CEOs Showing Humanity: Human Care Statements in Conference Calls and Stock Market Performance During Crisis

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ABSTRACT

Conference calls provide opportunities for CEOs to inform market participants (i.e., financial analysts and investors) about their companies' prospects. Much research has focused on how CEOs speak about business-related topics in these calls, yet surprisingly the literature has not considered how statements that go beyond financial information affect market participants. When we explored archival data of how CEOs of publicly traded U.S.-based companies from the Russell 3000 Index spoke about COVID-19 in conference calls as the pandemic began in 2020, we noticed that about half of CEOs made *human care statements* that expressed a concern for people, with seemingly little direct financial relevance. However, although these statements were largely generic, vague expressions rather than clear plans, we discovered that the more such statements CEOs made, the better their companies fared on the stock market when stock prices tumbled globally. Follow-up explorations unveiled a negative association between CEO human care statements and stock volatility, meaning that market participants discounted these companies' future earnings less. Our explorations suggest that it pays off for CEOs to go beyond mere financial information and show some humanity, with implications for downstream theorizing about CEO impression management.

Keywords: financial analysts, CEOs, conference calls, impression management, stock market

"*I mean, first of all, any time people are sick or tragically lost their lives that's a much more important topic than anything we're covering today*. *So I just want to sort of put a fine point on that.*" – Strauss H. Zelnick, CEO of Take-Two Interactive Software, Inc.

"First off, the whole coronavirus situation is a human situation. It's kind of a human tragedy." – Andrew Anagnost, CEO of Autodesk, Inc.

"Obviously, the coronavirus makes a very fluid situation. […] I'll start by saying, our first priority is making sure that our employees, partners and customers are safe." – Anders Gustafsson, CEO of Zebra

Public conference calls with corporate executives provide a valuable opportunity for market participants (i.e., financial analysts and investors) to gather information about companies (Brown, Call, Clement, & Sharp, 2015; Frankel, Johnson, & Skinner, 1999; Matsumoto, Pronk, & Roelofsen, 2011). This information is critical for a company's performance on the stock market (Brauer & Wiersema, 2018), as investors often behave according to financial analysts' evaluations after conference calls (e.g., earnings forecasts). Thus, a growing literature focuses on how managers – in particular, Chief Executive Officers (CEOs) – navigate conference calls with financial analysts and how analysts and the market react to CEOs' statements during these calls.

This literature has generally established the importance of CEO statements in conference calls: what CEOs say, and how they say it, can affect analyst reactions and, in turn, influence investors and reverberate on the stock market (Bowen, Davis, & Matsumoto, 2002; Druz, Petzev, Wagner, & Zeckhauser, 2020; Kimbrough, 2005). Thus, CEO statements often include information that paints their business outlook in a favorable light, in an endeavor to manage analysts' evaluations by cultivating as positive of an impression of their companies' financial prospects as possible (Brauer & Wiersema, 2018; Washburn & Bromily, 2014). The literature mostly casts financial analysts as experts with a laser focus on financial matters; their role is to cut through the noise and assess and communicate a company's financial prospects with high accuracy, serving as prudent information intermediaries to investors (Brauer & Wiersema, 2018).

An overlooked aspect is, however, that conference calls at times include topics other than core business and finance, and it is unclear how such information may influence analysts and market participants. For example, at the onset of the COVID-19 pandemic, several CEOs made statements in conference calls that were not directly relevant to business, with some highlighting their concerns for people as the introductory quotes above illustrate (e.g., CEO Strauss Zelnick emphasizes that considerations about human life are "a much more important topic than anything we are covering today"). At first glance, such statements seem to be of little relevance for financial analysts and should therefore leave market participants largely unaffected. Yet in the absence of relevant theory and research on CEO statements that go beyond core business in conference calls with financial analysts, we set out to empirically explore the nature and effects of such statements that address a concern for people.

Specifically, we focus on two research questions: First, when CEOs make statements that express care for people (what we refer to as *human care statements*) in conference calls, what is the nature of these statements? Second, do human care statements prompt a stock price reaction, and if so, how might they influence market participants (i.e., financial analysts and investors) in ways that reverberate on the stock market? We explore these questions by examining conference calls with CEOs of publicly traded companies in the Russell 3000 Index (i.e., the largest publicly traded companies in the United States) during the onset of the COVID-19 crisis.

Our research reveals four discoveries. Surprisingly, our first discovery is that, despite operating in the context of a global crisis that had a dramatic effect on people, only about *half* of the CEOs who spoke about the crisis took a moment to make human care statements in conference calls with financial analysts. Our second discovery is that most of those human care statements were "cheap talk": relatively empty, even throwaway comments involving generic

expressions of care for people (as the quotes above illustrate), rather than statements involving concrete actions CEOs were taking, or planning to take, to offset the crisis's threat to human health and well-being. Yet, despite the superficiality of these statements, we were surprised by our third discovery that the number of human care statements CEOs made positively predicted their companies' stock prices during the severe market crash caused early in the crisis, labelled as the "Fever" period in prior research (Ramelli & Wagner, 2020). As Figure 1 illustrates, most U.S. companies experienced a stark decline in stock prices during this period. Our additional explorations led to a fourth discovery that human care statements related to stock volatility during the "Fever" period (but not to financial analysts' evaluations of a company's future earnings). This finding suggests that a reduction in perceived uncertainty is a possible pathway through which human care statements, despite being relatively cheap talk, might influence market participants and have positive financial effects during crises.

Insert Figure 1 about here

Collectively, our discoveries begin to address a void in the growing literature on financial analysts' impressions in conference calls, which has not considered the implications of CEOs raising topics with seemingly little business relevance in such calls. Our unexpected finding that market participants seem to attend to CEOs' generic human care statements in ways that reverberate on the stock market raises new questions for theory on how CEOs address broader topics in financially-focused conversations with financial analysts and the effects of doing so among market participants. Our discoveries also invite new questions about when market participants might pay attention to cheap talk, as well as how and why cheap talk influences the reactions of market participants in turbulent times and beyond.

BACKGROUND

CEOs are purveyors of critical information about their companies to analysts (Washburn & Bromiley, 2014). Conference calls provide a valuable chance for analysts, and accordingly investors, to gather information about companies' financial prospects as they prepare their evaluations (Brown et al., 2015). Indeed, the literature on financial analysts and conference calls has illustrated a variety of ways in which CEOs' words and tone in conference calls can affect financial analysts' reactions, and ultimately influence investors (Bowen et al., 2002; Kimbrough, 2005; Matsumoto et al., 2011). By influencing these market participants, CEOs' words can even influence company stock performance. As one lawyer for the Silicon Valley company *Wilson, Sonsini, Goodrich, & Rosati* cautioned executives: "Successfully handling analyst conference calls requires the nuancing abilities of a diplomat and the patience of a saint. A slip of the tongue can send a company's stock price into cardiac arrest" (Feldman, 1996).

Even more subtle linguistic markers of a company's business outlook, such as CEOs' positive and negative tone during conference calls, predict stock returns (Huang, Teoh, & Zhang, 2014; Mayhew & Venkatachalam, 2012; Price et al., 2020). For example, Druz et al. (2020) found that when CEOs' tone becomes more negative, analysts adjust their earnings forecasts downward, and uncertainty increases. Other research has found that the particular words CEOs use in conversations can shape analyst and stock price reactions (e.g., Bochkay, Hales, & Chava, 2020). For example, when CEOs speak in more vague terms (e.g., using words such as "approximately", "probably," and "maybe"), analysts report greater uncertainty and lower positive reactions (Dzieliński, Wagner, & Zeckhauser, 2017). On the positive side, research found that when CEOs used euphemistic language (e.g., "a bump in the road"; "caught by surprise"; "in uncharted waters"), this mitigated the effects of bad news announcements on stock market returns (Suslava, 2021). Overall, these findings suggest that how CEOs discuss about

business matters for how analysts evaluate their companies and, ultimately, how CEOs' companies fare on the stock market.

Yet, there is an implicit assumption in the literature that what matters in conference calls with financial analysts is language that is directly relevant to business. Accordingly, the literature has focused on exploring how CEOs address aspects related to business outlook, and in particular financial matters. This focus may paint a picture of conference calls as a setting that is fully concentrated on business and finances, and likewise, of financial analysts as an audience unlikely to be swayed by statements with less obvious relevance to the topic at hand. However, we propose that in conference calls, CEOs might speak about other, broader topics that at first glance, may seem less obviously relevant to their business. Indeed, business-related aspects are not necessarily narrowly financial. For example, given that climate change is material to many companies (e.g., in terms of physical exposure, regulatory exposure, and opportunities), CEOs tend to also address climate exposure during conference calls (Sautner, Van Lent, Vilkov, & Zhang, 2023).

Our research aims to explore the nature of statements that go beyond core business and finances, and their potential effects on market participants. Specifically, we ask: How might market participants (i.e., financial analysts and investors) react to CEO statements in conference calls that are less obviously relevant to business? Business-irrelevant statements may stand out poorly in the context of conversations that are supposed to be "about finance." Particularly if market participants conclude that CEO statements – like the quotes we provided at the outset – lack meaningful substance, then they should discard them in their evaluations and the stock price would not react. Such generic statements could even be expected to adversely affect the reactions of market participants. Market participants might be expected to penalize CEOs for making

vague and unsubstantiated claims. Indeed, scholars have cautioned against cheap talk that involves promises without substance, labeling low-cost, non-binding, and non-verifiable statements as "too cheap for investors to take seriously" and asserting that only valuable information should influence market participants (Whittington, Yakis-Douglas, & Ahn, 2016).

However, it is also possible that such statements – even if they do not truly offer any substance – might reassure market participants about a company's prospects in ways that shape their reactions and reverberate on the stock market. Indeed, some scholars suggested that, despite the literature largely considering cheap talk as empty and inconsequential, "verbal claims about one's intentions may be costless, but leaders use them, and they appear to influence behavior in ways we do not fully understand" (Tingley & Walter, 2011: 997).

Given the focus of past research on language features related to business outlook, it is not clear which statements CEOs may make about broader topics or how such statements might shape the reactions of market participants, and thus a company's stock price. Our research aims to shed light on these open questions, leveraging the COVID-19 pandemic as a disruptive crisis worldwide where we anticipated CEOs might raise topics that are less obviously relevant to business in conference calls with financial analysts. As the quotes at the beginning of the paper illustrate, in a crisis like COVID-19, CEOs may have felt compelled to pause from "business as usual" and consider the bigger picture as human life across the globe was impacted by this unprecedented global shock. Inspired by what we noticed in the transcripts of conference calls, we explored what CEOs say when they express human care in these calls as well as whether and why these statements trigger any stock price reactions. We structured our methods and results sections around these two research questions.

RESEARCH QUESTION 1: METHOD

Our first research question asks what CEOs say when they express concern for people during a crisis. To address this question, we obtained archival data of statements from every CEO of a company on the Russell 3000 Index who spoke about COVID-19 in conference calls with analysts as the crisis unfolded from January to March 2020. We chose to examine CEOs of Russell 3000 companies because the Russell 3000 Index represents the largest publicly traded companies in the United States, equivalent to 98% of the total U.S. public equity market, thus providing a broad group of companies for which comparable data is available and which has also been examined in other papers investigating the financial impact of COVID-19 (Ramelli & Wagner, 2020). We excluded financial companies as is standard in the finance literature.

The dataset included segments of text from conference calls in which a CEO mentioned either "coronavirus", "covid-19", "2019-ncov", or "sars-cov-2" at least once.[1] Calls that did not explicitly refer to the COVID-19 crisis were not included in the dataset. We coded conference calls from January 22nd to March 20th, 2020, because prior to January 22nd, 2020, CEOs did not mention COVID-19 (Ramelli & Wagner, 2020) and after March 20th, 2020, the Federal Reserve Board's major interventions to support credit to large corporations kicked in. March 20th, 2020 also represents the end of the "Fever" period when most U.S. companies experienced a stark decline in stock prices (see Figure 1). Overall, our sample consists of 884 statements made in public conference calls involving CEOs of 448 different companies. These 884 statements came from 510 unique conference calls (i.e., some calls involved more than one statement about the crisis, and some companies had more than one conference call during the onset of the crisis).

[1] It is conceivable that CEOs used other terms to refer to COVID-19. Therefore, the dataset might miss some human care statements that were mentioned but did not involve the keywords used. However, the number of statements involving keywords such as "pandemic" should be minimal, given that COVID-19 was not declared a pandemic until March 11th ,2020.

We conducted three rounds of coding. First, two independent research assistants coded whether each sentence said by a CEO during a conference call involved a human care statement. The research assistants were provided with a coding manual (available on OSF: https://osf.io/c34uh/?view_only=c29a1b0338ec4ba9abc3822904f24355) that they used to indicate whether a given segment of text from a call mentioned a human care statement (0 = *no*, 1 = *yes*). The two research assistants were first asked to code the same randomly selected subset of conference calls from 46 CEOs (i.e., approximately 10% of CEOs in our sample). Given that Cohen's kappa's indicated a high level of interrater agreement (0.82), the remaining 838 texts were divided among the two coders and coded separately.

Human care statements included statements such as "*The first and foremost order of business is to make sure our employees and our partners are safe and protected*" (E. Nelson Mills, Columbia Sportswear CO.; Consumer Durables & Apparel industry), "*Our hearts are with the people around the world affected by this outbreak*" (Ernie L. Herrman, TJX Companies Inc.; Retailing industry), and "*First and foremost, we are taking active precautions to help protect the health and well-being of our employees and working closely with our clients*" (Amerino Gatti, Team Inc., Commercial & Professional Services industry). These human care statements all involve CEOs expressing care for people – whether their own employees, customers, and clients, or the people around the world being affected by the virus.

Based on this initial round of coding, we computed, for each CEO, the sum of the number of times that a CEO made human care statements when they addressed the crisis, throughout all conference calls from January 22nd to March 20th, 2020. This resulted in a sum score for each of the 448 CEOs in our sample that indicated the number of times that each CEO made human care

statements.[2] We also explored how often CEOs made statements over two different time periods defined by Ramelli and Wagner (2020): the "Outbreak" period (from January 22nd to February 21st, 2020), which is immediately prior to the severe market crash, and the "Fever" period (from February 24th to March 20th, 2020), which represents the severe market crash prompted by COVID-19 during which stock prices plummeted dramatically (see Figure 1).[3] See Table 1 for an overview of the frequency of CEO human care statements across these two time periods.

Insert Table 1 about here

Second, the research assistants conducted a more detailed coding to unveil the nature of CEO's human care statements. CEOs made human care statements in 302 text segments, which represents 34.2% of our total sample of 884 text segments. Following a second coding manual (available on OSF: https://osf.io/c34uh/?view_only=c29a1b0338ec4ba9abc3822904f24355), for these 302 text segments, coders distinguished between human care statements that were more detailed and involved an *action* (i.e., specific, concrete actions to be taken to care for people), versus less detailed "cheap talk" involving a mere *statement* (i.e., general acknowledgments of care for people without reference to any specific, concrete actions). Coders further differentiated between *stakeholder* statements focused on people directly involved in the CEO's company (e.g., employees, customers, suppliers), or *societal* statements focused on people indirectly relevant to the CEO's company (i.e., people affected by the virus on a broader and/or global scale).

[2] We use a continuous measure rather than alternative options (e.g., dichotomizing the variable), for two reasons. On an empirical level, scholars have cautioned against dichotomizing continuous variables because doing so loses information, reduces power, and increases the probability of a Type II error (MacCallum, Zhang, Preacher, & Rucker, 2002; Pham, 2015). On a conceptual level, we reasoned that CEOs who made more (v. fewer) human care statements would send a stronger signal to market participants about their concern for people's health and well-being during the crisis, and thus the sum score might hold more information than other alternatives.

[3] These date ranges exclude weekend days because markets are closed (i.e., February 22nd and February 23rd, 2020).

Finally, we also asked the research assistants to code whether CEOs placed particular *emphasis* on human care by using phrases such as "first and foremost" and "our utmost priority" when making human care statements. Such phrases were quite frequent (in 52.3% of the statements) and could serve as a stronger signal of care for people because they involve setting an explicit priority on a topic other than core business and finances.

RESEARCH QUESTION 1: RESULTS

What Do CEOs Say When They Make Human Care Statements?

Intriguingly, we discovered that when discussing COVID-19 during public conference calls, almost half of the CEOs (216, or 48.2%) never made any human care statements (see Table 1). This finding suggests that CEOs may often choose not to speak about the impact that a crisis has on people in conversations with financial analysts, despite these calls taking place in the context of a global health crisis. Of the 302 CEO human care statements, 126 (41.7%) took place during the "Outbreak" period, and 176 (58.3%) took place during the "Fever" period. Thus, in the later stages of the crisis, it became more common for CEOs to make human care statements.

In total, 177 CEOs (39.5% of the sample) made a human care statement once, 46 CEOs (10.3% of the sample) did so twice, and 9 CEOs (2.0% of the sample) made a human care statement more than twice. Thus, there was some variability in how many human care statements CEOs made and the potential strength of the signal of care for people they sent.

The most frequent type of human care statements were general statements about people involved in the company (e.g., employees, customers, see Table 2). Specifically, 183 CEOs (40.8%) mentioned *stakeholder statements* (i.e., about parties involved with the company), 84 CEOs (18.8%) mentioned *stakeholder actions*, 60 CEOs (13.4%) mentioned *societal statements* (i.e., about parties not involved with the company), and 18 CEOs (4.0%) mentioned *societal*

actions. A total of 137 CEOs (30.6%) placed particular emphasis on care for people by using phrases such as "first of all" and "our top priority" when making human care statements.

Thus, most CEOs' human care statements (74.8% of the 302 statements, see Table 2) were generic statements about how they intended to care for stakeholders directly involved in their companies during the crisis. These statements could be considered "cheap talk" expressing care for people, in that they did not involve any discussion of the types of actions that CEOs were taking to offset the threat to human health and well-being.

Insert Table 2 about here

RESEARCH QUESTION 2: METHOD

Our second research question asks whether CEO human care statements might relate to stock price reactions – and if so, how the statements might be influencing market participants. Would market participants ignore such statements, react poorly to them, or be positively influenced in ways that reverberate on the market? To address this question, we collected information about the stock market performance of the 448 companies in our sample and examined whether there was a relationship between the number of human care statements CEOs made and their company's stock market performance during the crisis.

Measure of Company Stock Market Performance

In terms of company stock market performance, we examined cumulative stock returns (i.e., the aggregate amount that a company's stock price changes over a specific period, adjusted for dividends) during the "Fever" period (i.e., from February 24th to March 20th, 2020) when the stock market crashed. To calculate cumulative returns, we retrieved daily stock prices from the Compustat Capital IQ North America Daily database (accessed via Wharton Research Data

Services, WRDS). We adjusted returns for dividends through the daily multiplication factor and the price adjustment factors provided by Compustat.

Control Variables

We controlled for company industry (as fixed effects) and six standard variables from the finance literature (i.e., leverage, cash holdings, company size, book-to-market, market beta, and profitability) that could influence our results (see Ramelli & Wagner, 2020). We also controlled for the total number of times that a CEO spoke about COVID-19, so that our analyses account for the number of times that the crisis was addressed in the call and thus differences in opportunities CEOs had to make human care statements.[4] See Table 3 for a detailed description.

Insert Table 3 about here

RESEARCH QUESTION 2: RESULTS

Table 4 includes means, standard deviations, and correlations among variables.

Insert Table 4 about here

Do Stock Prices React to CEO Human Care Statements?

Our second research question asks whether stock prices reacted to CEO human care statements, and if so, how market participants might be influenced by these statements. To address this question, we used multiple linear regression (OLS) to examine the relationship between the number of times that a CEO made human care statements and their company's stock performance during the "Fever" period. We report unstandardized regression coefficients and

[4] As a different way to account for the opportunities that CEOs had to make human care statements, we conducted additional analyses controlling for document length (i.e., the log number of words in the call). The effect of human care statements on cumulative returns remained significant when controlling for this variable, $B = 2.44$, 95% *CI*: [0.23, 4.65], $SE = 1.12$, $t(388) = 2.18$, $p = 0.030$, $\eta^2 = .01$, and document length did not predict cumulative returns, $B = 0.00$, 95% *CI*: [-0.00, 0.00], $SE = 0.00$, $t(388) = 0.64$, $p = 0.522$, $\eta^2 = .00$.

robust standard errors. *P* values below 0.05 are considered statistically significant. For details on the statistical software and packages, see Appendix A in the SOM. Data and scripts for analyses are available online at: https://osf.io/c34uh/?view_only=c29a1b0338ec4ba9abc3822904f24355.

Results (see Figure 2 and Table 5) showed that the number of times CEOs made human care statements was positively related to cumulative returns, $B = 2.49$, 95% confidence interval (*CI*): [0.30, 4.69], $SE = 1.12$, $t(413) = 2.23$, $p = 0.026$, $\eta^2 = .01$. The more human care statements CEOs made, the better their companies performed economically on the stock market while stock prices declined steeply during the "Fever" period (i.e., from February 24th to March 20th, 2020).[5] Specifically, the linear effect of making one human care statement was equivalent to a 2.49 percentage point increase in cumulative returns. Given that the median market value of equity in our sample was approximately $3.17 billion, this effect amounts to around $78.9 millions of company financial value preserved in the wake of the crisis. This is a sizable effect: it is equivalent to the effect of a 0.75 standard deviations lower leverage (i.e., debt).[6]

Insert Figure 2 and Table 5 about here

Robustness checks. The above results remained substantively the same when we a) omitted control variables (see SOM, Table S2), b) controlled for additional variables (e.g., CEO gender, measures of corporate culture, measures of CSR, the emotional tone of the statements, the extent to which companies' operations involve foreign parties, and the extent to which companies' business was likely disrupted by lockdown measures; see Table 6 for a detailed description and Table 5, Model 3), c) examined the effects of different types of CEO human care

[5] We tested whether there were any non-linear effects in polynomial regression models. There were no non-linear effects in quadratic, cubic, or quartic models (all $|t|$'s < 1.53, all p's > .128), and the linear effect remained significant in all these models, all $|t|$'s > 2.24, all p's < .025. Thus, human care statements related to cumulative returns in a linear fashion, such that additional statements predicted higher cumulative returns during the crisis.
[6] Leverage is a key measure of a company's financial strength and prior research found that it was an influential predictor of returns during the market crash (Ramelli & Wagner, 2020).

statements (i.e., stakeholder statements, stakeholder actions, societal statements, societal actions, emphasis; see SOM, Appendix B, Table S3), d) examined the number of CEO human care statements made during the "Outbreak" and "Fever" periods separately (see SOM, Appendix C, Table S4), e) removed outliers (see SOM, Appendix D), and f) assessed sensitivity to omitted variable bias (see SOM, Appendix E). We also discovered that most human care statements were made in the presentation, rather than the Q&A section, of the conference call, and that the effect of human care statements on cumulative returns remained significant when controlling for whether the analyst had asked a question about COVID-19 (see SOM, Appendix F).

Insert Table 6 about here

Moreover, a supplemental difference-in-differences analysis provided further insight about the direction of these effects: CEO human care statements prior to the "Fever" period predicted a reduced decline in returns during the "Fever" period. Thus, although we cannot rule out reverse causality given the archival nature of our dataset (i.e., CEOs whose companies performed better on the stock market could be better positioned to make human care statements), this difference-in-differences analysis reinforces confidence in the suggested direction of the effects – that CEO human care statements represent a protective factor that may influence market participants and lead to better share price performance in a crisis (see SOM, Appendix G).

ADDITIONAL EXPLORATIONS

Do the Initial Effects of CEOs Making Human Care Statements Revert on the Long-Term?

We were curious if the positive effects of CEOs making more human care statements might reverse after the "Fever" period. During a crisis, certain company characteristics (e.g., high leverage) may lead market participants to immediately shy away from companies that they anticipate will have worse performance. But once the shock of the crisis passes and markets

restabilize, market participants may readjust their assessments (e.g., no longer avoiding companies with high leverage), leading to a reversal of effects observed during the crisis. Thus, we wondered: does a CEO making more human care statements positively affect stock performance (e.g., by leading market participants to favorably evaluate companies) during an acute crisis, but once this crisis passes, might there be a significant reversal[7] of the initial effect (e.g., as investment behavior returns to normal and such companies are no longer prioritized)?

To address this question, we examined the effect of human care statements on cumulative returns during two "Recovery" periods after the "Fever" period. First, we examined a "Recovery" period from March 23rd to April 13th, 2020, prior to the implementation of major government interventions that could have influenced the financial performance of companies (i.e., when the federal government expanded its primary and secondary market facilities to support corporations). Second, we examined a "Recovery" period from April 14th, 2020, to May 28th, 2021. It is possible that the long-term effects are influenced by additional conference calls, and our analyses of different time frames are not able to account for these effects. Moreover, during the latter period, the financial performance of companies could have been affected by these government interventions that began after April 13th, as well as other governmental measures in the U.S. that took place during this period (e.g., several stimulus packages passed by the U.S. House of Representatives in May and October 2020).

[7] Looking for a (lack of) significant reversal is standard in the finance literature (see for example Table 3 in Druz et al., 2020 who examined results in later time periods after conference calls to verify that the initial effect they observed did not reverse).

Although for some variables the initial effects (partially) reversed (see Table 7)[8], strikingly, the effect of CEOs making more human care statements on cumulative returns did not significantly reverse, $B = 0.14$, 95% *CI:* [-2.20, 2.48], $SE = 1.21$, $t(413) = 0.12$, $p = 0.908$, $\eta^2 = .00$. The effects of making more human care statements also did not significantly reverse as the crisis progressed into 2021 (i.e., from April 14th, 2020 to May 28th, 2021), $B = 1.31$, 95% *CI*: [-11.00, 13.62], $SE = 6.26$, $t(401) = 0.21$, $p = 0.834$, $\eta^2 = .00$. This lack of a significant reversal is meaningful because it indicates that market participants did *not* readjust their behavior to return to "normal" (i.e., pre-crash) patterns; namely, it is not the case that human care statements initially drew market participants toward these companies, but then later (once the stock market shock passed) market participants readjusted to no longer prioritize these companies. Overall, these findings suggest that the effect of human care statements was not merely a temporary (and perhaps behaviorally induced) mispricing, but rather a sustained perception of greater company value among market participants, even after the acute crisis had passed.

Insert Table 7 about here

Why Do CEO Human Care Statements Relate to Stock Performance?

Why might we have observed a relationship between CEOs making more human care statements in conference calls with analysts and company performance on the stock market as it crashed during the "Fever" period? The finance literature suggests that there are two possible routes through which CEOs' statements in conference calls can influence market participants,

[8] For example, looking at cumulative returns from March 23rd to April 13th, 2020, we find that the effect of leverage, which had significantly predicted lower cumulative returns during the crisis as investors shied away from debt-heavy companies ($B = -0.16$, 95% *CI:* [-0.01, 0.20], $SE = 0.05$, $t(413) = -3.41$, $p < 0.001$, $\eta^2 = .02$), reversed over this later time period, $B = 0.09$, 95% *CI:* [-0.01, 0.20], $SE = 0.05$, $t(413) = 1.73$, $p = 0.085$, $\eta^2 = .01$; high-leverage companies continued to significantly recover as the crisis progressed into 2021, $B = 0.82$, 95% *CI*: [0.10, 1.53], $SE = 0.36$, $t(401) = 2.25$, $p = 0.025$, $\eta^2 = .02$. Thus, as the crisis progressed, market participants reversed their initial assessments such that they shielded away from high-leverage companies during the crisis period (e.g., because they anticipated these companies would perform more poorly) and readjusted once the acuteness of the crisis passed.

and thus stock market performance. The first route is through financial analysts' earnings forecasts, which can affect investor reactions and stock price (Beaver, Cornell, Landsman, & Stubben, 2008; Lys & Sohn, 1990). Analysts might adjust their earnings forecasts upward, or downgrade them less, when CEOs make more human care statements because they expect better earnings from companies whose CEOs make more such statements. The second route is through the discounting of expected future earnings made by both market participants (i.e., the extent to which market participants perceive stocks as "risky"). The discounting of future earnings by market participants can be influenced by some subjective judgments of risk in ways that affect stock price (Imam, Barker, & Clubb, 2008). Thus, CEOs making more human care statements may have prompted market participants to discount future earnings less, thus resulting in higher stock prices during the "Fever" period. Accordingly, we conducted a series of exploratory analyses to probe whether the number of human care statements may have affected market participants' reactions through either of these routes.

Route 1: Financial Analysts' Earnings Forecasts. To explore the first route, we examined the *change in analysts' forecasts* after each of the 510 conference calls took place, following the approach used in past research (Ramelli, Wagner, Zeckhauser, & Ziegler, 2021). We obtained analyst forecasts from IBES and were able to match 344 conference calls with at least some analysts forecast data (67.5% of the 510 unique conference calls). We examined how consensus forecasts (i.e., the median of the latest earnings forecasts of all analysts) changed over two time periods – a shorter-term period (i.e., the consensus forecast three days after the conference call, minus the value of the consensus forecast on the day before the conference call) and throughout the end of the "Fever" period (i.e., the consensus forecast on March 20th, minus

the value of the consensus forecast on the day before the conference call).[9] We conducted a series of OLS regressions, predicting the forecast change variables for the different fiscal quarters[10] with a variable indicating the number of human care statements in the conference call that took place before the forecasts were made, the date of the call, and the control variables.

Is the number of human care statements CEOs linked to lower analyst forecasts? Results indicated that analysts did not seem to upgrade their forecasts, or downgrade them less, in response to CEOs making more frequent human care statements; the coefficient of human care statements was never significant, whether examining how analysts' forecasts changed over the short-term (i.e., three days post-call), all $|t|$'s < 0.28, all p's > .776, or examining how analysts' forecasts changed over the "Fever" period, all $|t|$'s < 1.31, all p's > .192.[11] See Table 8.

Insert Table 8 about here

Route 2: Market Participants' Discounting of Future Earnings. Next, we examined *stock return volatility* after the conference calls. Information on analysts' discount rates, as well as investors' discounting, is not publicly available or observable; thus, we used return volatility

[9] We chose these two time periods so we could examine whether effects might immediately shape analysts' reactions or unfold on the long-term.

[10] We examined forecasts that were made regarding the fiscal quarters from the second fiscal quarter of 2020 through the fourth fiscal quarter of 2020, to explore whether human care statements were associated with analysts' immediate forecasts as the crisis unfolded, or their longer-term forecasts projecting into the future.

[11] We focused our investigation on analysts' earnings forecasts, since this is information that investors observe and may use as a factor in their decision-making. However, it is possible that analysts' earnings forecasts may have missed actual differences between companies whose CEOs made more human care statements and companies whose CEOs did not. Thus, we further explored whether companies' ex-post realized earnings (i.e., their actual earnings that emerged after the forecasts, which were not observable to investors during the "Fever" period and further, may have been influenced by later policy choices) were associated with CEO human care statements. Perhaps companies whose CEOs made human care statements did end up operationally performing better than the other companies. Thus, in OLS regressions, we predicted companies' realized earnings during four time periods in 2020 (Q1: January to March, Q2: April to June, Q3: July to September, Q4: October to December) with the variable indicating the number of times the CEO made human care statements and the control variables. Human care statements did not significantly predict realized earnings during Q1 (B = -0.04, SE = 0.13, $t(298)$ = -0.34, p = 0.735), Q2 (B = 0.18, SE = 0.15, $t(298)$ = 1.21, p = 0.227), or Q3 (B = 0.14, SE = 0.14, $t(292)$ = 1.02, p = 0.306). In Q4, the effect was in a positive direction but did not reach the 5% significance threshold (B = 0.23, SE = 0.13, $t(289)$ = 1.81, p = 0.072). Overall, these results do not provide compelling indications that CEOs who made human care statements took certain actions to help their company weather the crisis, which then resulted in higher realized earnings.

as a proxy; return volatility captures a company's perceived riskiness (Kothari, Li, & Short, 2009) and can thus assess market participants' uncertainty regarding future earnings. As with earnings forecasts, we examined volatility over two periods, a shorter-term period (i.e., the 20-day trading volatility, captured as the standard deviation of the daily return, after the conference call, see Deng, Dzieliński, & Wagner, 2023) and the "Fever" period (i.e., the volatility between February 20th and March 20th). We retrieved the data from WRDS. In a series of OLS regressions, we predicted the volatility measures with a variable indicating the number of human care statements in the specific conference call that took place before the forecasts were made, the date of the call, and the control variables.

Is the number of human care statements CEOs linked to lower discounting of future earnings? Results indicated that return volatility was indeed lower when CEOs made more human care statements during the crisis in analyses examining return volatility over the 20-day post-call period, B = -0.004, 95% CI: [-0.008, -0.001], SE = 0.00, $t(435)$ = -2.43, p = 0.016, η^2 = .01. There was a similar pattern when examining return volatility over the "Fever" period, although the effect did not reach the 5% significance threshold, B = -0.003, 95% CI: [-0.005, 0.00], SE = 0.001, $t(435)$ = -1.90, p = 0.058, η^2 = .003. Further, when the volatility measures were added separately into OLS regressions that predicted cumulative returns with the measure of CEO human care statements and the control variables, higher volatility predicted lower cumulative returns during the crisis period (effect of return volatility over the 20-day post-call period: B = -114.41, 95% CI: [-156.28, -72.54], SE = 21.30, $t(435)$ = -5.37, $p < .001$, η^2 = .06; effect of return volatility over the "Fever" period: B = -118.20, 95% CI: [-199.40, -37.00], SE = 41.31, $t(435)$ = -2.86, p = 0.004, η^2 = .03). Thus, as would be expected, lower volatility was associated with higher cumulative returns as the stock market crashed in 2020. See Table 9.

Insert Table 9 about here

Overall, we found some suggestive evidence in line with the second possible explanation for how CEOs' number of human care statements in conference calls could relate to stock price. These statements, despite being "cheap talk", seemed to reduce market participants' uncertainty associated with future earnings (as captured by the reductions in return volatility) as the crisis unfolded, both over the short-term and, to some degree, over the long-term. This reduced volatility was, in turn, associated with higher cumulative returns during the crisis period. This finding suggests that perhaps market participants' confidence in the companies was reinforced when CEOs made more human care statements during the crisis.

GENERAL DISCUSSION

Our empirical explorations revealed that CEOs sometimes address topics in financially-focused conference calls with financial analysts that, at first glance, seem to have little relevance to business. We discovered that, despite their lack of substance, such statements can prompt a stock price reaction by influencing market participants (i.e., financial analysts and investors). Our findings are four-fold: 1) in a crisis, only about half of CEOs made human care statements – i.e., statements that express care for people, 2) the majority (74.8%) of these statements were "cheap talk": relatively empty, throwaway statements that expressed a general concern for the people in one's company without mentioning specific actions, 3) yet, this cheap talk was positively associated with a company's financial value during the crisis, and 4) one reason this relationship may occur is because when CEOs made more human care statements, market participants discounted future earnings less during the crisis period. These discoveries can spark

new theorizing on how statements without obvious business relevance and substance can affect market participants.

Implications for Theory Building

Our discoveries expand the literature on impression management in conference calls with financial analysts (Brauer & Wiersema, 2018; Washburn & Bromily, 2014) by focusing on how CEOs address non-business aspects in conference calls, as well as documenting the consequences of doing so – an overlooked and under-theorized topic. Our results suggest that some CEOs do raise topics that lack obvious business relevance in conference calls with financial analysts; namely, in a crisis context, some CEOs did bring up concern for people, sometimes even emphasizing that this concern was more important than the business at hand. It is particularly notable, however, that we found CEOs often neglected to bring up concern for people in the context of a global *health* crisis where threats to human life (i.e., protecting health) abounded and dramatically shaped companies' actions (e.g., closing offices, shutting down production, and shifting to remote work to protect lives). This finding suggests that many CEOs may view conference calls as "strictly business," exhibiting a reluctance to address topics that are less obviously related to core business, even during a human-centric crisis.

Thus, a first theoretical direction inspired by our discoveries concerns building theory around CEO decision-making around non-business topics in conversations with financial analysts. For example, theoretical models could investigate how CEOs choose to raise non-business aspects in conversations with financial analysts. What varieties of non-business issues do CEOs address in calls with financial analysts? Why do some CEOs choose to address non-business aspects whereas others choose not to? Perhaps some CEOs are concerned that non-business aspects, such as general statements of care for people outside the business, will be

viewed as irrelevant by analysts, or even constitute a red flag, as analysts might consider such statements as distracting or insubstantial. Our discovery encourages scholars to build theoretical models that address questions related to whether and how CEOs address non-business topics during calls that are largely financially-focused.

Second, our discoveries can inspire future theorizing about how and why market participants attend to cheap talk in conference calls. Building on our discoveries, future inquiry could build conceptual models related to when and why analysts attend to, and may be biased by, cheap talk. Models could help address questions such as: When are human care statements particularly relevant and influential on analysts' impressions? And why might analysts even pay attention to statements of human care? Does a CEO making more human care statements alleviate analysts' own anxiety, thus subconsciously biasing market participants? As the literature in management increasingly considers how seemingly meaningless statements (i.e., "small talk") have a deeper significance in organizational life (Methot, Rosado-Solomon, Downes, & Gabriel, 2021), our discovery suggests that the literature on financial analysts and conference calls would benefit from integrating this perspective and building models that regard the role of seemingly superficial statements from CEOs. Relatedly, we examined how many times CEOs made human care statements and found that when CEOs expressed *more* regard for people, it predicted better company performance. This finding suggests that it is the strength of signals of humanity that matters, rather than the mere presence or absence of a signal and raises questions about whether and how subtle differences in the magnitude of CEO's human care statements, such as their frequency, may affect analysts and shape results. Future inquiry could build models of how, and to what degree, care for people is signaled in conference calls with financial analysts and the effects of different signal types and strengths.

Third, given the observed positive effects of cheap talk on company performance, it is worth exploring whether CEOs intentionally tried to sway analysts by showing care for people, or whether they genuinely wanted to signal their humanity. CEOs might use cheap talk as a strategic corporate communication tool to sway market participants or to positively shape their reputation, yet there might be situations when engaging in cheap talk backfires. Specifically, in our research, we examined conference calls during a rapidly unfolding crisis and found that in such an ambiguous and chaotic situation, even vague, low substance statements about caring for people sent a positive signal. However, in more stable situations or once the initial impact of a crisis wears off, cheap talk might be perceived negatively as market participants start to look for actions and not just words. Thus, scholars could build on our findings to develop a theory of the positive and negative consequences of CEO cheap talk, developing propositions around when such talk helps or harms companies.

A final area of theoretical inquiry inspired by our research is around the timing of cheap talk. We found that most CEOs made human care statements during the presentation section of the conference call (209 out of 302 statements, 69.2%). This is surprising given that previous research suggests that this portion of the call tends to be less informative for analysts (Matsumoto et al., 2011) and that analysts evaluate the Q&A session as more informative (e.g., in developing earnings forecasts, Brown, Call, Clement, & Sharp, 2015). Notably, we further found that the timing of the human care statements during conference calls (in the presentation v. the Q&A session) did not have different effects on cumulative returns (see Appendix G in SOM). One would anticipate that CEOs who voluntarily make human care statements at the outset of a conference call could receive greater benefits, because they are clearly putting priority on this issue, compared to those who only raise it once analysts prompt further discussion. On the other

hand, the Q&A session, which is usually less scripted, is viewed as more honest and informative (Burgoon et al., 2016). This discovery raises critical questions such as: When are human care statements perceived as strategic, insincere, and calculated (i.e., when "cheap talk" may be recognized for what it perhaps truly is), and when are such statements perceived as authentic expressions of CEO's values – and does this difference matter on the stock market? How does the timing of CEO statements affect the reactions of market participants? Addressing these and other questions around the timing of CEO communication can help enrich existing theorizing on impression management that has yet to incorporate the role of time in shaping analysts' impressions and downstream consequences on investors.

Limitations and Future Research Directions

Our research has several strengths, including examining an externally-valid sample of CEO statements in conference calls with financial analysts, leveraging multiple sources of financial data that shed some light on why we observed effects of human care statements on company performance, and exploring protective factors for company performance in the context of an unprecedented global crisis. However, as is common with any research, our investigation also has limitations that point towards opportunities for future research.

First, we focused on CEOs making human care statements because past research indicates that CEO statements should be particularly influential on analysts, investors, and the stock market (Druz et al., 2020; Mayhew & Venkatachalam, 2012). However, other executives may also make statements about aspects less directly related to the bottom line, such as human care statements, during conference calls with financial analysts. Indeed, Chief Human Resources Officers might be expected to focus more on such human aspects given the nature of their role.

Future research should explore the implications of when other executives raise non-business topics and how their statements affect market participants and stock price reactions.

Second, we chose to focus on CEOs who explicitly addressed COVID-19 in calls with financial analysts because we wanted to explore how CEOs may address this topic and its human aspects, predicting that CEOs may be more likely to raise aspects that are not strictly related to core business in this context. That is, all the CEOs we examined appeared to view the crisis as important to raise during the calls but simply differed in the extent to which they made human care statements.[12] Thus, our effects are contingent on CEOs choosing to raise a crisis in conference calls with analysts. Interestingly, out of the 2,364 CEOs of non-financial Russell 3000 companies that could have potentially been included in our analysis, only 448 (20.0%) spoke explicitly about the crisis in conference calls with analysts prior to March 20, 2020.[13] This suggests that CEOs might have been reluctant to address the crisis in calls with financial analysts since raising such "bad news" in conference calls could undermine analyst and investor confidence and adversely influence stock price (Feldman, 1996). Indeed, research suggests that CEOs try to avoid bringing bad news during conference calls (Hollander, Pronk, & Roelofsten, 2010) or try to strategically minimize it (Suslava, 2021). Future research should explore CEO decision-making regarding whether and how to bring up the more human aspects of a crisis in conference calls with financial analysts.

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[12] We compared companies with CEOs who made human care statements to the full pool of non-financial Russell 3000 companies for which we had data (N = 2,364). More frequent human care statements again predicted higher cumulative returns, B = 2.42, 95% CI: [0.15, 4.69], SE = 1.16, $t(2{,}335) = 2.09$, $p = 0.037$, $\eta^2 = .001$.

[13] When we examine effects among all 2,364 companies from the Russell 3000 index from which relevant data could be obtained, we find that CEOs mentioning COVID-19 more frequently predicts lower cumulative returns during the "Outbreak" period. CEOs mentioning COVID-19 more frequently during the "Fever" period did not predict lower cumulative returns. However, when we control for returns during the "Outbreak" period (thus accounting for how adversely companies were initially affected by the crisis), the positive association between CEO human care statements and cumulative returns during the "Fever" period remains significant, both when we examine the whole sample of 2,364 companies and when we examine the subset of 448 companies whose CEO mentioned COVID-19 at least once. This finding helps mitigate the possible interpretation that companies whose CEOs made human care statements were less adversely affected by the crisis, and thus performed better on the stock market during the "Fever" period. See SOM, Appendix H and Table S6 and S7.

Third, especially in the early days, COVID-19 may have been perceived as a problem for Asia, and thus companies in the U.S. may have mentioned it less frequently. Indeed, companies with ties to China and larger foreign exports were more adversely affected by the pandemic on the stock market prior to February 24th, 2020 (Ramelli & Wagner, 2020). And, in our data, companies with stronger ties to China had CEOs who mentioned the pandemic more frequently, $B = 0.01$, 95% *CI*: [0.01, 0.02], $SE = 0.00$, $z(1660) = 5.80$, $p < 0.001$, rate ratio = 1.01, but controlling for such ties does not change the results (see Table 5, Model 3). Thus, during the early stages of the crisis, there may have been uncertainty around the impact of the pandemic on U.S. companies. Given this uncertainty, CEOs of U.S.-based companies may have decided not to raise the pandemic in conference calls, though perhaps they were addressing it in other types of conversations or behind closed doors. Future research should seek to examine whether and how CEOs might address the impact of a crisis outside public conference calls.

Finally, our research is embedded in the context of the COVID-19 crisis, raising questions about the generalizability of our findings to other types of crises. For example, do CEOs bring up non-business aspects or "cheap talk" in other crises? In line with research suggesting that CEO empathy may be less influential in highly technical crises (König et al., 2020), CEOs might avoid bringing up human care statements during crises that have a lesser (or at least less obvious) impact on human health and well-being, such as company financial fraud, misconduct, greenwashing, or other reputational crises. Do such statements leave a more favorable impression on market participants across any type of global crisis or is such positive impact restricted to global crises that threaten human life? Addressing these and other questions can help unveil additional considerations about the strategic use of communication between CEOs and financial analysts across different crises.

CONCLUSION

Cheap talk may be considered a liability in business. Yet, we discovered that CEOs' brief statements expressing concern for people, despite lacking objective substance in terms of concrete actions, seemed to have a payoff for companies in the context of the COVID-19 crisis, managing to sway market participants. This unexpected finding can inspire new lines of inquiry in the management literature on financial analysts and conference calls, encouraging scholars to build new theory around when and why CEOs focus on topics with less obvious relevance to business in conference calls with financial analysts, as well as why addressing such topics – even if only at a superficial level – would trigger positive (or negative) consequences.

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TABLE 1

CEO Human Care Statements Across the Time Periods Examined in the Research

Total *N*	During the "Outbreak" period	During the "Fever" period	During both "Outbreak" and "Fever" period
448 CEOs making a human care statement	*N* = 107 (23.9%)	*N* = 135 (30.1%)	*N* = 232 (51.8%)
302 human care statements	*N* = 126 (41.7%)	*N* = 176 (58.3%)	*N* = 302 (100%)

Notes. The "Outbreak" and "Fever" periods are defined as per Ramelli and Wagner (2020). Some CEOs made human care statements both in the "Outbreak" and "Fever" periods, and thus values do not sum to 54% for the total number of CEOs who made human care statements across the "Outbreak" and "Fever" periods.

TABLE 2

Additional Coding of CEO Human Care Statements

	Stakeholder (Parties Directly Involved with the Company)	Societal (Parties Indirectly Involved with the Company)
Statement (General Acknowledgments Without Specific Actions)	• **74.8% of the 302 human care statements** • **40.8% of the 448 CEOs** Examples: • "Regarding the virus outbreak, **our first priority has been the safety and health of our employees, customers and partners**" • **"First, as it comes to the coronavirus, the health and the safety of employees in China and around the world is our top priority."**	• **23.2% of the 302 human care statements** • **13.4% of the 448 CEOs** Examples: • "**Our hearts are with the people around the world affected by this outbreak**" • "In less than a month since our last call, **the world has seen the effect of this pandemic, and it now impacts nearly every aspect of our society."**
Action (Specific, Concrete Actions)	• **29.8% of the 302 human care statements** • **18.8% of the 448 CEOs** Examples: • **"For our employees, we have restricted travel and are taking precautions to promote a safe work environment, including, if necessary, temporarily closing offices as we have in Seattle**, which as you know has been ground zero here in the U.S." • "First and foremost, we want to make sure that our employees are safe, and so we've put into place programs to make sure that they stay safe. **For example, in China, our employees are working from home. We are limiting travel, certainly, to some regions in the world.**"	• **7.6% of the 302 human care statements** • **4.0% of the 448 CEOs** Examples: • "As you might imagine, our Healthcare team is really in the smack in the middle of this in Wuhan and elsewhere, servicing our equipment, certainly prioritizing new equipment deliveries, particularly to the Wuhan hospitals. **We made a significant donation of patient monitors and ultrasound equipment to help the care providers there.**" • "As you'd expect from us, **we're also supporting response efforts in China by providing in kind and monetary donations to the Wuhan Red Cross and Project HOPE.**"

Notes. A statement could be coded into multiple categories, and thus the values for the % of the 302 human care statements sums to over 100%. Values for the % of CEOs represent the % of the overall number of 448 CEOs in our sample, and thus values sum to less than 100% (as only 51.8% of CEOs made at least one human care statement).

TABLE 3

Description of Control Variables

Measure	Description
Industry	Company industry was identified through each company's Global Industry Classification Standard (GICS) industry group. See Table S1 in SOM for more information about each industry.
Leverage	Leverage represents the long-term debt plus debt in current liabilities divided by total assets. It is a key measure of company financial strength that is influential in crises. Leverage is calculated in percentage points using accounting data from 2019 quarterly results ending January 1, 2020.
Cash holdings	Cash holdings are calculated as cash and short-term investments, divided by total assets, in percentage points. They were calculated from accounting data of 2019 quarterly results ending January 1, 2020.
Company size	Company size is based on market capitalization and is calculated as the logarithm of the number of outstanding shares by the current market value of one share as of December 31st, 2019.
Book-to-market	Book-to-market represents the book value of equity divided by market valuation.
Market beta	Market beta is the volatility or riskiness of a stock, and it is calculated as the logarithm of the equity market value as of December 31, 2019.
Profitability	Profitability is calculated as the return on assets in percentages computed as the quarterly income before the crisis period over total assets.
Total times mentioning COVID-19	We control for the total number of times that a CEO spoke about COVID-19, which allows us to account for variability in the number of times that a CEO spoke about the crisis during conference calls.

TABLE 4

Means, Standard Deviations, and Correlations Among Variables

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Cumulative returns in crisis	-39.79	17.76																	
2. Human care statements	0.67	0.80	.09^{+}																
3. Total mentions	1.97	1.63	.06	.45***															
4. Leverage	34.64	20.69	-.22***	.15**	.01														
5. Cash holdings	15.10	18.36	.18***	-.03	-.05	-.13**													
6. Company size	21.88	1.71	.11*	.20***	.15**	.01	-.20***												
7. Book-to-market	0.42	0.46	-.11*	-.06	-.07	-.11*	-.22***	-.28***											
8. Market beta	1.19	0.46	-.08^{+}	.05	.06	-.13**	.15**	-.19***	.17***										
9. Profit-ability	0.17	4.57	.06	.05	.06	-.16***	-.34***	.40***	-.07	-.10*									
10. % foreign	33.40	26.46	.04	.17**	.16**	-.18***	.03	.21***	-.12*	.40***	.06								
11. China import	9.02	14.97	-.00	.11*	.15**	-.10*	-.06	.04	-.02	.22***	.12*	.40***							
12. Industry	0.99	0.12	.29***	-.12*	-.03	-.04	.08^{+}	-.03	-.19***	.02	-.01	.11*	.05						
13. CEO gender	0.07	0.26	-.08^{+}	.02	-.09^{+}	.03	-.03	-.03	.13**	.06	.05	-.12*	-.03	-.04					
14. Integrity	0.53	0.29	-.00	.02	-.07	.12*	.19***	-.10*	-.06	-.13**	-.19***	-.21***	-.19***	.02	.03				
15. Team-work	0.79	0.56	.13*	-.02	-.09^{+}	-.08	.68***	-.23***	-.19***	.12*	-.35***	-.04	-.18***	.06	-.05	.40***			
16. Innovation	2.04	1.05	.04	.13**	-.02	-.06	.30***	.03	-.17***	.07	.04	-.00	-.03	.02	.19***	.17***	.28***		
17. Respect	0.96	0.70	.02	-.01	-.07	-.07	.17***	-.12*	-.08	-.06	-.05	-.13*	-.17***	.03	-.01	.39***	.26***	.35***	
18. Quality	1.36	0.67	.12*	-.00	-.00	-.18***	.22***	-.11*	-.13**	.21***	.04	.13*	-.06	.00	.05	.08	.27***	.56***	.38***

TABLE 4 (continued)

Means, Standard Deviations, and Correlations Among Variables

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
19. Env. CSR	4.81	2.02	.13**	.11*	.07	.10*	.07	.19***	-.16**	-.20***	.07	.03	-.12*	.04	-.09^{+}	.16**	.20***	.05	.12*	-.03
20. Social CSR	4.57	1.49	.05	.05	-.02	-.14**	.05	-.06	.04	.18***	.01	.09^{+}	.02	.05	.02	-.06	.02	.05	.06	.19***
21. C. Gov. CSR	5.62	1.21	.02	.07	.04	-.09^{+}	-.21***	.15**	.07	-.06	.19***	-.03	-.04	-.02	.07	-.13*	-.25***	.06	.00	.09^{+}
22. Pos. emotion LIWC	3.30	1.35	-.01	-.02	.01	.02	-.04	-.01	.04	.07	.07	.10*	.02	-.02	.01	.02	-.01	.01	.06	.01
23. Neg. emotion LIWC	0.56	0.49	.03	-.05	-.04	-.07	.07	-.03	-.03	-.05	-.03	.08	-.01	.04	-.09^{+}	-.05	.11*	-.02	.01	.02
24. Internal F2F	8.34	4.17	-.16***	.06	-.04	.31***	-.12*	-.09^{+}	.14**	-.09^{+}	-.23***	-.32***	-.19***	-.14**	.18***	.17***	-.02	-.09^{+}	.05	-.21***
25. External F2F	19.20	21.40	-.13**	.10*	-.05	.33***	-.13**	.02	.12*	-.20***	.06	-.42***	-.24***	-.20***	.20***	.14**	-.09^{+}	.22***	.15**	-.01
26. Physical presence	8.87	8.82	-.07	-.18***	-.13**	.01	-.20***	-.05	.14**	-.12***	-.07	-.14**	-.08^{+}	.06	-.02	-.08	-.11*	-.34***	-.21***	-.20***
27. Hours home	0.16	0.11	-.03	-.04	.06	-.07	.05	.04	-.04	-.07	.11*	.10	-.00	.05	-.02	.02	.09^{+}	.14**	.17***	.19***
28. Share home	0.36	0.23	.03	-.14**	-.04	-.16***	.18***	.03	-.03	-.02	-.01	.08	-.13**	.08^{+}	-.10*	.15**	.23***	.10*	.25***	.27***
29. CEO Pos. Tone	1.87	1.01	.02	-.00	.02	.00	-.07	.05	.07	.01	.08^{+}	.08	.03	-.02	.00	.08^{+}	-.05	-.02	.10*	.03
30. CEO Neg. Tone	1.04	0.72	.08	-.02	-.07	-.08	.05	.02	-.05	.02	.02	.11*	.04	.07	-.06	-.06	.03	-.04	.06	-.01
31. CEO Uncertainty Tone	0.88	0.66	.02	-.04	-.10*	.07	.03	.03	-.06	.06	-.05	-.02	-.02	.00	-.10*	.02	.06	-.05	.04	.00

TABLE 4 (continued)

Means, Standard Deviations, and Correlations Among Variables

Variable	19	20	21	22	23	24	25	26	27	28	29	30
19. Env. CSR												
20. Social CSR	.02											
21. C. Gov. CSR	-.17***	-.05										
22. Pos. emotion LIWC	.12*	.01	.03									
23. Neg. emotion LIWC	.01	.02	-.04	-.16***								
24. Internal F2F	-.03	-.02	-.05	-.10*	-.07							
25. External F2F	-.05	-.13**	.07	-.07	-.05	.51***						
26. Physical presence	-.13^{+}	-.05	.10*	-.02	-.00	.14**	-.24***					
27. Hours home	.20***	.01	-.05	.11*	.04	-.24***	.04	-.25***				
28. Share home	.21**	-.05	-.07	.10*	-.00	-.35***	-.21***	-.22***	.64***			
29. CEO Pos. Tone	.06	-.02	.11*	.64***	-.10*	-.09^{+}	-.03	-.03	.08	.11*		
30. CEO Neg. Tone	.02	.06	-.06	-.09*	.38***	-.03	-.02	-.05	.06	-.03	-.09*	
31. CEO Uncertainty Tone	-.01	-.10*	-.05	-.20***	.29***	-.03	-.06	.10*	-.05	.01	-.16***	.14**

Notes. See Table 3 and Table 6 for a description of the control variables and additional variables used in robustness checks that are included in this table. Total mentions = The total number of times that the CEO of a company mentioned one of the COVID-19 keywords between January 22, 2020, and March 20, 2020. Company size = Company size as measured through log market capitalization. % foreign = percent of non-US sales. China import = number of import/export ties to China. CEO = Chief Executive Officer. CSR = MSCI CSR scores. Env. = environment. C. Gov. = Corporate governance. Pos. = positive. Neg. = negative. F2F = Face-to-face communication. Hours home = social distance measure from Hensvik et al. Share home = social distance measure from Dingel & Neiman. Tone = CEO tone as calculated with the Loughran-McDonald financial sentiment dictionary. CEO gender was coded as 0 = man, 1 = woman. Industry was coded as 0 = Food & Staples Retailing, 1 = Other. ***p<.001, **p<.01, *p<.05, ^{+}p<.10.

TABLE 5

Unstandardized Coefficients from OLS Regressions Predicting Cumulative Returns During the Crisis, With Human Care Statements, Core Control Variables, and the Additional Variables Used in Robustness Checks

	Dependent Variable: Cumulative Returns During the "Fever" Period		
Predictor	**(1)**	**(2)**	**(3)**
1. Human care statements	-	2.49* (1.12)	3.73** (1.19)
2. Total times mentioning COVID-19	-0.11 (0.37)	-0.60 (0.42)	-0.71 (0.49)
3. Leverage	-0.15** (0.05)	-0.16*** (0.05)	-0.20** (0.07)
4. Cash holdings	0.09 (0.06)	0.09 (0.06)	0.13 (0.09)
5. Size (market capitalization)	0.97^{+} (0.55)	0.75 (0.56)	0.92 (0.62)
6. Book-to-market	-0.33 (3.15)	-0.61 (3.14)	-5.56 (3.35)
7. Market beta (2019)	-4.45* (2.13)	-4.66* (2.09)	-1.11 (2.47)
8. Profitability (return on assets)	0.25 (0.26)	0.26 (0.27)	0.54 (0.39)
9. CEO gender – Man			3.76 (3.44)
10. Culture – Integrity			-1.26 (5.26)
11. Culture – Teamwork			-1.29 (3.41)
12. Culture – Innovation			-0.89 (1.08)
13. Culture – Respect			-0.05 (1.48)
14. Culture – Quality			1.12 (2.23)
15. CSR – Environment			0.91 (0.66)
16. CSR – Social			0.29 (0.49)
17. CSR – Governance			1.19 (0.71)
18. Positive emotion (LIWC)			0.23 (0.72)
19. Negative emotion (LIWC)			-0.91 (1.99)
20. % of foreign revenues			-0.07 (0.05)
21. Import-export relations with China			0.00 (0.05)
22. Internal F2F			-0.38 (0.50)
23. External F2F			0.07 (0.09)
24. Physical presence			-0.06 (0.23)
25. Hours home			3.99 (7.71)
26. Share home			-12.87 (11.77)
27. CEO Positive tone			0.31 (1.05)
28: CEO Negative tone			0.39 (1.03)
29: CEO Uncertainty			1.10 (1.18)
30. Industry Fixed Effects	Yes	Yes	Yes
Intercept	-54.18*** (15.08)	-49.02** (15.02)	-65.61*** (16.77)
N	445	445	318
Adjusted R^2	0.29	0.30	0.36

Notes. See Table 3 and Table 6 for a description of the control variables and additional variables used in robustness checks that are included in the table. Industry fixed effects were included in these models but have been omitted for brevity of presentation. Robust standard errors are presented in parentheses. Numbers of observations differ when additional controls are added given missing data for some control variables. CEO = Chief Executive Officer. CSR = corporate social responsibility. LIWC = emotional content of the statements as analyzed using the Linguistic Inquiry and Word Count tool. F2F = Face-to-face communication. Hours home = social distance measure from Hensvik et al. Share home = social distance measure from Dingel & Neiman. ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$, $^{+}p < 0.10$.

TABLE 6

Description of Additional Variables Used in Robustness Checks

Measure	Description	Rationale
CEO gender	A research assistant blind to hypotheses determined CEO gender from publicly available sources by conducting a web search for each CEO by name.	Recent research suggests that women leaders were better at managing the COVID-19 crisis, compared to male leaders (Sergent & Stajkovic, 2020).
Culture - Integrity	We used corporate culture variables as generated by Li, Mai, Shen, and Yan (2021), who used machine learning to score corporate culture based on the words CEOs used during conference calls along the dimensions of the corporate values of innovation, integrity, quality, respect, and teamwork, and found that companies with a stronger culture performed better on the stock market during periods of crises. These variables represent the prevalence of words associated with each of the five cultural dimensions in CEO statements during the conference calls. Leveraging the data from Li et al. (2021), we calculated an average value across all years for which data was available for each company (ranging from 2001 to 2018) for each of the five company culture dimensions	Controlling for corporate culture can help us examine whether CEO human care statements might be a proxy for features of company culture that lead companies to perform better in crises
Culture - Teamwork		
Culture - Innovation		
Culture - Respect		
Culture - Quality		
CSR – Environment	We controlled for the company's environmental, social, and governance (ESG) scores provided in the MSCI ESG Stats (formerly known as KLD Stats) database from 2019.	It is unclear whether engagement in CSR may bolster company performance on the stock market during crises. Some studies found that companies with higher ESG scores fared well during the COVID-19 crisis (Albuquerque, Koskinen, Yang, & Zhang, 2020), whereas other studies questioned the relevance of ESG in this crisis (Demers, Hendrikse, Joos, & Lev, 2021) and at the onset of the Russia-Ukraine crisis (Deng, Leippold, Wagner, & Wang, 2023).
CSR – Social		
CSR – Governance		

Positive emotion (LIWC)	We control for positive emotional tone, negative emotional tone, and the frequency of uncertainty expressed in the CEO statements. To code for these dimensions, we used both the Loughran-McDonald Financial Sentiment Dictionary (Loughran & McDonald, 2011) and the internal dictionaries of Linguistic Inquiry and Word Count (LIWC) (Boyd, Ashokkumar, Seraj, & Pennebaker, 2022; Tausczik & Pennebaker, 2010). The variables represent the percentage of words in the text that are associated with positive (or negative, respectively) emotion out of the full text, and the percentage of words in the text that are associated with uncertainty.	CEOs who make more human care statements might also express a more or less positive emotional tone (high positive emotions and low negative emotions) or may express different levels of uncertainty that may in turn affect stock prices, as suggested in previous research (Druz et al., 2020; Price et al., 2020).
Negative emotion (LIWC)		
CEO Positive tone		
CEO Negative tone		
CEO Uncertainty		
% of foreign revenues	The percent of foreign revenues represents the percentage of non-US revenues. It's taken from the most recent year available (2017 or 2018) retrieved from the Compustat Segments database. Data were missing for 86 companies on these variables, and neither variable significantly predicted cumulative returns during the crisis period. Thus, we omitted these two variables from the main analyses to maximize sample size (i.e., to include the 154 statements that would otherwise be omitted by including these control variables).	Companies with higher levels of international trade were more at risk of business disruptions given the negative impact of COVID-19 on global trade.
Import-export relations with China	Import-export relations with China was assessed through the number of times a company mentioned China in their 10-K in relation to importing or exporting activities (Hoberg & Moon, 2017). This was calculated for 2017, the latest year for which data were available.	

Internal F2F	We used measures from Koren and Pető (2020) assessing the extent to which jobs in a company's industry involve internal face-to-face communication, external face-to-face communication (e.g., with customers), and physical presence. Scores ranged from 4 to 42 (for internal face-to-face communication), from 3 to 90 (for external face-to-face communication), and from 0 to 66 (for physical presence)	We included these measures given as a proxy for the extent to which jobs in a company's industry were likely to have been affected by lockdown measures during the crisis, a feature that has been shown to be an important determinant of stock price reactions (Pagano, Wagner, & Zechner, 2023).
External F2F		
Physical presence		
Hours home	We used a measure from Hensvik, Le Barbanchon, & Rathelot (2021) to assess the share of hours worked at home over the share of hours worked at home (v. the office) within industries prior to COVID-19. Scores ranged from 0.013 to 0.643	
Share home	We used a measure from Dingel and Neiman (2020) to capture the share of jobs within industries that can be completed at home. Scores ranged from 0.018 to 0.954	

TABLE 7

OLS Regressions Predicting Cumulative Returns During Different Periods of the Crisis

	Dependent Variable: Cumulative Returns During Each Time Period		
	February 24, 2020 - March 20, 2020 (i.e., Fever Period)	March 23, 2020- April 13, 2020 (i.e., Recovery Period #1)	April 14, 2020- May 28, 2021 (i.e., Recovery Period #2)
Predictor	(1)	(2)	(3)
1. Human care statements	2.49*	0.14	1.31
	(1.12)	(1.19)	(6.26)
2. Total times mentioning COVID-19	-0.60	0.02	-0.27
	(0.42)	(0.46)	(2.61)
3. Leverage	-0.16***	0.09^{+}	0.81*
	(0.05)	(0.05)	(0.36)
4. Cash holdings	0.09	0.06	-0.93**
	(0.06)	(0.06)	(0.30)
5. Size (market capitalization)	0.75	1.71*	-17.82***
	(0.56)	(0.67)	(4.24)
6. Book-to-market	-0.61	-7.03*	7.82
	(3.14)	(2.83)	(26.74)
7. Market beta (2019)	-4.66*	-4.06	50.95**
	(2.09)	(2.77)	(15.63)
8. Profitability (return on assets)	0.26	-1.00*	-2.44
	(0.27)	(0.43)	(2.15)
Industry Fixed Effects	Yes	Yes	Yes
Intercept	-49.02**	-6.85	429.77***
	(15.02)	(16.56)	(113.54)
N	445	445	433
Adjusted R^2	0.30	0.15	0.23

Notes. Unstandardized coefficients from OLS regressions predicting cumulative returns during the severe market crash (Model 1), during government intervention in March/April 2020 (Model 2), and from April 2020 to May 2021 (Model 3) with CEO human care statements and control variables. Robust standard errors are presented in parentheses. Industry fixed effects were included in these models but have been omitted for brevity of presentation. Numbers of observations differ for the period of April 14th, 2020 – May 28th, 2021, as some securities ceased trading (e.g., because of mergers and acquisitions, bankruptcy) during this time. Conclusions remain substantively the same when we omit the control variables (see Table S2 in the SOM). ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$, $^{+}p < 0.10$.

TABLE 8

Unstandardized Coefficients from OLS Regressions Examining Analyst Forecasts After Conference Calls

	Dependent Variable					
	Change in Analyst Forecasts, 3 Days After Call			Change in Analyst Forecasts, February 20th, 2020 – March 20th, 2020		
Predictor	(1) 2020Q2	(2) 2020Q3	(3) 2020Q4	(4) 2020Q2	(5) 2020Q3	(6) 2020Q4
1. Human care statements	0.65	-1.12	-2.73	5.92	1.70	2.16
	(4.15)	(4.29)	(9.60)	(5.36)	(4.43)	(6.58)
2. Total times COVID-19 mentioned	2.20	-0.17	-0.71	-1.12	-1.82	-1.34
	(2.52)	(2.21)	(2.16)	(2.90)	(2.28)	(3.51)
3. Date of call	-0.95^{+}	-0.41	0.07	-1.13***	-0.64*	-0.56
	(0.49)	(0.30)	(0.74)	(0.31)	(0.31)	(0.39)
4. Leverage	0.14	-0.48^{+}	-0.01	0.24	-0.49*	-0.12
	(0.20)	(0.25)	(0.20)	(0.21)	(0.24)	(0.26)
5. Cash holdings	0.34	-0.08	-0.18	0.52^{+}	0.03	-0.09
	(0.28)	(0.17)	(0.26)	(0.28)	(0.18)	(0.35)
6. Size (market capitalization)	0.70	1.45	1.27	-2.77	-3.32	-3.72
	(3.26)	(2.22)	(6.04)	(2.79)	(2.37)	(3.48)
7. Book-to-market	-1.27	-7.52	-25.49^{+}	6.65	-5.72	-7.55
	(9.76)	(7.38)	(13.58)	(10.11)	(6.99)	(12.62)
8. Market beta (2019)	0.92	-8.40	6.15	-8.57	-7.52	-8.37
	(9.29)	(7.50)	(16.01)	(9.72)	(7.72)	(12.07)
9. Profitability (return on assets)	-0.15	-1.15	-1.06	0.91	0.00	-0.43
	(0.72)	(1.40)	(0.90)	(1.02)	(1.32)	(1.26)
Intercept	-23.13	-20.89	-29.59	63.91	107.30	118.48
	(83.37)	(61.94)	(162.83)	(72.83)	(68.03)	(90.75)
N	344	341	335	344	341	335
Adjusted R^2	0.02	-0.00	-0.04	0.06	0.12	0.09

Notes. The number of observations involves 510 unique conference calls that were matched to available post-call volatility data, resulting in a total of 344 observations that had at least some data. Numbers of observations differ slightly as there was more missing data for forecasts that were further in the future (i.e., for 2020Q4 versus 2020Q2). Date of call was coded as the days since the first conference call mentioned COVID-19 (i.e., January 22nd, 2020). Industry fixed effects were included in these models but have been omitted for brevity of presentation. Robust standard errors are presented in parentheses. ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$, $^{+}p < 0.10$.

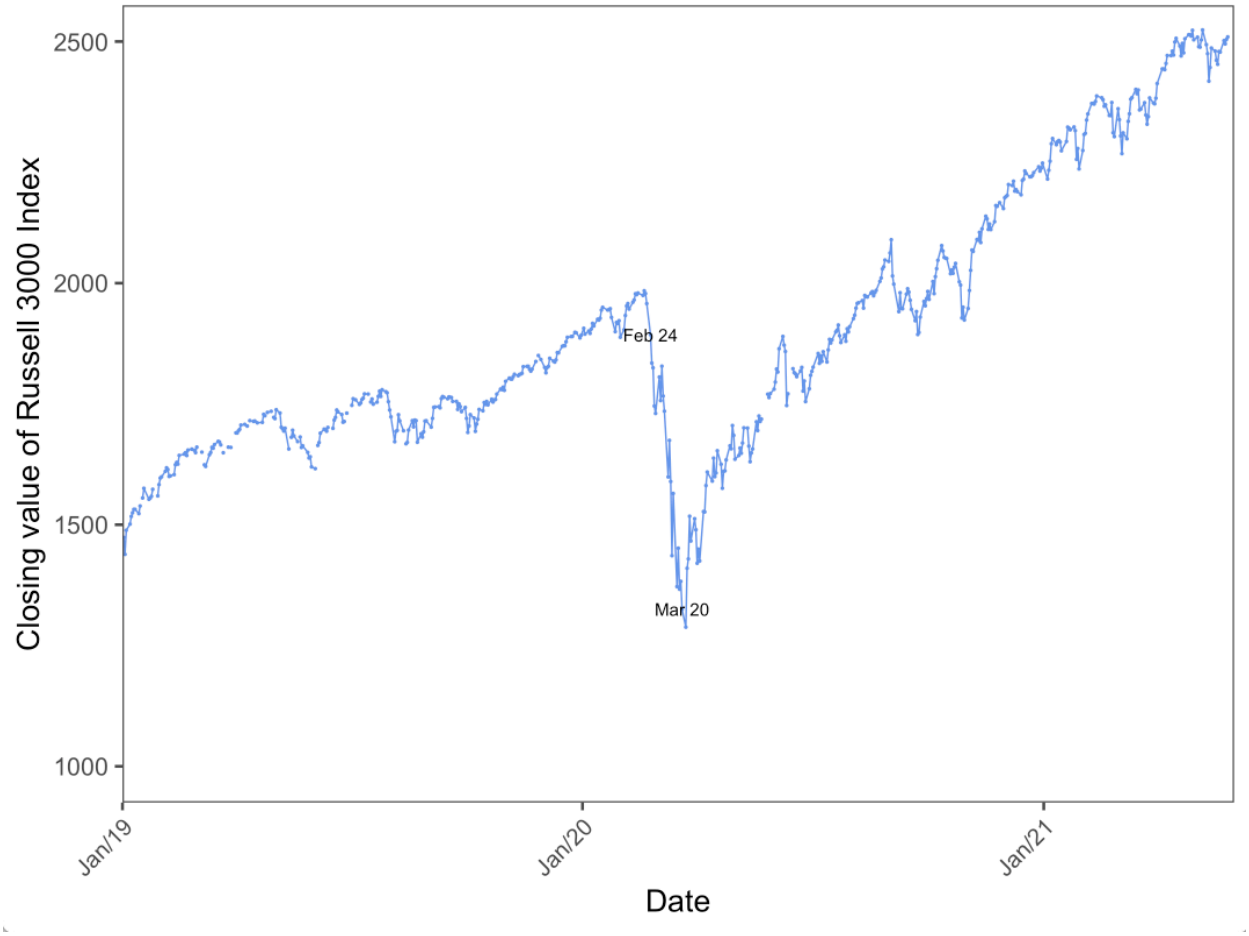
TABLE 9
Unstandardized Coefficients from OLS Regressions Examining Stock Return Volatility After Conference Calls

	Dependent Variable			
	20-day Volatility Post-call	Volatility February 20 – March 20 Post-call	Cumulative Returns During "Fever" Period	
Predictor	(1)	(2)	(3)	(4)
1. Human care statements	-0.004*	-0.003^{+}	2.73*	2.64*
	(0.00)	(0.00)	(1.13)	(1.13)
2. Total times COVID-19 mentioned	0.001	0.000	-0.21	-0.49
	(0.00)	(0.00)	(0.58)	(0.58)
3. Date of call	0.002***	0.000	-	-
	(0.00)	(0.00)		
4. Leverage	0.000***	0.000***	-0.08^{+}	-0.09*
	(0.00)	(0.00)	(0.05)	(0.05)
5. Cash holdings	-0.000	-0.000	0.12^{+}	0.12*
	(0.00)	(0.00)	(0.06)	(0.07)
6. Size (market capitalization)	-0.004***	-0.01***	-0.38	-0.15
	(0.00)	(0.00)	(0.50)	(0.47)
7. Book-to-market	0.01***	0.01*	1.57	1.06
	(0.00)	(0.00)	(3.08)	(3.36)
8. Market beta (2019)	0.01*	0.01**	-4.57*	-3.84^{+}
	(0.00)	(0.00)	(2.05)	(2.24)
9. Profitability (return on assets)	-0.000**	-0.001**	0.30	0.35^{+}
	(0.00)	(0.00)	(0.25)	(0.25)
10. 20-day volatility	-	-	-114.41***	-
			(21.30)	
11. Crash period volatility	-	-	-	-118.20***
				(41.31)
Intercept	0.09***	0.14***	-23.05	-26.45*
	(0.02)	(0.02)	(14.03)	(13.09)
N	468	468	468	468
Adjusted R^2	0.63	0.41	0.37	0.35

Notes. The number of observations involves 510 unique conference calls that were matched to available post-call volatility data, resulting in a total of 468 observations from 410 companies (91.5% of our sample). Date of call was coded as the days since the first conference call mentioned COVID-19 (i.e., January 22nd, 2020). Industry fixed effects were included in these models but have been omitted for brevity of presentation. Robust standard errors are presented in parentheses. ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$, $^{+}p < 0.10$.

FIGURE 1

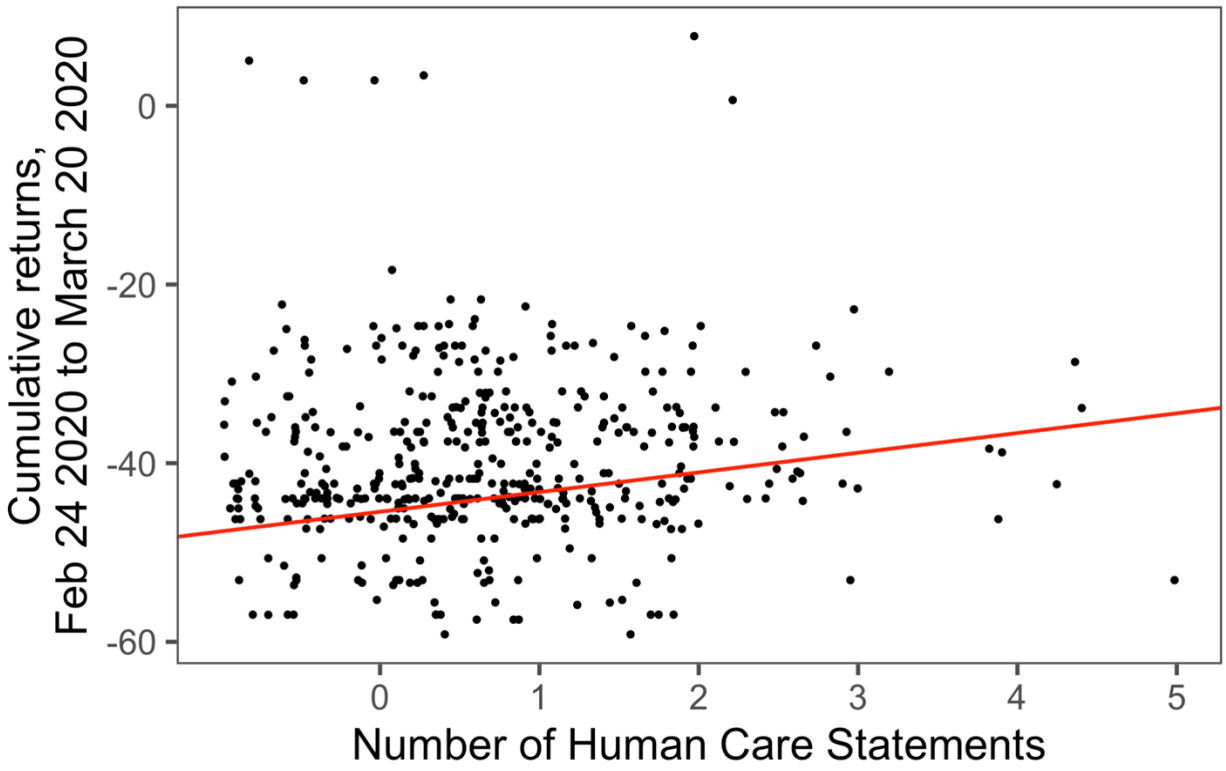
Values of the Russell 3000 Index from January 1st, 2007 to May 28th, 2021 at the Close of Each Trading Day, with the "Fever" Period Marked



Notes. February 24th through March 20th, 2020 represents the "Fever" period (Ramelli & Wagner, 2020) when stock prices declined dramatically. On February 24th, 2020, the first day on which trading happened after lockdowns in Italy, the value of the index began to decline (from 1957.64 prior to the lockdown on February 23rd, 2020, to 1893 on February 24th, 2020), and declined over 600 points (reaching a low of 1288.04 on March 23rd, 2020).

FIGURE 2

Association Between CEO Human Care Statements and Cumulative Returns During Onset of COVID-19 Crisis During the "Fever" Period from February 24th to March 20th, 2020



Notes. $N = 448$ companies. Points have been jittered in their location on the x-axis to avoid overlap. We included industry as a control variable in the analysis. The red line represents the linear association between the two variables as calculated in a model utilizing only industry controls.

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Supplemental Online Material (SOM) for:

CEOs Showing Humanity: Human Care Statements in Conference Calls and Stock Market Performance During Crisis

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Datasets and code for analysis are provided on the Open Science Framework at: https://osf.io/c34uh/

This document includes:

APPENDIX A: Specifications Used in Statistical Analyses

All analyses were conducted using R Version 4.1.1 (R Core Team, 2021), unless noted otherwise. Robust standard errors were calculated using the *sandwich* package with the HC1 estimator for linear regression (Zeileis, 2004; Zeileis, Köll, & Graham, 2020).

As measures of effect sizes, rate ratios were calculated for Poisson regressions using *RcountD* (https://stefany.shinyapps.io/RcountD/), Cohen's *d* was calculated using *rstatix* (Kassambara, 2021), and η^2 was calculated using the *lsr* package (Navarro, 2015).

TABLE S1

Industries Represented in the Sample of 448 Companies Whose CEO Discussed COVID-19 In Conference Calls

Industry	N (%) of companies	Average # of human care statements	Average % foreign revenues
Automobiles	8 (1.8%)	0.63	45.42
Banks	1 (0.2%)	1.00	NA
Capital goods	77 (17.2%)	0.70	33.87
Commercial and professional services	20 (4.4%)	0.80	22.57
Consumer durables and apparel	19 (4.2%)	0.89	38.80
Consumer services	19 (4.2%)	1.32	25.45
Diversified financials	11 (2.5%)	0.45	15.87
Energy	16 (3.6%)	0.25	31.69
Food and staples retailing	6 (1.3%)	1.50	5.94
Food, beverage, and tobacco	10 (2.2%)	0.80	30.23
Health care	30 (6.7%)	0.73	31.79
Household and personal products	5 (1.1%)	1.00	51.57
Insurance	4 (0.9%)	0.00	35.54
Materials	30 (6.7%)	0.60	44.49
Media and entertainment	10 (2.2%)	0.70	25.19
Pharma and biotech	29 (6.5%)	0.55	31.46
Real estate	28 (6.3%)	0.14	5.19
Retailing	36 (8.0%)	0.69	10.09
Semiconductors	25 (5.6%)	0.92	74.73
Software and services	22 (4.9%)	0.59	34.35
Tech hardware	28 (6.3%)	0.57	50.91
Telecom services	1 (0.2%)	0.00	0.00
Transportation	9 (2.0%)	0.89	29.34
Utilities	4 (0.9%)	0.25	0.00
Overall	448	0.67	33.40

TABLE S2

OLS Regressions Predicting Cumulative Returns During Different Periods of the Crisis Without Control Variables

	Dependent Variable: Cumulative Returns During Each Time Period		
	February 24, 2020 – March 20, 2020 (i.e., Fever Period)	March 23, 2020- April 13, 2020 (i.e., Recovery Period #1)	April 14, 2020- May 28, 2021 (i.e., Recovery Period #2)
Predictor	(1)	(2)	(3)
1. Human care statements	2.20* (1.08)	1.06 (1.26)	-2.48 (6.97)
2. Total times mentioning COVID-19	-0.56 (0.43)	0.03 (0.47)	-1.27 (2.62)
Industry Fixed Effects	Yes	Yes	Yes
Intercept	-45.42*** (5.45)	22.20*** (5.15)	156.96*** (30.28)
N	447	447	435
Adjusted R^2	0.24	0.04	0.07

Notes. Unstandardized coefficients from OLS regressions predicting cumulative returns during the severe market crash (Model 1), during government intervention in March/April 2020 (Model 2), and from April 2020 to May 2021 (Model 3) with number of CEO human care statements. Robust standard errors are presented in parentheses. Industry fixed effects were included in these models but have been omitted for brevity of presentation. Numbers of observations differ for the April 14th, 2020, to May 28th, 2021, as some securities ceased trading (e.g., because of mergers and acquisitions, bankruptcy) during this time. ***$p < .001$.

APPENDIX B: Supplemental Analyses Separating Out the Type of Human Care Statement

Results were similar when we examined the different types of human care statements (e.g., stakeholder statements, stakeholder actions, societal actions, societal statements, emphasis) identified in the additional coding. When entering these variables as separate predictors of cumulative returns, only more frequent stakeholder statements predicted higher cumulative returns, $B = 1.01$, 95% *CI*: [0.05, 1.96], $SE = 0.48$, $t(413) = 2.08$, $p = 0.038$, $\eta^2 = .004$ (all other $|t|$'s < 0.96, all other p's > 0.34), though this presumably could be due to a lack of power given the small number of other types of human care statements. Moreover, in a regression controlling for all of these predictors simultaneously, only more frequent stakeholder statements predicted higher cumulative returns, $B = 1.65$, 95% *CI*: [0.24, 3.06], $SE = 0.72$, $t(409) = 2.29$, $p = 0.022$, $\eta^2 = .008$ (all other $|t|$'s < 1.51, all other p's > 0.13). See Table S3.

TABLE S3

Unstandardized Coefficients from OLS Regressions Examining Additional Coding Categories

	Dependent Variable: Cumulative Returns During "Fever" Period						
Predictor	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Stakeholder Statements	-	1.01* (0.48)	-	-	-	-	1.65* (0.72)
2. Stakeholder Actions	-	-	0.53 (0.55)	-	-	-	0.29 (0.59)
3. Societal Statements	-	-	-	0.55 (1.28)	-	-	0.02 (1.32)
4. Societal Actions	-	-	-	-	1.17 (1.55)	-	-0.04 (1.36)
5. Emphasis (e.g., "first and foremost")	-	-	-	-	-	0.16 (0.97)	-1.94 (1.29)
6. Total times mentioning COVID-19	-0.11 (0.37)	-0.36 (0.39)	-0.21 (0.40)	-0.15 (0.37)	-0.13 (0.37)	-0.13 (0.39)	-0.33 (0.40)
7. Leverage	-0.15** (0.05)	-0.15** (0.05)	-0.15** (0.05)	-0.15** (0.05)	-0.15** (0.05)	-0.15** (0.05)	-0.15** (0.05)
8. Cash holdings	0.09 (0.06)	0.09 (0.06)	0.09 (0.06)	0.09 (0.07)	0.09 (0.06)	0.09 (0.06)	0.09 (0.07)
9. Size (market capitalization)	0.97^{+} (0.55)	0.84 (0.56)	0.95^{+} (0.56)	0.95^{+} (0.56)	0.90 (0.57)	0.96^{+} (0.56)	0.88 (0.57)
10. Book-to-market	-0.33 (3.15)	-0.46 (3.17)	-0.41 (3.19)	-0.32 (3.16)	-0.44 (3.18)	-0.34 (3.16)	-0.47 (3.23)
11. Market beta (2019)	-4.45* (2.13)	-4.49* (2.13)	-4.54* (2.14)	-4.43* (2.14)	-4.49* (2.14)	-4.46* (2.14)	-4.48* (2.16)
12. Profitability (return on assets)	0.25 (0.26)	0.23 (0.26)	0.26 (0.26)	0.25 (0.26)	0.24 (0.26)	0.25 (0.26)	0.24 (0.27)
Intercept	-54.18*** (15.08)	-51.25*** (15.17)	-53.44*** (15.19)	-53.71*** (15.12)	-52.33*** (15.53)	-53.93*** (15.16)	-51.98** (15.69)
N	445	445	445	445	445	445	445
Adjusted R^2	0.29	0.30	0.29	0.29	0.29	0.29	0.29

Notes. Industry fixed effects were included in these models but have been omitted for brevity of presentation. Robust standard errors are presented in parentheses. ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$, $^{+}p < .10$.

APPENDIX C: Separating Statements Made During the "Outbreak" and "Fever" Periods

Our main analyses collapsed the measure of CEO human care statements across the conference calls made in the "Outbreak" period prior to the severe stock market crash (i.e., January 22nd to February 24th, 2020) and in the "Fever" period during the severe stock market crash (i.e., February 24th to March 20th, 2020). The variables thus indicate the sum of CEO human care statements across these two time periods, meaning that there was some temporal overlap between our measure of CEO human care statements and our measure of cumulative returns (which captured cumulative returns during the "Fever" period). We did expect that effects could emerge over a short time frame, given the reactiveness of stock price to events over the short term (Druz, Petzev, Wagner, & Zeckhauser, 2020), and thus included statements made throughout this period. However, to avoid this temporal overlap between our dependent variable (cumulative returns) and explanatory variable (human care statements), we conducted additional analyses that separated these variables, examining how human care statements made during the "Outbreak" period *prior* to the severe market crash (i.e., plummeting share prices) and those made during the "Fever" period of the severe market crash each related to cumulative returns during the "Fever" period. Specifically, we created two separate variables that indicated the sum of CEO human care statements made during the "Outbreak" period and the sum of CEO human care statements made during the "Fever" period.

Out of the 448 CEOs, 341 (76.1%) did not make human care statements during the "Outbreak" period; 313 (69.9%) did not make human care statements during the "Fever" period. Of the 302 human care statements, 126 (41.7%) took place during the "Outbreak" period, and 176 (58.3%) took place during the "Fever" period. See also Table 2. The number of human care

statements made during the "Outbreak" period correlated slightly negatively with the number of human care statements made during the "Fever" period, $r(446) = -.16$, $p < 0.001$.

We predicted cumulative returns during the "Fever" period with the variables indicating human care statements made during the "Outbreak" period, human care statements made during the "Fever" period, and the control variables. We found that CEOs making more human care statements during the "Outbreak" period predicted higher cumulative returns during the "Fever" period, $B = 2.78$, 95% *CI:* [0.29, 5.27], $SE = 1.27$, $t(412) = 2.19$, $p = 0.029$, $\eta^2 = .01$. CEOs making more human care statements during the "Fever" period did not significantly predict cumulative returns during the "Fever" period, though the effect was in the same direction, $B = 2.32$, 95% *CI:* [-0.51, 5.15], $SE = 1.44$, $t(412) = 1.61$, $p = 0.108$, $\eta^2 = .01$ (see Table S4, Model 2). Results also held when the full battery of variables used in robustness checks were included in the model (see Table S4, Model 3).

The same pattern was evident in models that only included as controls the variable indicating the total number of times COVID-19 was mentioned and industry fixed effects. CEOs making more human care statements during the "Outbreak" period predicted higher cumulative returns during the "Fever" period, $B = 3.43$, 95% *CI:* [0.87, 5.98], $SE = 1.30$, $t(420) = 2.63$, $p = 0.009$, $\eta^2 = .01$, while CEOs making more human care statements during the "Fever" period did not predict cumulative returns during the "Fever" period, $B = 1.42$, 95% *CI:* [-1.32, 4.15], $SE = 1.39$, $t(420) = 1.02$, $p = 0.310$, $\eta^2 = .00$.

TABLE S4

OLS Regressions Predicting Cumulative Returns During the Crisis, Including Control Variables and All Variables Used in Robustness Checks

	Dependent Variable: Cumulative Returns During "Fever" Period		
Predictor	**(1)**	**(2)**	**(3)**
1. Human care statements during "Outbreak"		2.78* (1.27)	2.94* (1.41)
2. Human care statements during "Fever"		2.32 (1.44)	4.35** (1.49)
2. Total times mentioning COVID-19	-0.11 (0.37)	-0.58 (0.43)	-0.75 (0.50)
3. Leverage	-0.15** (0.05)	-0.16*** (0.05)	-0.20** (0.07)
4. Cash holdings	0.09 (0.06)	0.09 (0.06)	0.13 (0.09)
5. Size (market capitalization)	0.97 (0.55)	0.73 (0.57)	0.96 (0.62)
6. Book-to-market	-0.33 (3.15)	-0.62 (3.14)	-5.56 (3.37)
7. Market beta (2019)	-4.45 (2.13)	-4.70* (2.09)	-1.24 (2.47)
8. Profitability (return on assets)	0.25 (0.26)	0.26 (0.27)	0.54 (0.39)
9. CEO gender – Man			4.05 (3.50)
10. Culture – Integrity			-1.36 (5.23)
11. Culture – Teamwork			-1.36 (3.42)
12. Culture – Innovation			-0.90 (1.07)
13. Culture – Respect			-0.12 (1.50)
14. Culture – Quality			1.19 (2.23)
15. CSR – Social			0.92 (0.67)
16. CSR – Environment			0.31 (0.48)
17. CSR – Governance			1.17 (0.71)
18. Positive emotion (LIWC)			0.33 (0.72)
19. Negative emotion (LIWC)			-0.88 (1.99)
20. % of foreign revenues			-0.07 (0.05)
21. Import-export relations with China			0.01 (0.05)
22. Internal F2F			-0.36 (0.50)
23. External F2F			0.06 (0.01)
24. Physical presence			-0.06 (0.23)
25. Hours home			3.87 (7.68)
26. Share home			-13.72 (11.93)
27. CEO Positive tone			0.23 (1.04)
28: CEO Negative tone			0.44 (1.04)
29: CEO Uncertainty			1.09 (1.19)
30. Industry Fixed Effects	Yes	Yes	Yes
Intercept	-54.18*** (15.08)	-48.53** (15.16)	-66.93*** (16.86)
N	445	445	318
Adjusted R^2	0.29	0.30	0.36

Notes. Industry fixed effects were included in these models but have been omitted for brevity of presentation. Robust standard errors are presented in parentheses. Numbers of observations differ when additional controls are added given missing data for some control variables. CEO = Chief Executive Officer. CSR = corporate social responsibility. LIWC = emotional content of the statements as analyzed using the Linguistic Inquiry and Word Count tool. F2F = Face-to-face communication. Hours home = social distance measure from Hensvik et al. Share home = social distance measure from Dingel & Neiman.
***$p < 0.001$, **$p < 0.01$, *$p < 0.05$.

APPENDIX D: Removal of Outliers

Following current recommendations (Aguinis, Gottfredson, & Joo, 2013), we identified outliers via Cook's and leverage scores and removed 40 data points that were identified as outliers using this method. The main results remain significant when these 40 data points are removed; the number of CEO human care statements continues to predict higher cumulative returns, $B = 2.35$, 95% *CI*: [0.30, 4.69], $SE = 0.96$, $t(379) = 2.44$, $p = 0.015$, $\eta^2 = .01$.

APPENDIX E: Sensitivity to Omitted Variable Bias

Our findings were robust when assessing sensitivity to omitted variable bias. Following procedures recommended by Oster (2019), we examined the sensitivity of the coefficient for the effect of CEO human care statements on cumulative returns to unobserved variables. These procedures assume observed variables that influence the effect (i.e., control variables included in a model) are an appropriate proxy of the influence of unobserved variables (i.e., variables that could potentially influence the effect but were not measured or included in the model). Specifically, it is proposed that observed variables included in a model are selected because they are theorized to influence an effect in meaningful ways, and thus unobserved variables could be anticipated to influence the effect to a lesser degree than observed variables. The extent to which observed variables influence the size of the coefficient for an effect can thus be used to approximate the extent to which a coefficient would likely be affected by unobserved variables.

We used the *psacalc* function in STATA 16.1 created by Oster (2019) to calculate two parameters. First, we calculated the ratio to which unobserved variables would have to influence the observed coefficient for human care statements, as compared to the influence of the observed variables on the effect (referred to by Oster as "delta"), for the coefficient of human care statements to be reduced to zero. Second, we calculated the bias-corrected estimate of the coefficient if unobservable variables would: a) influence the effect to the same degree and in the same direction as the observed variables (delta = 1), and b) influence the effect to the same degree and in the *opposite* direction as the observed variables (delta = -1). We used an *R*max value of 0.45331, based on recommendations from Oster to set the maximum R^2 explained by the effect, observed variables, and unobserved variables to 1.3 times the R^2 from regressing the outcome on the effect of human care statements and observable variables ($R^2 = 0.3487$).

First, we found that to reduce the coefficient of the human care statements to zero, delta would have to equal 16.61, meaning that the effect of human care statements could be expected to be reduced to zero only if omitted variables are almost seventeen times as important for the outcome as the included control variables. Thus, unobserved variables would have to have a much stronger influence on the effect of human care statements than the observed variables for the coefficient of the effect of human care statements to be fully explained by omitted variables. Second, we found that the bias-adjusted coefficients were similar in size to the observed coefficient. When delta was equal to 1, the bias-adjusted coefficient was 2.73, and when delta was equal to -1, the bias-adjusted coefficient was 2.31. Thus, the effect appeared relatively robust to the influence of unobserved variables.

APPENDIX F: Prompting of Human Care Statements by Analysts

Does it matter if CEOs brought up human care statements during the presentation session of the conference calls, or later in the Q&A session with analysts? We addressed this question by 1) examining if the timing of the human care statements (i.e., in the presentation or the Q&A sessions of the call) affected our results, and 2) controlling for a variable indicating whether the analysts had asked specifically about COVID-19 and/or the human aspects of the crisis.

Timing in the call. To examine whether the timing of human care statements might play a role in these effects, we identified in our dataset of conference calls whether CEO human care statements were unprompted (i.e., the CEOs made human care statements in the presentation session of the call, prior to analyst questions) or whether human care statements were prompted (i.e., the CEOs only made statements about human care in response to analysts raising a question in the Q&A session of the call). Out of the 884 mentions of COVID-19 in the calls, most were prompted by questions (516 mentions, 58.4%). However, most CEO human care statements took place in the presentation session of the call (209 out of 302 mentions, 69.2%) and thus were unprompted. This suggests that analysts are not driving the effect, but rather that most CEOs are choosing to make human care statements on their own.

Next, we examined if the timing of CEO human care statements moderated the effect of the number of CEO human care statements on cumulative returns during the crisis. To do so, we created a variable indicating the percent of times that a CEO made human care statements during the presentation session (versus the Q&A session). Then, in linear regression, among the subset of companies whose CEO made human care statements at least once, we predicted cumulative returns during the crisis with the variable indicating the number of human care statements a CEO made and its interaction with this variable. We found that the variable indicating the number of

times a CEO made a human care statement did not interact with the variable indicating the percent of times that the CEO acknowledged these costs in the presentation versus Q&A to predict cumulative returns, B = -12.79, 95% *CI*: [-28.20, 2.61], SE = 7.81, $t(198)$ = -1.64, p = 0.103, η^2 = .01. Thus, it did not seem to matter when CEOs made human care statements during the call.

Analysts asking about COVID-19 and/or its human aspects. As a second test of this question, we conducted additional coding of the earnings conference calls to capture 1) whether the analysts asked the CEOs about COVID-19 and 2) whether the analysts asked the CEOs about the human impacts of COVID-19. An independent coder examined the analysts' statements made prior to CEO statements about COVID-19 and coded whether the analyst had asked about COVID-19 (0 = *no*, 1 = *yes*), as well as whether the analyst had asked about the human aspects of COVID-19 specifically (0 = *no*, 1 = *yes*). Most of the CEO statements about COVID-19 were not prompted by analysts (i.e., only 113, or 25.2%, of CEO statements about COVID-19 were in response to an analyst question about COVID-19). Furthermore, most analysts did not ask about the human aspects of the COVID-19 crisis (only 5, or 1.1% of CEO statements about COVID-19, were in response to an analyst question about the human aspects of COVID-19).

Adding these variables as additional covariates in our main regression models did not alter our conclusions as number of CEO human care statements continued to significantly predict cumulative returns (B = 2.42, 95% *CI*: [0.19, 4.64], SE = 1.13, $t(409)$ = 2.13, p = 0.033, η^2 = .01). Results also held when controlling for these variables separately. See Table S5 below.

TABLE S5

OLS Regressions Predicting Cumulative Returns with Prompting Variables

	Dependent Variable: Cumulative Returns During "Fever" Period		
Predictor	(1)	(2)	(3)
1. Human care statements	2.42*	2.39*	2.31*
	(1.13)	(1.11)	(1.08)
2. Total times mentioning COVID-19	-0.77	-0.75	-0.57
	(0.47)	(0.46)	(0.50)
3. Analyst asked about COVID-19	1.07	1.01	-
	(1.71)	(1.63)	
4. Analyst asked about human aspects of COVID-19	-1.21	-	-0.02
	(3.13)		(6.95)
5. Leverage	-0.16***	-0.16***	-0.16***
	(0.05)	(0.05)	(0.04)
6. Cash holdings	0.09	0.09	0.09^{+}
	(0.06)	(0.06)	(0.05)
7. Size (market capitalization)	0.80	0.80	0.79
	(0.56)	(0.56)	(0.52)
8. Book-to-market	-0.48	-0.48	-0.40
	(3.16)	(3.15)	(1.98)
9. Market beta (2019)	-4.78*	-4.77*	-4.89*
	(2.14)	(2.13)	(2.05)
10. Profitability (return on assets)	0.23	0.23	0.23
	(0.27)	(0.27)	(0.20)
Industry Fixed Effects	Yes	Yes	Yes
Intercept	-49.78**	-50.01**	-40.63***
	(15.17)	(15.13)	(13.58)
N	443	443	443
Adjusted R^2	.30	.30	.30

Notes. Unstandardized coefficients from OLS regressions predicting cumulative returns during the severe market crash. Industry fixed effects were included in these models but have been omitted for brevity of presentation. Robust standard errors are presented in parentheses. ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$.

APPENDIX G: Difference-in-Differences Analysis

To address issues of causality, this analysis examined how daily returns changed from pre-crash to post-crash on the stock market. We estimated a difference-in-differences regression of company-level daily returns to examine the effect of CEO human care statements prior to the "Fever" period on financial performance during the "Fever" period. This allowed us to test how companies fared after the initial shock of the pandemic to the stock market, dependent on the extent to which CEOs made human care statements prior to the "Fever" period. We obtained daily returns for the period of January 2nd to March 31st, 2020, from the Compustat Capital IQ North America Daily database (accessed via Wharton Research Data Services, WRDS).

Our analysis predicted, in a mixed-effects linear regression, the logarithm of daily returns over the period of January 2nd, 2020 to March 31st, 2020 (i.e., the first quarter of 2020) with a variable indicating the number of times a CEO made human care statements prior to the start of the "Fever" period on February 24th, 2020, a variable indicating whether the date of the return was pre-"Fever" period (i.e., before February 24th, 2020, labeled as 0), or during the "Fever" period (i.e., February 24th or after, labeled as 1), the interaction between these two variables, and including the same control variables as in the models presented in the main text. A significant interaction would indicate that prior to the "Fever" period, CEO human care statements affected companies' performance during the "Fever" period. We used the period of January 2nd, 2020 to March 31st, 2020 and specified February 24th, 2020 as the start date of the "Fever" period to follow the procedures of other research using similar analyses (Albuquerque, Koskinen, Yang, & Zhang, 2020). The model included a random intercept for the company and for the date to account for correlations across companies and on a particular date.

The interaction between the variable indicating whether the return was prior to the "Fever" period or during the "Fever" period and CEO human care statements was significant, $B = 0.03$, 95% CI: [0.01, 0.04], $SE = 0.01$, $t(3{,}036) = 4.29$, $p < 0.001$. Companies whose CEOs never made human care statements in advance of the "Fever" period experienced a more pronounced decrease in returns from prior to the "Fever" period to the "Fever" period, $B = -0.34$, 95% CI: [-0.40, -0.27], $SE = 0.03$, $t(61) = -10.81$, $p < 0.001$, than, for example, companies whose CEOs made human care statements once in advance of the "Fever" period, $B = -0.31$, 95% CI: [-0.37, -0.25], $SE = 0.03$, $t(63) = -9.83$, $p < 0.001$, or companies whose CEOs made human care statements three times in advance of the "Fever" period (the maximum value), $B = -0.25$, 95% CI: [-0.32, -0.18], $SE = 0.04$, $t(105) = -7.12$, $p < 0.001$.

This analysis suggests that prior to the "Fever" period, CEO human care statements predicted a reduced decline in returns during the "Fever" period. Though our data preclude us from making strong causal inferences, these results further support the idea that CEO human care statements fostered stronger financial performance during the "Fever" period.

APPENDIX H: Analyses Among All 2,364 Companies

Were companies whose CEOs chose to raise the crisis in conference calls more adversely affected by the crisis, and thus had lower cumulative returns during the market crash? To get at this question, we examined if companies whose CEO did not explicitly speak about the crisis had higher cumulative stock returns than those whose CEOs explicitly spoke about the crisis, among the 2,364 CEOs for whom we had relevant data and control variables. The number of times that a CEO mentioned COVID-19 did not predict cumulative returns during the crisis period, $B = 0.32$, 95% *CI*: [-0.29, 0.92], $SE = 0.31$, $t(2{,}336) = 1.03$, $p = 0.304$, $\eta^2 = .00$, suggesting that explicitly raising (versus not) the topic of COVID-19 did not affect cumulative returns.

We note that this finding may be surprising, given that Ramelli and Wagner (2020) found some evidence that companies on whose calls the coronavirus was discussed had lower average cumulative returns over the period from January 20th to March 20th, 2020. However, there are two key differences between our current research and the research conducted by Ramelli and Wagner (2020) that could explain this discrepancy. A first difference is the period over which we examine the relationship between statements about the coronavirus and cumulative returns. We zoom-in on calls where coronavirus was mentioned to explore how CEOs address the coronavirus, and specifically examine whether the number of times that CEOs mention human care statements during conference earning calls is related to cumulative returns during the market crash created by the crisis. In doing so, we focus specifically on the "Fever" period of the crisis, when the market crash occurred. In contrast, Ramelli and Wagner (2020) were particularly interested in what predicts the frequency of mentioning the coronavirus during conference calls that took place throughout the entire time frame of the crisis (i.e., collapsed across the different time periods). Ramelli and Wagner (2020) also explored whether mentioning coronavirus (versus

not) predicts cumulative returns and find that not mentioning coronavirus is associated with higher average cumulative returns over the whole period of the crisis (while we found no effect when looking specifically at the "Fever" period). Thus, the differences in the periods explored may explain the differences between our and their results.

Notably, when we examine effects among all 2,364 companies, we do find that CEOs mentioning coronavirus more frequently predicts lower cumulative returns during the "Outbreak" period, though CEOs mentioning coronavirus more frequently during the "Fever" period did not predict lower cumulative returns (see Table S6). Therefore, it may be that the effects observed in Ramelli and Wagner (2020) were driven by coronavirus mentions during this period of the crisis, prior to the stock market crash.

Yet, when we control for returns during the "Outbreak" period, the association between CEOs mentioning human care statements more frequently and higher cumulative returns during the "Fever" period remains significant, both when we examine the whole sample of 2,364 companies and when we examine the subset of 448 companies whose CEO mentioned the coronavirus at least once (see Table S7). As might be expected, in the full sample, companies that had lower returns during the "Outbreak" period also had significantly lower returns during the "Fever" period; however, we do find the same association among the subset of companies whose CEO mentioned coronavirus at least once. Thus, when accounting for initial company performance as the crisis emerged, we still see positive associations between CEOs making human care statements and cumulative returns. This lends support to the idea that it is not simply that companies whose CEOs made human care statements were worse off than companies whose CEOs did not make such statements, and this explains our effects.

A second difference is that we focus on CEOs mentioning the crisis, rather than statements from anyone on the conference call. This distinguishes us from Ramelli and Wagner (2020), who examined statements from any party about the coronavirus and their effects. Thus, our focus on statements from CEOs may explain in part why we do not see the same association as Ramelli and Wagner (2020).

TABLE S6

OLS Regressions Predicting Cumulative Returns During "Outbreak" and "Fever" Period

	Returns During "Outbreak" Period	Returns During "Fever" Period
Variables	(1)	(2)
COVID-19 mentions	-0.50* (0.21)	0.32 (0.31)
Leverage	0.02 (0.02)	-0.12*** (0.02)
Cash holdings	0.06** (0.02)	0.07** (0.02)
Company size	0.60** (0.21)	0.62* (0.26)
Book-to-market	-0.29 (0.43)	-0.84 (0.80)
Market beta	-2.37** (0.82)	-5.25*** (0.97)
Profitability	0.06 (0.11)	0.08 (0.10)
Industry fixed effects	Yes	Yes
Intercept	-11.25^{+} (5.77)	-50.08*** (6.48)
N	2,364	2,364
Adjusted R^2	0.11	0.20

Notes. Industry fixed effects were included in these models but have been omitted for brevity of presentation. Robust standard errors are presented in parentheses. ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$, $^{+}p < 0.10$.

TABLE S7

OLS Regressions Predicting Cumulative Returns During the Fever Period, Controlling for Returns During the Outbreak Period

	Returns During "Fever" Period (all companies)	Returns During "Fever" Period (subset of companies with CEO mentioning coronavirus at least once)
Variables	(1)	(2)
Human care statements	2.41* (1.16)	2.48* (1.11)
COVID-19 mentions	-0.39 (0.40)	-0.60 (0.42)
"Outbreak" cumulative returns	-0.07** (0.03)	-0.08 (0.10)
Leverage	-0.12*** (0.02)	-0.16*** (0.05)
Cash holdings	0.07** (0.02)	0.09 (0.06)
Company size	0.63* (0.26)	0.80 (0.57)
Book-to-market	-0.87 (0.78)	-0.64 (3.18)
Market beta	-5.46*** (0.97)	-4.96* (2.07)
Profitability	0.09 (0.10)	0.26 (0.27)
Industry fixed effects	Yes	Yes
Intercept	-50.09*** (6.41)	-50.60** (15.69)
N	2,364	445
Adjusted R^2	0.20	0.30

Notes. Industry fixed effects were included in these models but have been omitted for brevity of presentation. Robust standard errors are presented in parentheses. ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$.

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