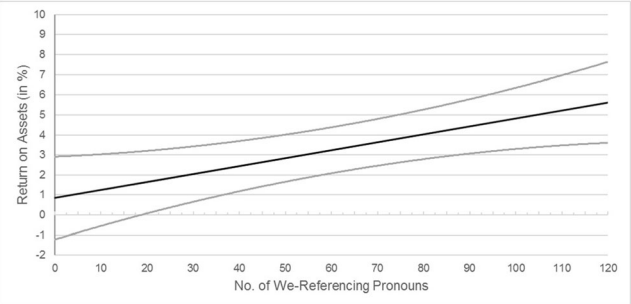

Fig. 1 Relationship between use of we-referencing language and return on assets. Note. Predicted values for return on assets in percent as a function of the number of we-referencing pronouns used in letters to the stakeholders controlled for total number of words. Effects of the random effects of CEO, organization and year (Model 2) are averaged. Upper and lower graphs represent the upper and lower bound of a 95%-confidence interval for the predicted values, respectively. Model statistics: $\chi^2(1) = 8.019$, $p = .003$, *SE* = .002, $\Delta R^2 = .017$, $b = 0.040$, *SE* b = .014

Ratio of We- and I-References To Total Words

To test the robustness of our results, we calculated the number of words in a letter per pronoun by dividing the total number of words by the number of I- and we-referencing pronouns, respectively. For our first model (i.e., including the random effect for CEO and organization), as expected, the greater the ratio of total words to number of we-referencing pronouns, the smaller the organization's ROA ($b = -.089$; $\chi^2(1) = 14.731$, $p = .006$, *SE* = .002, $\Delta R^2 = .025$). Again, there was no association with subsequent ROS ($\chi^2(1) = 7.491$, $p = .530$, *SE* = .016). For our second model (i.e., adding a random factor for year), results were again robust and significant for ROA ($b = -.086$; $\chi^2(1) = 14.665$, $p = .011$, *SE* = .003, $\Delta R^2 = .021$) but non-significant for ROS ($\chi^2(1) = 7.344$, $p = .612$, *SE* = .015).

For I-referencing language, in 50 cases, CEOs did not use first personal pronouns in their letter, which reduced the sample size to 328. The ratio of total words to I-referencing pronouns was not associated with ROA in any of the models ($\chi^2(1) < 1.010$, $p > .341$, $BF_{01} > 197.87$) or ROS ($\chi^2(1) < 0.850$, $p > .372$, $BF_{01} > 184.26$).

Sales per Employee

We tested one additional key indicator of accounting-based organizational performance, namely sales per employee (e.g., Bhattacharya et al. 2005; Thomas et al. 1991).[5] This constructive replication helps to test the robustness of our results across variations in measurement (Eden 2002; Richard et al. 2009). We calculated this indicator by dividing the total value of sales (in Euros) by the number of an organization's employees in that year. This analysis revealed a positive and significant effect of we-referencing language on sales per employee in both the first ($\chi^2(1) = 3.814$, $p = .054$, *SE* = 0.007, $\Delta R^2 = .002$, $b = 753.12$) and the second model ($\chi^2(1) = 3.649$, $p = .058$, *SE* = 0.007, $\Delta R^2 = .002$, b = 724.15). This indicated that sales per employee increased by 724 Euros in a year for a CEO's every additional we-referencing pronoun. With an average of about 131,000 employees in DAX organizations (n = 130.975), this corresponds to an increase of total sales by approximately 99 million Euros per additional we-reference. I-referencing

Table 2 Estimated parameters of linear-mixed effects models predicting ROA and ROS from CEOs' use of we-referencing language

	Outcome			
	ROA		ROS	
Variable	Model (0)	Model (1)	Model (0)	Model (1)
Intercept	3.979 (0.840)	3.789 (0.823)	11.359 (2.579)	11.168 (2.579)
Fixed effects				
Use of we-referencing language	–	0.040 (0.014)	–	0.027 (0.034)
Total no. of words in letter	−0.001 (0.001)	−0.003 (0.001)	−0.000 (0.001)	−0.001 (0.002)
Random effects (variance)				
CEO	8.672 (2.945)	9.134 (3.022)	22.188 (4.710)	21.331 (4.619)
Organization	3.229 (1.797)	2.672 (1.635)	109.350 (10.457)	109.116 (10.446)
Year	1.238 (1.113)	1.059 (1.029)	2.092 (1.446)	1.922 (1.386)
Residual	9.876 (3.143)	9.663 (3.108)	63.345 (7.959)	63.540 (7.971)
Evaluation				
−2 LogLik	2089.6	2081.4	2780.2	2779.6
AIC	2101.5	2095.5	2792.3	2793.6
BIC	2125.1	2123.0	2815.9	2821.2
$\Delta\chi^2$ ($df = 1$)		8.019		0.613
p (SE)		.003 (.002)		.458 (.016)
ΔR^2		.017		.001

$N = 378$ letters by 73 CEOs of 30 organizations from a period of 16 years (2000–2016). ROA = return on assets. ROS = return on sales. Model (0) refers to the null model. Model (1) refers to the final model. For fixed effects standard error in parentheses. For random effects standard deviation in parentheses

language, on the other hand, was not associated with subsequent sales per employee ($\chi^2(1) < 0.968$, $p > .372$, $BF_{01} > 1.67$).

Controlling for Prior Year's Performance

We examined the extent to which the relationship of I- and we-referencing language and subsequent financial performance held when controlling for performance in the preceding year. We were able to match prior and subsequent year's financial performance for 352 data points (from 70 CEOs). First, we explored the correlation between prior and subsequent year's financial performance: For ROA, ROS, and sales per employee correlations were .58, .64, .92 ($p < .001$), respectively. Thus, a high proportion of variance in these indicators of financial performance was explained by prior year's performance ($R^2 = .33, .40, .85$).

We then conducted additional analyses in which we added prior year's performance as covariate to the model described in the main confirmatory analysis reported above. When we did so, the linear mixed effect models did no longer converge due to parameter estimate singularity (Bates et al. 2015) which might be due to overparameterization (Bates et al. 2018). As suggested by Bates et al. (2018), we (stepwise) removed variance components (i.e., random effects for organization and year) to reduce model complexity. In this reduced model, CEOs' use of we-referencing language was significantly and positively associated with subsequent ROA ($\chi^2(1) = 4.406$, $p = .048$, $SE = .007$, $R^2 = .008$) but not with ROS ($\chi^2(1) = 1.861$, $p = .183$, $SE = .012$). For sales per employee, due to non-convergence we further reduced model complexity (i.e., by dropping the random effect *CEO*). The remaining linear model was significant (F (5,348) = 1035.00, $p < .001$, $R^2 = .889$) in which we-referencing language was significantly and positively related to sales per employee ($b = 659.99$, $SE\ b = 317.86$, $p = .039$). CEOs' use of I-referencing language was neither related to ROA ($\chi^2(1) = 0.348$, $p = .555$) nor ROS ($\chi^2(1) = 0.126$, $p = .723$). For sales per employee, the linear model was significant (F (5,348) = 1023.00, $p < .001$, $R^2 = .898$) but this effect was merely driven by prior year's sales per employee ($b = 0.957$, $SE\ b = .017$, $p < .001$).

Test of Reverse Relationship

It is plausible that recent group success may influence an individual's group identification and thereby their use of we-referencing language. Accordingly, CEOs may identify more strongly—and express this through greater use of we-referencing language—as a function of financial performance. To test this reverse relationship, we regressed the number of we-references on financial performance in the previous year. The variance of the random effects year and organization were

[0] This was the only exploratory dependent variable that we examined.

close to zero (i.e., parameter singularity) for models with ROA and ROS as predictor. Consequently, these variables were dropped from the models (Bates et al. 2018). The relationship of ROA and use of we-referencing language was significantly positive ($\chi^2(1) = 15.859$, $p < .001$, $SE = 0.0001$, $\Delta R^2 = .013$, $b = 0.693$) yet of smaller in magnitude than our focal relationship reported above (accounting for 1.3% compared to 2.3% of the variance). However, it was not for ROS ($\chi^2(1) = .426$, $p = .525$, $SE = 0.016$) or sales per employee ($\chi^2(1) = .058$, $p = .831$, $SE = 0.012$).

Summary of Additional Analyses

We conducted seven additional sensitivity and exploratory analyses which are reported in detail in the online supplement and which we briefly summarize here.

First, analyses yielded substantively identical results when including all CEO demographics that were associated with predictor or outcome variables (Becker et al. 2016; i.e., CEO age, CEO education, internal, vs. external CEO, size of organization) as control variables.

Second, to inspect the influence of extreme cases on the results, we conducted a sensitivity analysis in which we excluded outliers (based on Cook's distance measure; Cook 1977). Results were identical to those revealed by the main analysis with the only difference that I-referencing language was negatively associated with subsequent ROA (Model 2: $\chi^2(1) = 7.242$, $p = .006$, $SE = 0.002$, $b = -.084$, $\Delta R^2 = .014$, $n = 364$ after excluding 14 outliers).

Third, to analyze whether the results were affected by the Global Finance Crisis, we conducted a sensitivity analyses in which we excluded years of the Global Financial Crisis (i.e., 2008 and 2009). The significance of the results from these analyses did not change.

Fourth, to explore the potential interactive influence of I- and we-referencing language, we conducted additional analyses in which we added the interaction term between I- and we-referencing language. Results show that the models adding the interaction of I- and we-referencing language did not significantly improve explanatory power, providing no evidence of interaction effects.

Fifth, to explore potential clusters of CEOs as a function of their language use, we conducted a multilevel latent profile analysis of CEOs' I- and we-referencing language (Asparouhov and Muthén 2008). On the lower level, two profiles of use of language were revealed in stakeholder letters. The profiles predominantly differed in the use of I-referencing language (high vs. low) but were characterized by similarly high levels of we-referencing language. Based on these profiles, two clusters of CEOs were identified: The dominant cluster (76.5%) almost exclusively used "High We Low I" profiles. CEOs in the second cluster (23.5%) used "High We High I" profiles about twice as often as "High We Low I" profiles.

Sixth, we explored how CEOs' use of language changed over the course of their tenure. Results for we-referencing language indicated that a quadratic model (i.e., inverted U-shape) fitted the data best ($F(3,286) = 18.61$, $p < .001$, $R^2 = .155$). For I-referencing language, a cubic model (i.e., U-shape followed by inverted U-shape) fitted the data best ($F(4,276) = 4.97$, $p < .001$, $R^2 = .054$).

Finally, we explored within-CEO associations between use of language and subsequent organizational performance (i.e., whether higher use of we-referencing language of a given CEO in a given year was associated with greater performance). Results showed that the key relationships also held within-CEOs such that the years in which a CEO made greater use of we-referencing language were followed by higher organizational performance.

Discussion

This study provides evidence that CEOs' use of we-referencing language is positively associated with higher organizational performance. This association was found across two key accounting-based financial performance indicators: return on assets and sales per employee. There was no evidence of a positive association with return on sales in this sample. In a secondary analysis we also found that these findings also held when controlling for prior years' organizational performance. Why we obtained evidence for the hypothesized relationship for only two of the three indicators is not clear. One potential reason may be that CEOs' strategies and management practices are more concerned with improving the organization's efficiency (i.e., return on assets) rather than with the revenue on goods sold (i.e., return on sales; Richard et al. 2009). This is an issue that will be important for future research to resolve.

Furthermore, results show that CEOs' I-referencing language was not associated with return on assets and return on sales (based on Bayesian statistics). This finding strengthens previous findings (which relied on null hypothesis significance testing) showing that I-referencing language is unrelated to measures of followers' organizational behaviors (Weiss et al. 2018) and political voting behavior (Steffens and Haslam 2013) as well as organizational performance (Chatterjee and Hambrick 2007). However, recent research by Steffens et al. (2018a) points to the negative effect of CEOs' actions that undermine a sense of shared identity between leaders and followers—such as high levels of CEO pay—on followers' personal identification with the CEO as well as perceptions of CEOs' leadership and charisma.

Supporting predictions derived from a growing body of social identity work in organizations (Ashforth and Mael

1989; Haslam 2004; Hogg and Terry 2000), the present findings show that CEOs' use of language that emphasizes the collective ("us") was related to improved organizational performance, as indicated by objective financial data, and I-referencing language was not. In this respect it is important to note that although we examined a limited part of CEOs' communication (i.e., their use of language in stakeholder letters), the part we focused on is generally representative of their overall communication and is the most widely read part of annual reports (Prasad and Mir 2002; Smith and Taffler 2000). Letters in annual reports are clearly not the only communication (and pathway) that can help (and is sufficient; e.g., Haslam et al. 2011) to create a strong shared identity among organizational members. However, they play a relevant role in the negotiation of CEOs' relationships with other organizational members (Palmer and Short 2008; Smith and Taffler 2000).

Moreover, although the present research provides evidence of a predictive association of CEOs' use of we-referencing language at the beginning and financial performance at the end of a year, as Steffens and Haslam (2013) observe, there is also likely to be a recursive dimension to this relationship—and our explorative analyses of the reverse relationship point to this possibility. Nevertheless, it is noteworthy that the magnitude of the effect of the hypothesized relationships (from we-referencing language to organizational performance in terms of ROA) was larger (almost twice as large) as the reverse effect (from organizational performance to we-referencing language). We also note that bi-directional (causal) relationships between variables are more common than is often assumed (Smith 1982) and even though they are often explicitly stated in theory (e.g., stakeholder theory), they are seldomly tested in empirical studies (Money et al. 2012). Within the theoretical framework of the social identity approach, this accords with the suggestion (e.g., Haslam 2004) that group success—conveying high group status—increases the potential for people to self-enhance via their group membership in ways that also render them both more likely to identify with the group (Oakes et al. 1994) and to strive to advance the group's interests (e.g., Mael and Ashforth 1992). In sum, this bi-directional process speaks to the fact that leaders not only shape the social realities of organizational members but are also themselves shaped by those realities (Haslam et al. 2011).

The present research was conducted with a sample of German companies which primarily operate within an individualistic, Western culture. For this reason, it remains an open question whether the relationships studied here would differ across cultures (e.g., for companies based in more collectivistic cultures such as Japan). As things stand, we know relatively little about how culture shapes the impact of identity leadership (Haslam et al. 2011). However, there are two important exceptions. First, in the ILI-Global Project (research conducted in over 20 countries on all six continents) van Dick et al. (2018) showed that identity leadership (as measured by the Identity Leadership Inventory; Steffens et al. 2014b) is interpreted in similar ways in individualistic (e.g., Germany, USA) and collectivistic countries (e.g., China, Japan). Second, in a study of Chinese workers, Steffens et al. (2018b) found a lagged association between leaders' identity entrepreneurship and employee burnout, engagement, and turnover intentions. This previous research, therefore, gives us no grounds for thinking that the present results for we-referencing language are likely to differ in more collectivistic cultures. However, in regard to I-referencing language, it is possible that one might find a more pronounced negative relationship with organizational performance. This is because speaking of "me, myself, and I" constitutes a strong norm violation in this environment and might therefore elicit a harsh response from followers (Hornsey et al. 2006).

Our research offers a new perspective on strategic leaders and the ways in which they can engage in leadership. Most particularly, it challenges our understanding of what CEOs need to do in order to be effective. In many ways, as individuals CEOs may be unlike others and possess unique qualities that they do not share with any of their potential followers (Finkelstein et al. 2009). Yet, while this may be true, our research suggests that this is not necessarily what makes them effective. Instead, CEOs can also be seen as group members and it is by demonstrating that they are one of "us," they are able to influence other group members in ways that motivate them to contribute to shared group goals (Haslam et al. 2011). These results point to the importance of CEOs acting as identity entrepreneurs who represent and create a shared identity (i.e., the shared values, norms, and beliefs of their organization; Reicher et al. 2005). To the extent that leaders define and emphasize a shared sense of organizational identity, this in turn may help make this identity salient for other organizational members (Riantoputra 2010). This is something CEOs can attempt to do themselves through general communication (of the form studied here) or personal contact, but it is also something that can be achieved by ambassadors who speak to (and for) the group on their behalf (Finkelstein et al. 2009; e.g., other members of their top management team, Voss et al. 2006).

As well as speaking to the literature on characteristics of effective CEOs, this research expands upon previous work informed by the social identity approach to leadership (e.g., Ellemers et al. 2004; Haslam et al. 2011; van Knippenberg and Hogg 2003). Previous organizational research in this tradition has tended to focus on followers' evaluations of leaders (e.g., perceived trust or perceived effectiveness; Barreto and Hogg 2017) but considerably less on material outcomes of leadership (e.g., organizational performance). At the same time, although research by Steffens and Haslam (2013) has examined the effect of we-referencing language on leader effectiveness

(i.e., election victory), studies of identity entrepreneurship have largely involved qualitative studies of political leadership (e.g., Augoustinos and de Garis 2012; Gleibs et al. 2017; Reicher and Hopkins 2001). Expanding this approach to the strategic level of business leadership, the current study provides evidence of the impact of CEOs' social identity-related behavior on material organizational outcomes. The present study advances our understanding of the relationship between social identity and performance by, to our knowledge, being the first study to provide evidence of the contribution of CEOs' identity leadership to objective organizational performance.

On the basis of the findings, one might infer that CEOs (and other leaders) simply need to use more we-references in their communication to become more effective. Although there is evidence of a positive association between we-referencing language and organizational success, it is possible that by increasing their use of we-referencing language, leaders will not necessarily reap lasting benefits. Although carefully crafting one's pronouncements is important and can be effective, leaders will ultimately also be challenged to turn words into action (Haslam et al. 2011). If they see themselves and speak as individuals, this is unlikely to yield fruitful returns. Moreover, if they speak for a collective that does not exist or for which they are not representative of, then this too seems likely do more harm than good.

Thus, in a first step (see Haslam et al. 2017), it is important for leaders on all organizational levels to reflect on the role that a shared social and organizational identity plays for organizations (Haslam et al. 2003; Haslam 2004) and for leadership in particular (Haslam et al. 2011; van Knippenberg and Hogg 2003). Following this, leaders may reflect on who the people are who belong (and who do not belong) to the group they want to lead and what the group is (and is not) about (i.e., its norms, ideals, and values). This should allow leaders to engage in identity entrepreneurship (e.g., through their use of we-referencing language as discussed here) in ways that are more likely to help clarify and shape the group's understanding of goals and aspirations.

Limitations and Directions for Future Research

Three key strengths of this research are that it was preregistered (such that the study design and hypotheses were specified prior to data collection and analysis), collected data from organizations for a period of 16 years, and relied on unobtrusive objective measures. However, the archival approach we adopted also has limitations—of which three stand out. First, operationalizing organizational financial performance is not straightforward (Agle et al. 2006; Richard et al. 2009). Indeed, every indicator has its own limitations and each sheds only partial light on organizational performance as a whole. Here, following Agle et al.'s (2006) recommendations, we focused on accounting-based indicators of organizational performance as these can be directly influenced by CEOs. Yet, taking this forward, there could be merit in examining market-based (e.g., Tobin's Q) and other (e.g., corporate social performance) indicators of performance. For example, although we believe them to be less relevant to the ideas we were seeking to test in the present research (because our focus was on intra-organizational responses to CEOs), market-based indicators might provide insight into external perceptions of organizations. Relatedly, it would be interesting to explore whether (and how) external stakeholders react to CEOs' use of we-referencing language as a function of their identity-based relationship to the organization—as their reactions might differ from those of employees (König et al. 2018).

Second, we were unable to explore the psychological processes that link CEOs' use of we-referencing language to financial performance. So although other evidence suggests that (a) leaders' own organizational identification transfers to followers' identification and, through this, affects those followers' organizational behavior (e.g., OCB; van Dick et al. 2007) and (b) leaders' use of language affects followers' leader endorsement (Hornsey et al. 2005; Weiss et al. 2018). These are linkages that we were not able to examine in the present research. In this regard too, it would be worth examining in more detail the potential bi-directional nature of the relationship between CEO language and organizational performance. To further unpack possible causal bi-directional paths between the variables (i.e., we-referencing language and organizational performance), future work might examine these relationships in experimental studies that manipulate these variables independently (i.e., to create exogenous predictor variables; (Smith 1982; Steffens et al. 2013).

A third limitation relates to our reliance on CEOs' letters in annual reports as the focus of our analysis. We chose to examine these because the CEOs' letter to stakeholders is part of the non-statutory section of annual reports that is unaudited and therefore gives CEOs the freedom to articulate their agenda for their organization in their own words. Unlike many previous studies (e.g., Smith and Taffler 2000), our analysis relied on an objective automated word count which is unobtrusive and eliminates researcher bias. Nevertheless, future research could explore additional aspects of identity-related speech through more fine-grained analysis of CEO pronouncements (e.g., examining linguistic strategies for presenting oneself as prototypical of the group; Augoustinos and de Garis 2012).

Concluding Comment

In line with the social identity approach to leadership (Haslam et al. 2011; Hogg et al. 2012; van Knippenberg 2011), the present study served to underline claims that, to be effective,

CEOs need to be identity leaders—that is, leaders who inspire positive organizational outcomes by representing and cultivating a sense of "we" among organizational members. More specifically, the study supported this approach by demonstrating that CEOs' we-referencing language is positively associated with the subsequent financial performance of their organization. In line with the quote from Peter Drucker which prefaced this paper, this suggests that leaders are likely to be effective not by asserting their personal identity through references to "I" but by cultivating collective identity through references to "we" and "us." Ultimately, though, as Drucker intimates, the key to success here seems likely to derive from the fact that the leaders in question are not simply parroting a concern for the group but really mean it.

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