Analyses of Social Issues and Public Policy, Vol. 00, No. 0, 2020, pp. 1–29

From Absolution to Action: Examining Americans' Reactions to High-Profile Corporate Scandals

Meaghan L. Guckian *

University of Massachusetts and Antioch University

Daniel A. Chapman

University of Massachusetts, Yale University, and University of Pennsylvania

Brian Lickel and Ezra M. Markowitz

University of Massachusetts

When corporations behave inappropriately, for example, by intentionally circumventing emissions regulation or jacking up the price of a life-saving drug, assessing and assigning culpability is both natural and necessary. Such ascriptions of blame influence how consumers perceive and engage with corporations in the wake of misconduct. In a nationally representative sample of American adults, we examined how people's mental models of corporate wrongdoing influenced their awareness of and responses to a series of corporate scandals that broke between 2015 and 2017. Using a mixed effects modeling approach addressing both individual and scandal-level variability, our results revealed that subscribing to the belief that corporate scandals are the product of the corporate culture (as opposed to the actions of a "few bad apples" within an organization) amplified people's awareness of, degree of concern about, and the probability of having taken action against transgressing corporations. The findings presented here highlight the importance of exploring consumers' complex responses to corporate scandals, particularly

*Correspondence concerning this article should be addressed to Meaghan L. Guckian, Department of Environmental Studies, Antioch University New England, 40 Avon Street, Keene, NH 03431 [e-mail: mguckian@antioch.edu].

Acknowledgments: This work was supported by the National Science Foundation Division of Behavioral and Cognitive Sciences under Grant BCS-1622687 awarded to E.M. (PI) and B.L. (co-PI). All authors contributed to the study concept, development, and design. D.C. analyzed the data and contributed the results and figures. M.G. wrote the first draft of the manuscript. All authors provided critical revisions and approved the final version. The relevant data, analysis code, survey materials, and supplementary tables can be accessed at: https://osf.io/79kjz/. The present research was not preregistered.

DOI: 10.1111/asap.12196

for regulators and consumer advocates interested in leveraging public outcry to hold corporations responsible.

Corporate scandals often culminate in the resignation and/or criminal indictment of a handful of top-level employees. Coupled with the media's proclivity to headline stories of deviant CEOs and high-ranking officials (An & Gower, 2009; Benediktsson, 2010), the narrative of blame surrounding instances of corporate malfeasance often implicates the actions of a "few bad apples." While attributing blame to individual actors is common and objectively appropriate for some corporate scandals, there are also instances of corporate wrongdoing that are the by-products of deeper and more pervasive corruption at the organizational and/or institutional level; that is, sometimes corporate wrongdoing stems not solely from the actions of a few wayward employees but rather is a consequence of a corrupt corporate culture that shapes the decisions made at both the individual and organizational levels (e.g., Sims & Brinkman, 2003).

How a given instance of corporate wrongdoing is both presented to (e.g., via media coverage) and perceived by consumers is important because ascriptions of responsibility and blame influence consumers' reactions to incidences of corporate wrongdoing (e.g., Folkes, 1988; Guckian, Chapman, Lickel, & Markowitz, 2018). When consumers come to view a few bad actors as primarily responsible for a scandal, they are often quick to absolve the larger corporation of responsibility, which in turn suppresses motivation to meaningfully punish the organization through, e.g., consumer actions (e.g., boycotting); in contrast, when people harbor the belief that corporate scandals are a by-product of a corrupt corporate culture, they are more likely to respond negatively toward the brand (e.g., show increased levels of anger, decreased patronage intentions; Guckian et al., 2018). However, it remains unclear whether people's mental models of blame and responsibility in the context of organizational wrongdoing consistently and predictably influence their reactions to diverse real-world corporate scandals, as past work has generally focused only on single instances of wrongdoing (e.g., Volkswagen diesel emissions scandal). Thus, in the present study we surveyed a nationally representative sample of American adults to examine individuals' responses to a diverse set of high-profile corporate scandals that received widespread media coverage between 2015 and 2017. In doing so, we build on prior themes in the literature and explore how various previously identified individual-level factors and socio-demographic characteristics may influence people's awareness of, concern about, and punitive responses to corporate scandals.

Corporate Wrongdoing

Corporate scandals are far from an anomaly. Since Volkswagen admitted to intentionally evading emissions regulations in some 11 million diesel engine vehicles worldwide in September 2015 (Gates, Ewing, Russel, & Watkins, 2016), the marketplace has experienced a surge in high-profile scandals. Equifax Inc., one of the largest credit reporting agencies, delayed revealing a substantial data breach, which exposed sensitive, identifying personal information of nearly half of the American public (Bernard, Hsu, Perlroth, & Lieber, 2017). Mylan pharmaceutical came under fire for price gouging the Epi-Pen®, a life-saving drug used by over 3.6 million Americans to treat severe allergic reactions (Rockoff, 2016), while Wells Fargo & Company was found to have created millions of fraudulent, unauthorized bank accounts (Corkery, 2016; Cowley, 2017).

These and other incidences of corporate neglect and unethical decision-making can create immeasurable damage for corporations, their employees (e.g., Groysberg, Lin, Serafeim, & Abrahams, 2016), and even competing brands (e.g., Borah & Tellis, 2016; Roehm & Tybout, 2006; Trump & Newman, 2017). However, less is known about how corporate scandals are perceived and acted upon by the people who are either directly serviced by faulty products and left unprotected by neglect, or simply exposed to major institutional failures. That is, how do corporate scandals resonate in the minds of American consumers?

Consumer Reactions to Corporate Wrongdoing

Research in consumer marketing and psychology has examined consumer-related responses to corporate scandals, particularly those characterized as product-harm crises (for review, see Cleeren, Dekimpe, & van Heerde, 2017). At the individual consumer level, (re)-patronage and brand punishment decisions (e.g., boycotting products, bad-mouthing) following corporate wrongdoing have received attention from researchers (e.g., Klein & Dawar, 2004). In addition to assessing post-scandal purchase and punishment intentions, research has also examined consumers' evaluations of transgressing brands (Aaker, Fournier, & Brasel, 2004; Cheng, White, & Chaplin, 2012; Einwiller, Fedorikhin, Johnson, & Kamins, 2006), while less research has explored outcomes pertaining to individuals' awareness of corporate scandals (e.g., Dawar & Pillutla, 2000).

Across multiple domains, research has identified a variety of factors that drive consumers' post-scandal purchase intentions, including corporate social responsibility evaluations (Klein & Dawar, 2004; Russell, Russell, & Honea, 2016), preexisting brand relationships (Dawar & Pillutla, 2000; Grégoire & Fisher, 2008; Grégoire, Tripp, & Legoux, 2009), attributions of blame (e.g., Folkes, 1988; Guckian et al., 2018; Lei, Dawar, & Gürhan-Canli, 2012), proximity to the scandal (e.g., Guckian et al., 2018; Johnson, Matear, & Thomson, 2010),

and moral self-conscious emotions (Grappi, Romani, & Bagozzi, 2013; Guckian et al., 2018; Romani, Grappi, & Bagozzi, 2013). Extant research in this domain has largely relied on the use of vignettes and/or stimulus narratives—based in part on prior instances of wrongdoing—to examine the nature of the relationship between corporate wrongdoing and consumer reactions (Grappi et al., 2013).

Although this past research has provided an important contribution to our understanding of the psychological processes underpinning consumers' reactions to corporate irresponsibility, most of it has not addressed the dynamics of opinion and behavior formation relative to actual corporate scandals. More recently, research has begun to examine how existing brand patrons respond following an actual instance of intentional corporate malfeasance that affects both brand patrons and the general public (e.g., Guckian et al., 2018; Markowitz, Chapman, Guckian, & Lickel, 2017). What emerges from this collective body of work is clear evidence that both scandal- and consumer-centered factors determine how people respond to specific instances of corporate wrongdoing. However, much work remains to be done.

Assessing Reactions to Real-World Scandals

As corporate scandals proliferate, it is important to understand what drives consumers' cognitive, attitudinal, and behavioral responses. Reviewing prior literature, there remain important, yet largely unanswered questions in the context of corporate wrongdoing. One seemingly basic, yet underexamined area of research involves ascertaining whether and to what extent American adult consumers are even aware of recent acts of corporate wrongdoing, and furthermore, to what extent they are concerned about and have taken retributive action against transgressing brands. Although we may be inclined to believe that people "vote with their wallets," it is unclear to what extent the American public punishes organizations that, for instance, violate their privacy or moral norms.

Additionally, no research that we are aware of has examined whether and how consumers' mental models of blame and responsibility relative to corporate wrongdoing consistently and predictably influence their reactions to the wide diversity of corporate scandals they hear about through the media and other sources. Although prior research suggests that the probability of retributive action is higher among consumers who attribute blame to corporate corruption (Guckian et al., 2018), it remains uncertain whether this effect is stable and robust across disparate scandals and, furthermore, to the inclusion of other relevant predictors known to influence consumer reactions to corporate irresponsibility (e.g., gender, Laufer & Gillespie, 2004).

Exploring consumer responses to multiple, diverse real-world corporate scandals also presents an opportunity to examine more explicitly whether differences in behavioral and attitudinal outcomes are predominantly driven by situational (e.g.,

scandal-specific variables) versus intra-individual factors. Thus, to more comprehensively examine what may drive people's awareness and reactions of specific scandals, we explore how other individual-level factors (e.g., media consumption) and pertinent socio-demographic characteristics (e.g., political party affiliation, age) may help explain consumers' awareness and reactions.

Ascribing Responsibility for Corporate Wrongdoing

In the wake of corporate scandals, addressing the question and implications of culpability has drawn significant academic and popular interest. Indeed, a long-standing debate exists about whether organizations, including corporations, should and can be considered morally responsible agents themselves or conversely, if only individual actors operating within an organization can assume culpability (Orts & Smith, 2017). Although this debate warrants attention with respect to the legal and criminal ramifications surrounding corporate wrongdoing, the implications stemming from judgments of blame extend beyond measures of liability. Extant literature in psychology suggests that people are motivated to develop and assign causes to actions, events, and/or behaviors (Heider, 1958; Malle, Guglielmo, & Monroe, 2014; Weiner, 1985), particularly those with negative consequences. In turn, these ascriptions of responsibility can play a powerful role in shaping people's perceptions of and reactions to blameworthy events (Weiner, 1985).

Interpreting the causal antecedents of corporate failures poses similar downstream implications as research indicates that consumer responses to corporate wrongdoing are partly driven by attributions of blame (Folkes, 1988; Lei et al., 2012). Ascribing more blame to a corporation has been associated with negative consumer reactions to corporate wrongdoing (Folkes, 1988; Folkes, Koletsky, & Graham, 1987). However, most of the research examining the aftermath of corporate misconduct have examined attributions of responsibility with respect to three causal dimensions—locus, stability, and control—that lead to an overall judgment of blame (e.g., Barbarossa, de Pelsmacker, Moons, & Marcati, 2016; Weiner, 1985).

Yet, media coverage of corporate scandals rarely conforms to such a three-dimensional narrative. Rather, headlines more often adhere to the enduring debate, implicating that corporate wrongdoing is either a by-product of a handful of immoral actors (e.g., "bad apples") or else is symptomatic of a corrupt corporate culture (e.g., "bad barrel"; Benediktsson, 2010). Research examining the media's coverage of white-collar crimes, including cases of corporate fraud, consistently reveals media outlets tend to focus on the actions of individuals rather than on patterns of organizational corruption (Benediktsson, 2010; Lynch et al., 2000; Burns & Orrick, 2002).

Variation among individuals' beliefs about the nature of culpability can differentially influence reactions to corporate scandals. In a recent study,

Guckian et al. (2018) examined how Volkswagen vehicle owners' ascriptions of responsibility for causing the diesel emissions scandal—blaming either a "few bad apples" or else a "rotten corporate culture"—shaped their reactions to the corporation's circumvention of emissions regulations. Owners who perceived the scandal as symptomatic of a "rotten corporate culture" were angrier about it, tended to distrust the long-term ethicality of the firm, and were less likely to engage with the brand in the future—i.e., buy their products or spread positive word-of-mouth—compared to owners who perceived "a few bad apples" to be responsible (Guckian et al., 2018). Although this finding draws on a single incident of corporate wrongdoing, variation in people's mental models about the nature of culpability surrounding corporate wrongdoing may strongly influence their awareness of, concern about, and punitive actions in response to corporate wrongdoings more generally.

Additional Factors

In addition to playing a pivotal role in shaping the narrative around who or what is to blame, the media play a critical role in illuminating the breadth of corporate misconduct and shaping public understanding of what went wrong (An & Gower, 2009; Schranz & Eisenegger, 2016). Indeed, when corporations do bad things—e.g., commit financial fraud or deliberately circumvent government regulations—consumers will likely hear about it via traditional and, increasingly, social media coverage. Given the proliferation of corporate scandals in recent years, major business press organizations such as Forbes and Fortune have become accustomed to releasing annual recounts of the year's most notable failures (e.g., Shen, 2017). Thus, we expect that individuals who are more exposed to mainstream media outlets (e.g., New York Times, local newspapers) should report higher levels of awareness of corporate misconduct. Yet, as news about corporate scandals eventually fades from national headlines, it remains unclear how and to what extent specific incidences of wrongdoing are remembered by the general public.

Prior expectations about how corporations should conduct their business may also influence consumers' awareness of and reactions to corporate scandals (Klein & Dawar, 2004; Russell et al., 2016). Corporate social responsibility (CSR) initiatives have become a mainstay on corporate agendas, underscoring firms' voluntary commitment to environmental and social endeavors that move beyond the scope of traditional economic interests (Dahlsrud, 2008). Several studies have demonstrated the link between CSR and positive affective, cognitive, and behavioral responses by consumers (Brown & Dacin, 1997; Creyer, 1997; Ellen, Mohr, & Webb, 2000; Sen & Battacharya, 2001). CSR platforms positively influence consumer attitudes toward a company and its products, and consumers are willing to pay more and advocate for products manufactured by corporations with strong

CSR commitments (Abrantes Ferreira, Gonçalves Avila, & Dias de Faria, 2010; Xie, Bagozzi, & Grønhaug, 2019).

With consumers increasingly attuned to and interested in patronizing brands on behalf of their CSR initiatives (Creyer, 1997), they are likely to respond unfavorably to acts of corporate wrongdoing that contradict such commitments. Indeed, consumers punish firms whose commitment to social initiatives is perceived as being insincere (Sen & Battacharya, 2001; Becker-Olsen, Cudmore, & Hill, 2006). Thus, when corporations behave unethically, or their negligence causes harm, it should be more salient and provoke more negative reactions (e.g., increased punitive action) among consumers who believe that a corporation's responsibility to both people and place is greater than profit maximization.

Another factor that should contribute to consumers' awareness of and reactions to corporate scandals is personal exposure and impact (e.g., Grégoire & Fisher, 2008; Johnson et al., 2010; Trump, 2014; Guckian et al., 2018). Many of the consequences of corporate scandals have diffuse—direct and indirect—impacts on consumers. Whether real or perceived, ethical decisions (e.g., punishing a transgressing brand) are amplified when individuals feel a heightened social, cultural, physical, or psychological sense of proximity to an issue (Jones, 1991; McHanon & Harvey, 2006). For instance, owners of impacted Volkswagen vehicles reported being less likely to engage with the corporation in the future compared to Volkswagen owners whose vehicles were not implicated in the emissions scandal (Guckian et al., 2018). Thus, we might expect people either directly or indirectly affected by a given scandal to be more likely to remember it, be more concerned about it, and more likely to take retributive action.

In addition to these aforementioned factors, individuals' perceptions of and behavioral responses to corporate scandals may also be influenced by a number of relevant socio-demographic characteristics. Research in consumer marketing suggests that women place greater emphasis on CSR initiatives than men (Hatch & Stephen, 2015), and tend to attribute more blame to corporations in product-harm crises as a function of feeling more personally vulnerable to experiencing a similar event (Laufer & Gillespie, 2004). Silvera, Meyer, and Laufer (2012) found that older adults perceive themselves as significantly less likely to be affected by product failures, attribute less blame to the corporation, and are more likely to purchase and recommend products manufactured by the corporation at fault. However, it remains unclear whether and how these differences influence peoples' awareness of and reactions to corporate scandals not characterized as product-harm crises.

Variation in educational attainment may also influence individuals' responses to corporate wrongdoing. Those who are highly educated may be more aware of current business affairs and, furthermore, the actions they can take to punish a firm (e.g., seek out and sign a petition; join a class action lawsuit). Corporate scandals may also provoke divergent responses as a function of political identity.

Research over the last decade has detailed how strongly held and broadly exercised social—partisan—identities exert an increasingly powerful influence on how people interpret and respond to significant social, economic, and political issues (e.g., Kahan et al., 2012; Pew Research Center, 2016). The growing partisan divide among Democrats and Republicans includes divergent opinions about the effect that large corporations, banks, and financial institutions have on the nation (Geiger, 2017; Pew Research Center, 2017). Thus, we suspect that political party affiliation may differentially influence individuals' familiarity with and responses to corporate wrongdoing.

Present Study

In the present study, we apply the term "corporate scandal" to a range of different situations wherein a corporation has experienced some level of controversy as a function of either their intentional and/or negligent conduct. A series of seven scandals that received significant media coverage since the revelation of Volkswagen's intentional diesel emissions deceit in 2015 offered an excellent context in which to assess people's awareness of, concern about, and actions taken to address actual instances of corporate wrongdoing. These scandals include the diesel emissions issue at Volkswagen, multiple claims of sexual harassment at Fox News, Cambridge Analytica's political interference on Facebook, Mylan pharmaceutical's price gouging of Epi-Pen®, the data breach at Equifax Inc., fraudulent unauthorized bank accounts at Wells Fargo, and the discovery of trace amounts of pesticides in Ben & Jerry's ice cream. Given the unique nature of each scandal (e.g., domain and nature of misconduct), study outcomes are expected to vary across the various instances of corporate wrongdoing. We also anticipate the effects of the individual-level and socio-demographic factors identified above to vary across scandals.

Method

Participants

Respondents were recruited to participate in the survey by the marketing research firm, YouGov. A total of 1,139 respondents were matched down to a sample of 1,000 respondents based on gender, age, race, and education constructed from the 2016 American Community Survey. Matched cases were then weighted using a propensity score function based on age, gender, race/ethnicity, years of education, and region to ensure that the sample was representative of the American adult population. To produce the final weights, the weights were then post-stratified on 2016 Presidential vote choice, and a four-way stratification of gender, age, race, and education. The survey was administered from May 4 to 9, 2018. The study was approved by the University of Massachusetts, Amherst Institutional Review

Table 1. Sociodemographic Characteristics for Survey Respondents

Age M = 47.73	*SD* = 17.67	Marital Status	%	Employment status	%
Gender	%	Married	45.8	Full-time	38.2
Female	51.3	Separated	0.6	Part-time	9.3
Male	48.7	Divorced	11.5	Laid off	0.3
Party identity		Widowed	5.3	Unemployed	8.7
Democrat	36.0	Never married	34.0	Retired	20.8
Republican	25.0	Domestic partnership	2.8	Permanently disabled	8.6
Independent	28.4	**Income**		Homemaker	6.9
Other	3.5	<10k	8.0	Student	5.3
Not sure	7.1	10–19.9k	11.7	Other	1.8
Education		20–29.9k	10.1	**Religion**	
No high school	10.0	30–39.9k	12.5	Protestant	35.3
High school graduate	29.7	40–49.9k	10.2	Catholic	21.5
Some college	18.8	50–59.9k	9.9	Mormon	1.3
2-year degree	13.4	60–69.9k	7.7	Eastern orthodox	0.7
4-year degree	18.2	70–79.9k	5.2	Jewish	1.8
Post-grad	10.0	80–99.9k	8.2	Muslim	0.6
Race		100–119.9k	5.4	Buddhist	0.8
White	64.1	120–149.9k	4.4	Hindu	0.5
Black	12.0	150–199.9k	3.2	Atheist	5.3
Hispanic	15.7	200–249.9k	2.1	Agnostic	8.0
Asian	4.0	250–349.9k	0.1	Nothing	20.4
Native American	1.0	350–499.9k	0.8	Other	3.9
Middle Eastern	0.1	500k+	0.5		
Mixed	2.0				
Other	1.2				

Note. Weighted proportion estimates are provided.

Board (Protocol ID: 2018–4741). Table 1 displays weighted socio-demographic characteristics.

Measures

Mental Models of Blame

A single dichotomous item assessed participants' mental models of blame and responsibility surrounding corporate scandals: "When corporations do bad things, do you generally think that it's because of the actions of a 'few bad apples' within the corporation or because of a bad corporate culture?" There was a roughly even split between those selecting the "a few bad apples" ($n = 482$, weighted% = 49.86) and "the corporation's culture" options ($n = 515$, weighted% = 50.14). This reflects a greater proportion of participants endorsing the "corporate culture" position in the population-level results than was observed in our prior research with Volkswagen owners (Guckian et al. 2018).

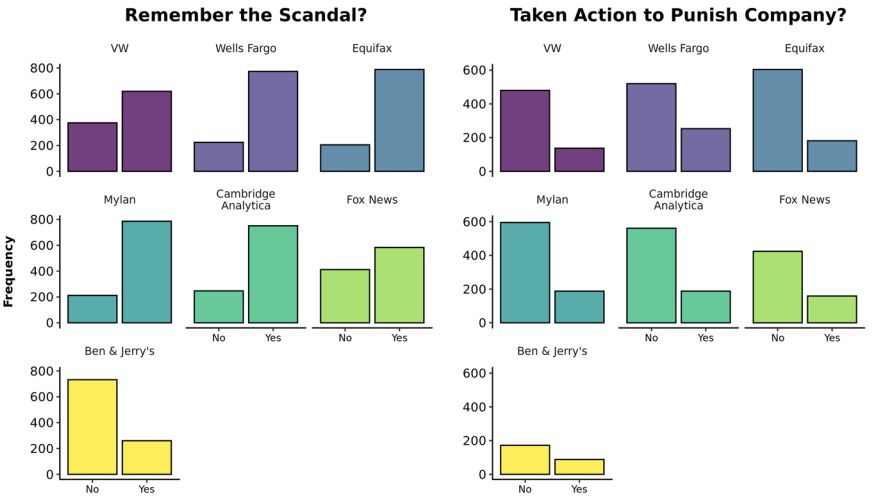

Fig. 1. Scandal-specific response patterns: familiarity and actions taken. [Color figure can be viewed at wileyonlinelibrary.com]

Familiarity with Recent Corporate Scandals and Actions Taken

For each of the seven scandals assessed, participants were asked whether they were or were not familiar with the scandal (e.g., "Do you remember hearing or reading about how the car manufacturer, Volkswagen, intentionally tampered with vehicle engines in order to evade government diesel emissions regulations?"; 0 (no) or 1 (yes)). For those who indicated that they were familiar with the scandal, three follow-up questions were asked (described below). Figure 1 provides the response details of participant familiarity (also referred to as "remembering" throughout). For those who indicated that they were familiar with a given scandal, Figure 1 also provides these participants' self-reports about whether they have taken some form of action to punish the company for the scandal. A single dichotomous item gauged consumer actions, "Have you personally done anything to punish the business or corporation in response to their actions (e.g., boycott their products, bad-mouth them, sign a petition)?"; 0 (no) or 1 (yes).

In addition to the six scandals reported on here, we initially also asked respondents about their familiarity with the recent Ben & Jerry's scandal involving the presence of trace amounts of herbicide in their ice cream. The pattern of participants' descriptive responses on each measure was noticeably different for this scandal relative to the other scandals (i.e., far fewer individuals remembering the scandal, much lower levels of concern, actions taken, etc.). Therefore, we drop this scandal from our statistical models, relying instead on ratings from the other six scandals. This change saved computation time for the mixed effects models,

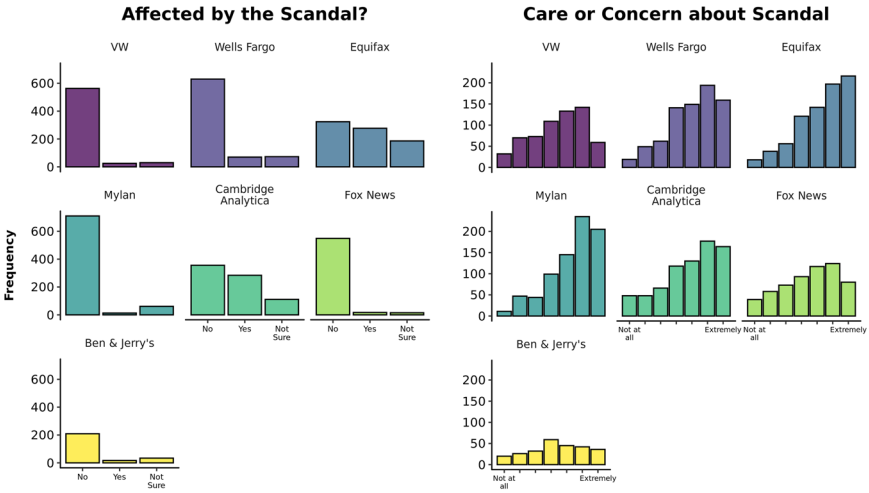

Fig. 2. Personal effects and concern about scandal impacts. [Color figure can be viewed at wileyonlinelibrary.com]

reduced convergence issues in the Monte Carlo samples, and generally produced more stable solutions. The decision to remove this was done prior to estimating our full mixed effects models, and thus ideally does not bias our estimates in favor of any specific finding.

Personal Effects and Concern About Recent Corporate Scandals

In addition to the measure of actions taken, participants who were familiar with the scandals were also asked whether they were personally affected by the scandal in some way as well as their degree of self-reported concern/care about the scandal. Personal effects of the scandal was measured using one item, "Were you personally affected by the corporation's actions?"; 0 (no), 1 (yes), or 2 (not sure). To assess self-reported concern, a single measure was used, "How much would you say you care or cared about the scandal?"; 1 (not at all) to 7 (extremely). Figure 2 provides the response patterns for these measures. Due to very low incidence rates of individuals being personally affected by these scandals, and the likely covariance between personal effects and concern, we ultimately opted to not include this indicator in our models.

Corporate Social Responsibility Beliefs

Five items were included to measure participants' beliefs about the motives of companies that engage in CSR actions. These items were asked in general

and not in reference to any specific scandal. These included maximizing profits, avoiding compromising ethical standards, ensuring equal employee treatment, and environmental protection. For example, participants were asked the extent to which they disagreed or agreed with the statement, "I believe that corporations must maximize profits"; 1 (strongly disagree) to 7 (strongly agree). Due to skew, correlation patterns, and theoretical considerations, only two of these items were retained for modeling presented here: the extent to which participants felt that companies engage in CSR in order to maximize profits and to help solve societal problems (Medians = 5). These items had a weak, negative correlation (Kendall's tau $b = -.05$, $z = -1.83$, $p = .067$).

Frequency of Media Use

Participants were asked about their media use habits (e.g., "During a typical week, how often do you use each of the following sources to get news and opinions?"; 1 (never) to 5 (very often)). For the purposes of modeling, several composites were created by averaging media use types together in order to create national cable media (CNN and MSNBC) and national newspaper (New York Times and Wall Street Journal) indices. National commercial broadcast (i.e., NBC, CBS, etc.), local papers, and Fox News were kept separate for the purposes of analysis.

Covariates

For building models to predict participants' familiarity and responses to the scandals, a series of covariates were included given their potential influence on these outcomes. Participant age and education level were included, as were political party affiliation and gender (see Table 1 for more information on these measures).

Analysis Plan

First, a series of simplified mixed effects regression models addressing both individual and scandal-level variability were evaluated to examine the direct influence of mental models of blame on familiarity with, concern about, and actions taken related to each scandal. Next, a set of larger mixed effects models were fit to evaluate the influence of mental models of blame on each focal outcome while concurrently evaluating the role of CSR, media exposure, and pertinent demographics. Bayesian (mixed effects) ordinal probit and logistic regressions were performed for all model evaluations. Logistic regressions were performed to explain the relationship between predictors and binary dependent variables (e.g., familiarity, actions taken). Although it is common in some areas of the social

sciences to use linear regressions (intended for metric data) on Likert-type data, we instead employed ordinal probit regression models. Estimation using ordinal regression is more appropriate for these binned item types (Bürkner & Vuorre, 2019), and we selected probit models to aid in their interpretability for unfamiliar readers (i.e., probit coefficients are interpreted similarly to linear coefficients). The mixed effects, multi-level modeling approach is particularly appropriate as it allowed us to account for variation across each scandal-type (i.e., ratings of multiple scandals) and across each participant's rating set (i.e., ratings of all scandals by each participant). Additionally, rather than inserting a series of dummy-coded predictors into the models to estimate education impacts on the outcomes, this was entered as a "group-level" factor, allowing the intercept of the model to vary across each level (Gelman & Hill, 2006).

A few important notes about our analysis bear mentioning. First, we do not rely on the null hypothesis significance testing framework for our work. That is, we are not seeking to derive so-called "statistical significance" from specific regression estimates (Gelman, 2018). Instead, our analysis focused on estimating the effects of our key predictors (e.g., mental models of blame) on outcomes while deriving indications of how uncertain the estimates are. Thus, our decisions for which models to run and which terms to include were not dictated by appeals to things such as "$p < .05$."

Both the design (within-subjects ratings of multiple scandals, etc.) and the estimation strategy led us to the decision that using Bayesian statistics enabled the most flexible and transparent framework from which to perform our analysis (Gelman et al., 2013). Perhaps the primary difference between our Bayesian framework and frequentist analyses (i.e., "traditional" approaches such as maximum likelihood) is that our assessment does not rely on assumptions of repeated sampling (and, thus, not on *p*-values) to perform inference. Instead, the Bayesian framework incorporates existing information about the subject matter (priors) with the observed data (likelihood) to generate estimates of interest (posterior). Our inferences are performed by examining the posterior distributions, summarizing them in various ways, and examining the substantive predictions of the models.

The premise of the mixed-effects regression models is virtually the same between frequentist and Bayesian approaches, with the exception being that how the models are estimated "under the hood," and how the results are interpreted, varies. At this point, it is natural for readers to wonder where the prior information is derived from to perform the analyses, since a study directly on this subject has not been performed. Fortunately, prior information need not mimic specific past findings, and instead is often (optimally) used as a means of calibrating (also known as regularizing) statistical models (Gelman, Simpson, & Betancourt, 2017; McElreath, 2016). For example, imagine if we were to predict concern about one scandal from mental models of blame using a simple regression model. In this model, we can very reasonably assume the regression coefficient for mental models

of blame would not be, say, 100 or 1,000 (or even 10 for that matter), purely given the structure of the model and scales of the data. By ruling out implausible values of this kind (i.e., using "prior information"), the statistical models perform more optimally without this prior information, dramatically influencing the estimates derived. Such priors are typically referred to as weakly informative or regularizing (Stan Development Team, 2018). One of the benefits of the Bayesian statistics approach to mixed-effects models is the ability to use priors as calibration tools (McElreath, 2016).

Instead of a point estimate and estimate of error for a regression term, we receive a full distribution of estimates with varying degrees of plausibility. These distributions can be summarized in various ways, such as computing the mean or median of the distribution (loosely analogous to the point estimate of a frequentist regression model) and describing an uncertainty interval. In our case, we use posterior medians and 95% highest posterior density intervals. The complicated term "highest posterior density intervals" simply denotes the region of a distribution that captures 95% of the probability. We opted to use 95% intervals as opposed to, say, 90% or 88% intervals as this region captures the majority of the posterior distribution probability while also being very loosely analogous to 95% confidence intervals that readers may be more familiar with. However, the interpretation of these intervals is not identical and thus this analogy should be taken with caution (Morey, Hoekstra, Rouder, Lee, & Wagenmakers, 2016).

To aid readers in interpreting the results, we rely primarily on graphical representations of the results. In addition to the aforementioned analyses, we also compared models including our key mental models of blame predictor against models in which an intercept only was included. This comparison helps to quantify the contribution of mental models of blame to model predictions, using the Watanabe–Akaike information criteria (WAIC; Watanabe, 2010). The WAIC is an update of the more traditional Akaike information criterion (AIC) that relies on fewer statistical assumptions, with lower values generally indicative (though not conclusive) of a "better" model. For each model, we report on the "WAIC difference" (i.e., the WAIC value after subtracting the intercept-only model value from the main model value) and the standard error of this difference, with larger differences (relative to the standard error) suggesting a greater difference. In addition, we also report Akaike model weights derived from the WAIC comparisons, which aim to quantify the weight of evidence in favor of one model over another (Wagenmakers & Farrell, 2004).The relevant data, analysis code, survey materials, and supplementary tables can be accessed at https://osf.io/79kjz/.

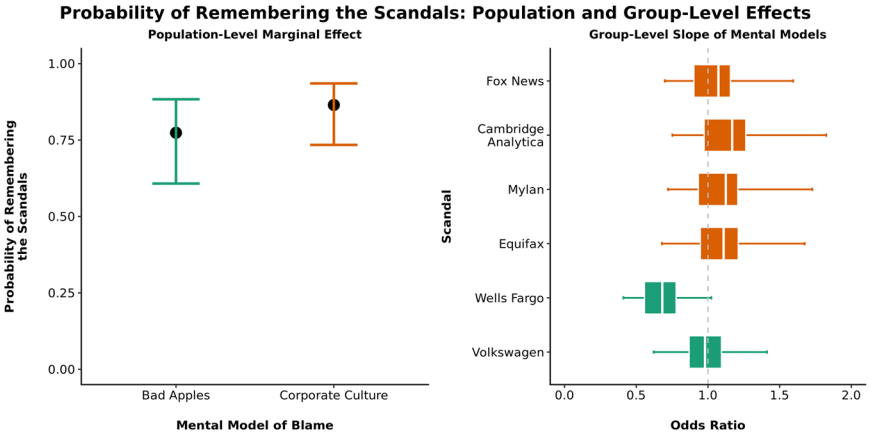

Fig. 3. Population and group-level effects of mental models of blame on the probability of remembering the scandals. [Color figure can be viewed at wileyonlinelibrary.com]

Results

Mental Models of Blame and Familiarity with Scandals

The effect of mental models of blame on the probability of remembering a given scandal was examined using a mixed effects logit model. Due to the nested nature of these ratings, the intercept of the model was allowed to vary across each scandal and across each participant (i.e., group-level intercepts). Additionally, to allow the effect of mental models of blame to vary across each scandal, an additional group-level slope was included to model this. There was a modest overall effect of mental models of blame such that those believing in a rotten corporate culture were close to two times as likely to remember a given scandal, Posterior Mean Odds Ratio (OR) = 1.86, 95% HPDI = 1.22, 2.83 (see the left-hand panel of Figure 3). There was substantial variation within each respondent's overall set of scandal ratings, Posterior Mean = 2.00, 95% HPDI = 1.83, 2.17, as well as variation across each scandal type, Posterior Mean = .88, 95% HPDI = .41, 1.49. Evaluation of the group-level slope of mental models of blame indicates there was much less variation in the effect of such attributions across each scandal type, Posterior Mean = .32, 95% HPDI = .00, .63 (see the right-hand panel of Figure 3). That is, the effect of mental models of blame on the probability of remembering a given scandal was highly similar across each scandal. When compared to the intercept-only model, this model was not substantially better in terms of raw WAIC comparison, although it did receive nearly all of the Akaike model weight (WAIC difference = 11.48, SE = 7.07, 99% of AIC weight).

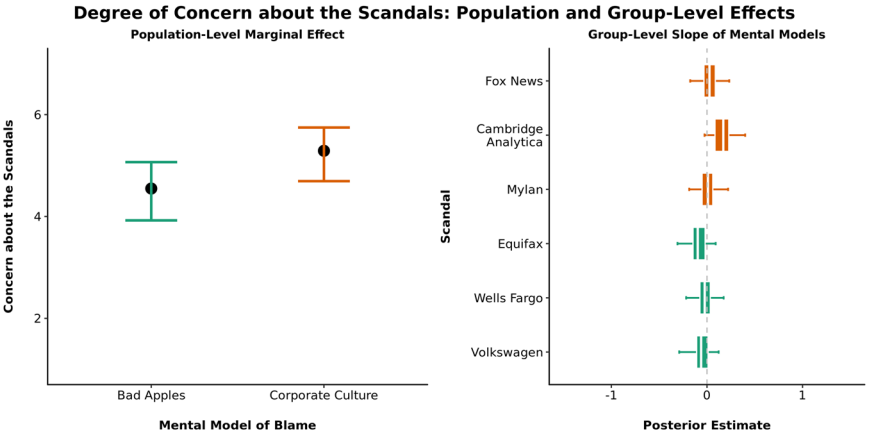

Fig. 4. Population and group-level effects of mental models of blame on the degree of concern about the scandal. [Color figure can be viewed at wileyonlinelibrary.com]

Mental Models of Blame and Concern about Scandals

Using a mixed effects probit regression, there was a non-negligible effect of mental models of blame on self-reported concern about each scandal, Posterior Mean = .61, 95% HPDI = .40, .82. Those believing in a rotten corporate culture were more than a half scale point higher in terms of self-reported concern about the scandals (see the left-hand panel of Figure 4). There was again noticeable variability across each set of scandal ratings by participants, Posterior Mean = 1.07, 95% HPDI = .99, 1.13, as well as aggregate ratings across each scandal, Posterior Mean = .51, 95% HPDI = .21, 92. The group-level slope for mental models of blame within each scandal was quite small, Posterior Mean = .16, 95% HPDI = .01, .34, again suggesting only modest variation in the effect of mental models of blame across each scandal type (see the right-hand panel of Figure 4). Compared to the intercept-only model, this model received the majority of the model weight, but again was only slightly better in terms of WAIC value comparison (WAIC difference = 16.34, SE = 10.07, ~99% of AIC weight).

Mental Models of Blame and the Likelihood of Having Taken Action

Participants were roughly 2.5 times as likely to report having taken action to punish a company when they believed that the scandals were primarily the result of a rotten corporate culture, Posterior Mean (OR) = 2.50, 95% HPDI = 1.75, 3.53. However, likely due to the low incidence rates of having taken action, there was quite a bit of variation in this estimate. The left-hand panel of Figure 5

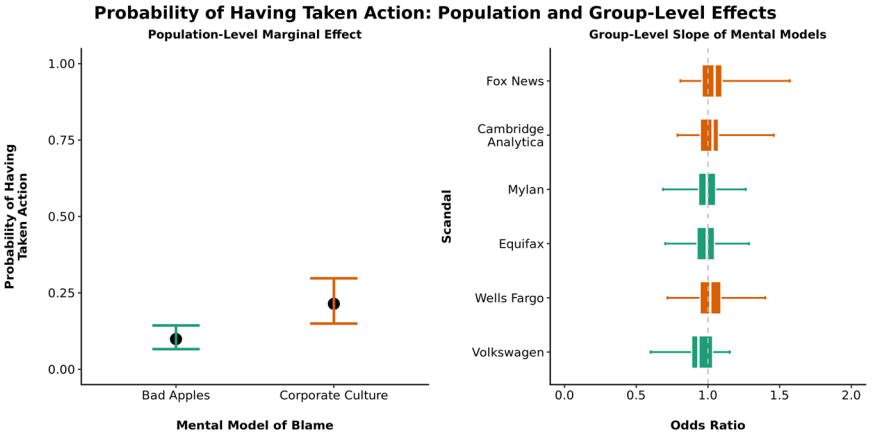

Fig. 5. Population and group-level effects of mental models of blame on the probability of having taken action to punish the company. [Color figure can be viewed at wileyonlinelibrary.com]

depicts the marginal regression effects. As with the prior models, this model was favored over an intercept-only model, although this difference was small in size (WAIC difference = 13.37, SE = 7.52, ~99% of AIC weight). There was also, again, considerable variation in the mixed effects model, particularly for each participant's set of ratings, Posterior Mean = 1.76, 95% HPDI = 1.58, 1.96, and the ratings nested within scandals, Posterior Mean = .38, 95% HPDI = .11, .75. The group-level slope for the effect of mental models of blame across scandals was again negligible, Posterior Mean = .17, 95% HPDI ≤ .01, .44 (see the right-hand panel of Figure 5).

Full Model: Remembering the Scandals

Next, we tested the full model of likelihood of remembering the scandals using the same general procedure as described earlier. In this case, the slopes of each predictor were allowed to vary across each scandal in order to incorporate variation across each scandal. Modeling all predictors simultaneously slightly reduced the previously observed effect of mental models of blame on the probability of remembering a given scandal, with a large degree of variation in the result. Thus, while the effect of mental models of blame effects is still positive (~96% of posterior probability above zero), it is less robust when adjusting for these other predictors (see Figure 6).

Age had the strongest impact on the outcome of the covariates, with a one standard deviation increase in age associated with two times the probability of remembering the scandal. There was also an effect of gender such that females were less likely to report remembering a given scandal than males. Neither of

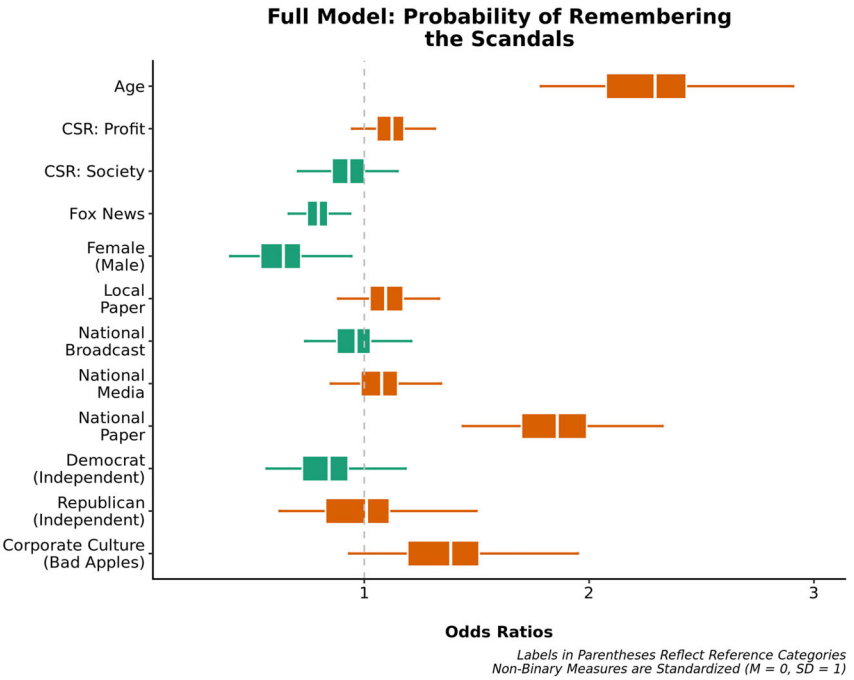

Fig. 6. Population-level predictors of familiarity with the scandals, derived from a Bayesian mixed effects logistic regression. The boxes denote 50% posterior intervals and the lines denote 95% posterior intervals. [Color figure can be viewed at wileyonlinelibrary.com]

the measures of CSR produced robust effects. The effects of attention to media sources were primarily small and highly variable, with two exceptions: Attention to national newspaper sources was associated with a greater probability of remembering the scandals, while attention to Fox News was associated with slightly lower probability of scandal recall. The estimates of the effects of political ideology were negligible and highly variable. Consistent with the simplified model presented earlier, there was considerable variation across each participants' ratings, Posterior Mean = 1.58., 95% HPDI = 1.42, 1.75, and across each scandal in the group-level estimates, Posterior Mean = .73, 95% HPDI = .36, 1.41. The group-level slope for mental models of blame did not vary substantially across scandal, Posterior Mean = .22, 95% HPDI = .08, .42. The other group-level slopes also exhibited only small amounts of variation across scandal at most, and are thus not discussed further here. There was also an effect of education on the probability of remembering scandals, Posterior Mean = .40, 95% HPDI = .21, .65 such that those with higher education levels had a higher probability of remembering a given scandal.

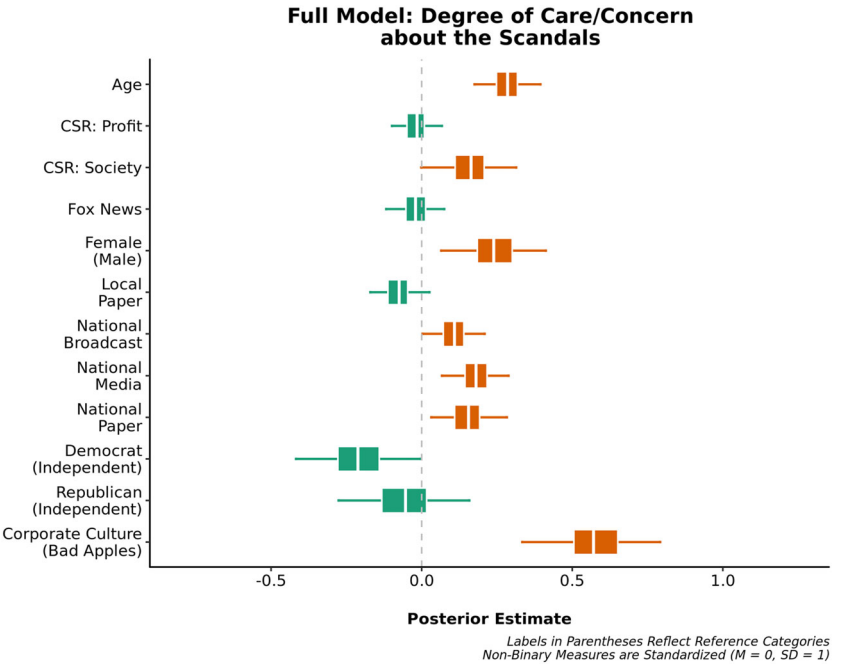

Fig. 7. Population-level predictors of concern about the scandal, derived from a Bayesian mixed effects probit regression. The boxes denote 50% posterior intervals and the lines denote 95% posterior intervals. [Color figure can be viewed at wileyonlinelibrary.com]

Full Model: Concern about Scandals

The findings regarding mental models of blame with respect to participants' concern about the scandals were highly similar for the full model as for the simplified model (see Figure 7). CSR beliefs again had a primarily negligible effect on this outcome, although the effect of CSR society beliefs was stronger than for CSR profit beliefs. As with the model for remembering the scandals, age had a positive effect such that older individuals reported greater concern on average than younger individuals. In contrast to the model of remembering scandals, females were slightly more likely to report concern about the scandals than males. Media attention, specifically attention to national news media and national papers had positive, albeit small, effects. Ideology again had a relatively minor influence on the pattern of results, although democrats were slightly less likely to report concern relative to independents. In terms of the group-level effects, education had little-to-no influence on concern about the scandals in this case and there was not substantive evidence for variation in the group-level slopes (i.e., variation in the effect of the predictors across each scandal rated).

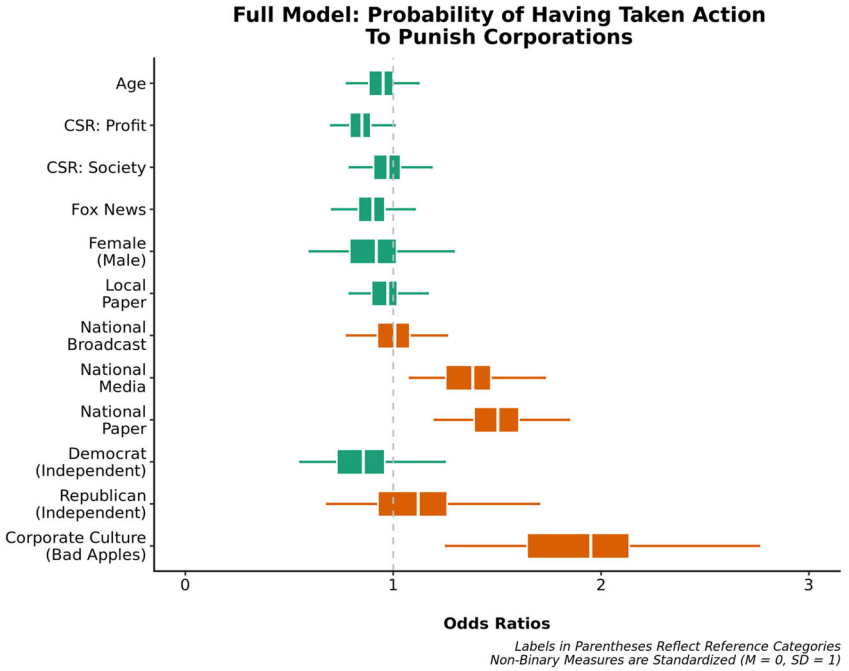

Fig. 8. Population-level predictors of having taken action to punish companies, derived from a Bayesian mixed effects logistic regression. The boxes denote 50% posterior intervals and the lines denote 95% posterior intervals. [Color figure can be viewed at wileyonlinelibrary.com]

Full Model: Likelihood of Having Taken Action

In the full model exploring consumers' behavioral responses to corporate scandals, the belief that corporate culture is rotten to the core was associated with close to two times greater likelihood of having taken action to punish the company. Indeed, mental models of blame were the strongest predictor of taking action in the full model. These estimates as well as those for the other predictors can be found in Figure 8. CSR beliefs, age, gender, and political orientation all had negligible effects on this outcome, as did attention to local newspapers, national broadcast news, and Fox News. Attention to other national media and national newspapers were both associated with small increases in the likelihood of taking action to punish a given company. Education level had a negligible influence on taking action against companies, as with the prior model, and is thus not discussed further. Similarly, evaluation of the group-level slopes (i.e., examining the variation in the effects of the predictors on the outcome across each scandal) again suggested negligible impacts.

Discussion

Although corporate scandals materialize under varying circumstances and across different domains (e.g., finance, politics, health), the present results suggest that people's generalized ascriptions of blame and responsibility play a powerful role in shaping their responses to actual incidences of corporate misconduct; indeed, the effects of such beliefs appear to be stronger drivers (or inhibitors) of retributive action than more commonly discussed and assessed factors, including attitudes toward corporate social responsibility. Our results reveal that participants who subscribe to the belief that corporate wrongdoing is generally the by-product of corrupt corporate culture were more aware of, expressed a greater degree of concern about, and were more likely to have taken action in response to particular instances of corporate malfeasance than were those participants who attribute blame primarily to a "few bad apples." In fact, participants who hold "corrupt corporate culture" beliefs were upwards of 2.5 times more likely to have punished transgressing brands in response to actual instances of wrongdoing.

Importantly, the observed effects were largely robust to the inclusion of various covariate factors that have, in prior work, been associated with consumer reactions to product-harm crises and corporate wrongdoing (e.g., Guckian et al., 2018). For example, both age and gender have previously been identified as important determinants of consumer reactions to product-harm crises (Laufer & Gillespie, 2004; Silvera et al., 2012). In examining the potential influence of these factors, the effect of consumers' mental models of blame and responsibility remained strong, particularly when predicting the probability of having taken retributive action. In addition and despite the observed variation in participant and scandal ratings, the role of mental models of blame in influencing the outcomes was largely consistent across a diverse set of scandals, which included everything from explicit corporate deception (e.g., Volkswagen, Wells Fargo) and anti-consumer behavior (e.g., Mylan) to more indirect or subtle forms of wrongdoing and negligence (e.g., Cambridge Analytica, Equifax). This consistency further suggests that these beliefs have a robust effect on shaping consumers' reactions and responses to specific instances of corporate wrongdoing. In turn, this suggests that Americans can perhaps be expected to respond in fairly predictable ways (e.g., attitudinally, behaviorally) following revelations of organizational failures regardless of the specific details of any given scandal.

In our representative sample of Americans, roughly equal numbers of respondents endorsed the "bad actors" and "rotten culture" models of corporate wrongdoing. Given the observed effects of such beliefs on downstream outcomes (e.g., attention, concern, punitive action), this distribution of core beliefs about the nature of corporate wrongdoing suggests that many Americans may be inclined to write off and downplay the importance or relevance of corporate wrongdoing;

this in turn may be reflected in consumers' general lack of willingness to take punitive action against transgressing brands. Indeed, the robust literature on willful ignorance (e.g., Bartling, Engl, & Weber, 2014) suggests that beliefs about the locus of blame and responsibility regarding corporate malfeasance may be used as one psychological "defense" against taking personally costly action to punish corporations.

Perhaps most importantly, our results provide further evidence that relying on consumers to hold corporations accountable for their past (and future) wrongdoing may be a risky approach to promoting corporate social and environmental responsibility efforts, at least among a large swath of the American public. Moreover, efforts aimed at increasing consumer engagement and action following (and perhaps preceding) corporate scandals likely need to account for (and in some cases circumvent) core beliefs about the nature of blame and responsibility in the context of organizational wrongdoing and failure. On the other side, for corporations seeking to soften the enduring effects of a public scandal, the findings here echo insights and techniques offered from literature on crisis management (Coombs, 2007). Indeed, accounts offered by corporations to explain away responsibility following instances of misconduct, e.g., justifying or excusing action as pervasive within a given corporate sector or as the result of actions taken by a small number of bad actors, are likely to influence consumer evaluations (Coombs, 2007; Schönbach, 1980; Scott & Lyman, 1968). By alleviating doubts about the underlying culture of an organization for causing wrongdoing and placing blame instead squarely on the shoulders of a "few bad apples," corporations may help placate consumers' apprehensions to engage with the brand in the future. Intentionally or not, traditional media coverage of corporate scandals appears to support this narrative, likely influencing how Americans respond to specific instances of wrongdoing.

That being said, it remains unclear whether people's mental models of blame and responsibility relative to corporate wrongdoing can be effectively dislodged or updated. Debunking the bad apples narrative may be particularly challenging if such beliefs are found to be a more stable individual characteristic rather than context-dependent. Indeed, our findings raise an important question regarding whether and to what extent consumers update their attribution beliefs in this domain as a function of "experience" (e.g., via media exposure and/or personal impact) with corporate wrongdoing. For example, despite a seemingly ever-increasing number of scandals making national headlines in recent years, we find only a very small difference in blame and attribution beliefs as a function of the number of scandals participants could recall having heard about. This in turn suggests that such beliefs may be unlikely to shift appreciably even as more instances of wrongdoing are revealed to the public.

At a more descriptive level, our results reveal interesting and somewhat disturbing patterns regarding Americans' reactions to concrete instances of corporate

wrongdoing over the past few years. Our findings indicate significant heterogeneity in Americans' responses to various corporate scandals, particularly with respect to the observed—moderate-to-elevated—levels of familiarity and expressed concern. Perhaps most important is the finding that there has not been a groundswell of retributive action taken among American consumers in response to recent instances of corporate wrongdoing. Although consumers increasingly patronize corporations on account of their efforts to propel both societal and ecological progress (e.g., Mohr, Webb, & Harris, 2001), our results suggest that when corporations violate these social and/or ecological contracts, consumers are largely unmotivated, through their individual and collective behaviors, to take punitive action. This finding, revealed in consistently low rates of self-reported retributive action across scandals, raises questions about the efficacy of leveraging consumer voices and actions as a collective means to confront and police instances of unethical corporate decision-making.

Other Factors that Influence Consumer Responses to Corporate Scandals

The observed effects of mental models of blame and responsibility remained robust to the inclusion of several covariate factors, further increasing our confidence that such beliefs are consequential in shaping consumers' responses to specific instances of wrongdoing. Contrary to our predictions, however, people's attitudes about how corporations should behave (e.g., CSR beliefs) did not exert an appreciable effect on study outcomes. One possible explanation for this finding may simply be that beliefs about blame and responsibility are more salient with respect to corporate misconduct compared to people's prescriptive beliefs about how corporations should ideally behave. In the absence of wrongdoing, we might expect CSR beliefs to play a more critical role in shaping consumers' positive engagement with a corporation (e.g., patronage). When confronted with incidences of misconduct, however, the present findings suggest that people's underlying suspicions about whom or what caused the problem—a belief already rooted in the context of wrongdoing—acts as a stronger determinant of people's responses.

Apart from mental models of blame, age had the strongest effect on study outcomes. This contradicts past research that suggests older adults are more forgiving of product-harm crises. One possible explanation for the apparent discrepancy may lie with the type of scandals highlighted in the present study, which largely captured instances of financial fraud and political propaganda rather than product-harm crises. Variation in educational attainment also had a strong effect on the likelihood of remembering the scandals, with consumers holding advanced postsecondary degrees expressing greater awareness of the corporate infractions studied here. In terms of concern and taking retributive action, however, the effect of educational attainment was negligible. Although we speculated that individuals' responses to corporate scandals would in part be driven by more ideologically

motivated patterns of belief, the results did not indicate a consistent effect of political party identification. Exposure to various media outlets also did not have an appreciable effect on individuals' familiarity with corporate scandals, though attention to national media was associated with slightly more awareness and attention to Fox News with slightly less.

Despite the relatively negligible effects of these additional factors, we do not want to claim that consumers' awareness of and reactions to corporate scandals are solely driven by their underlying beliefs about the locus of organizational wrongdoing. There are certainly other factors at work that also influence people's awareness of and reactions to corporate scandals not explored in the present study, e.g., preexisting brand relationships (e.g., Dawar & Pillutla, 2000; Grégoire et al., 2009).

Future Directions and Limitations

Our results raise a number of interesting questions deserving further exploration. First, future research should examine the plasticity and/or stability of people's beliefs about blame and responsibility in the context of organizational wrongdoing. For example, do certain types of experiences with corporate wrongdoing (e.g., being personally affected vs. merely hearing about the scandal) lead to greater or more rapid changes in people's underlying beliefs about the nature of corporate behavior more generally? One limitation of the present research is the use of a single contact cross-sectional design, which limits our ability to explore how and why such beliefs may shift over time. Second, because the present research is correlational and is necessarily limited in the ability to make causal claims, future work is needed to clarify the causal role that such beliefs may play in promoting or inhibiting consumer action in the wake of specific instances of corporate wrongdoing. For example, it is not impossible (and indeed perhaps likely) that the observed relationship between mental models of corporate wrongdoing and attention and/or concern paid to corporate scandals works in both directions (e.g., greater exposure to news about scandals may shape people's beliefs about the underlying nature of corporate decision-making). Another limitation of the present work is our reliance on purely observational data, limiting our ability to make causal inferences and generalizations to other instances of corporate wrongdoing. These limitations represent important avenues for future research in this domain.

The study also largely relied on single-item measures to assess people's attitudes and beliefs, as well as self-reported measures to gauge people's past engagement in punitive actions against transgressing brands. Furthermore, given the array of corporate scandals included in the study, the domain (e.g., social, financial, political, and health) and extent of misconduct (e.g., degree of harm, number of people affected) varied extensively. Future work should attempt to

overcome these limitations in order to increase confidence in the results. That being said, utilizing a mixed effects modeling approach enabled us to account for variation across each scandal type (i.e., multiple scandals) and across each participant's responses (i.e., ratings of all scandals by each participant). Thus, we believe our findings build on prior research and further extend our understanding of how the American adult public generally perceives and reacts to instances of real-world corporate scandals that impact various domains of life.

Conclusion

When corporations do bad things—release personal information without consent, jack up prices of lifesaving drugs solely to pad profits, and intentionally skirt safety and health regulations—the societal impacts can be enormous. Understanding what shapes consumers' responses to corporate scandals holds important implications not only for the corporations themselves but also for those charged with protecting society from overt instances of organizational wrongdoing (e.g., regulators, watchdog groups). If consumers are quick to forgive corporations for their bad actions—or fail to engage in any forms of punishment at all—changes in corporate practices and cultures that produce socially optimal outcomes are less likely to materialize. The present results suggest that beliefs about the nature of wrongdoing and blame play an important role in shaping consumers' awareness of and responses to specific instances of corporate wrongdoing. Perhaps even more critically, our results suggest that consumers cannot always (or perhaps even often) be relied upon to help police the corporate sector.

Open Research Badges

This article has earned Open Data and Open Materials badges. Data and materials are available at https://osf.io/79kjz/.

References

Aaker, J., Fournier, S., & Brasel, S. A. (2004). When good brands do bad. *Journal of Consumer Research*, *31*(1), 1–16.

Abrantes Ferreira, D., Gonçalves Avila, M., & Dias de Faria, M. (2010). Corporate social responsibility and consumers' perception of price. *Social Responsibility Journal*, *6*(2), 208–221.

An, S. K., & Gower, K. K. (2009). How do the news media frame crises? A content analysis of crisis news coverage. *Public Relations Review*, *35*(2), 107–112.

Barbarossa, C., de Pelsmacker, P., Moons, I., & Marcati, A. (2016). The influence of country-of-origin stereotypes on consumer responses to food safety scandals: The case of the horsemeat adulteration. *Food Quality and Preference*, *53*, 71–83.

Bartling, B., Engl, F., & Weber, R. A. (2014). Does willful ignorance deflect punishment? An experimental study. *European Economic Review*, *70*, 512–524.

Becker-Olsen, K. L., Cudmore, B. A., & Hill, R. P. (2006). The impact of perceived corporate social responsibility on consumer behavior. *Journal of Business Research*, *59*(1), 46–53.

Benediktsson, M. O. (2010). The deviant organization and the bad apple CEO: Ideology and accountability in media coverage of corporate scandals. *Social Forces*, *88*(5), 2189–2216.

Bernard, T. S., Hsu, T., Perlroth, N., & Lieber, R. (2017, September 7). Equifax says cyberattack may have affected 143 million in the US. *The New York Times*. Retrieved from https://www.nytimes.com/2017/09/07/business/equifax-cyberattack.html

Borah, A., & Tellis, G. J. (2016). Halo (spillover) effects in social media: Do product recalls of one brand hurt or help rival brands? *Journal of Marketing Research*, *53*(2), 143–160.

Brown, T. J., & Dacin, P. A. (1997). The company and the product: Corporate associations and consumer product responses. *The Journal of Marketing*, *61*(1), 68–84.

Bürkner, P. C., & Vuorre, M. (2019). Ordinal regression models in psychology: A tutorial. *Advances in Methods and Practices in Psychological Science*, *2*(1), 77–101.

Burns, R. G., & Orrick, L. (2002). Assessing newspaper coverage of corporate violence: The dance hall fire in Qoteborg, Sweden. *Critical Criminology*, *11*(2), 137–150.

Cheng, S. Y., White, T. B., & Chaplin, L. N. (2012). The effects of self-brand connections on responses to brand failure: A new look at the consumer–brand relationship. *Journal of Consumer Psychology*, *22*(2), 280–288.

Cleeren, K., Dekimpe, M. G., & van Heerde, H. J. (2017). Marketing research on product-harm crises: A review, managerial implications, and an agenda for future research. *Journal of the Academy of Marketing Science*, *45*(5), 593–615.

Coombs, W. T. (2007). Protecting organization reputations during a crisis: The development and application of situational crisis communication theory. *Corporate Reputation Review*, *10*(3), 163–176.

Corkery, M. (2016, September 8). Wells Fargo fined $185 million for fraudulently opening accounts. *The New York Times*. Retrieved from https://www.nytimes.com/2016/09/09/business/dealbook/wellsfargo-fined-for-years-of-harm-to-customers.html

Cowley, S. (2017, August 31). Wells Fargo review finds 1.4 million more suspect accounts. *The New York Times*. Retrieved from https://www.nytimes.com/2017/08/31/business/dealbook/wellsfargo-accounts.html

Creyer, E. H. (1997). The influence of firm behavior on purchase intention: Do consumers really care about business ethics? *Journal of Consumer Marketing*, *14*(6), 421–432.

Dahlsrud, A. (2008). How corporate social responsibility is defined: An analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management*, *15*(1), 1–13.

Dawar, N., & Pillutla, M. M. (2000). Impact of product-harm crises on brand equity: The moderating role of consumer expectations. *Journal of Marketing Research*, *37*(2), 215–226.

Einwiller, S. A., Fedorikhin, A., Johnson, A. R., & Kamins, M. A. (2006). Enough is enough! When identification no longer prevents negative corporate associations. *Journal of the Academy of Marketing Science*, *34*(2), 185.

Ellen, P. S., Mohr, L. A., & Webb, D. J. (2000). Charitable programs and the retailer: Do they mix? *Journal of Retailing*, *76*(3), 393–406.

Folkes, V. S. (1988). Recent attribution research in consumer behavior: A review and new directions. *Journal of Consumer Research*, *14*(4), 548–565.

Folkes, V. S., Koletsky, S., & Graham, J. L. (1987). A field study of causal inferences and consumer reaction: The view from the airport. *Journal of Consumer Research*, *13*(4), 534–539.

Gates, G., Ewing, J., Russel, K., & Watkins, D. (2016, April 28). Explaining Volkswagen's emissions scandal. *The New York Times*. Retrieved from http://www.nytimes.com/interactive/2015/business/international/vw-dieselemissions-scandal-explained.html?_r=0

Geiger, A. (2017). From universities to churches, Republicans and Democrats differ in views of major institutions. *Pew Research*. Retrieved from http://www.pewresearch.org/fact-tank/2016/09/26/from-universities-to-churches-republicans-and-democrats-differ-in-views-of-major-institutions/

Gelman, A. (2018). The failure of null hypothesis significance testing when studying incremental changes, and what to do about it. *Personality and Social Psychology Bulletin*, *44*(1), 16–23.

Gelman, A., Carlin, J. B., Rubin, D. B., Vehtari, A., Dunson, D. B., & Stern, H. S.(2013) *Bayesian data analysis* (3rd ed.). Boca Raton, FL: Chapman and Hall/CRC Press.

Gelman, A., & Hill, J. (2006). *Data analysis using regression and multilevel/hierarchical models*. Cambridge, UK: Cambridge University Press.

Gelman, A., Simpson, D., & Betancourt, M. (2017). The prior can often only be understood in the context of the likelihood. *Entropy*, *19*(10), 555.

Grappi, S., Romani, S., & Bagozzi, R. P. (2013). Consumer response to corporate irresponsible behavior: Moral emotions and virtues. *Journal of Business Research*, *66*(10), 1814–1821.

Grégoire, Y., & Fisher, R. J. (2008). Customer betrayal and retaliation: When your best customers become your worst enemies. *Journal of the Academy of Marketing Science*, *36*(2), 247–261.

Grégoire, Y., Tripp, T. M., & Legoux, R. (2009). When customer love turns into lasting hate: The effects of relationship strength and time on customer revenge and avoidance. *Journal of Marketing*, *73*(6), 18–32.

Groysberg, B., Lin, E., Serafeim, G., & Abrahams, R. (2016). The scandal effect. *Harvard Business Review*, *94*(9), 90–98.

Guckian, M. L., Chapman, D. A., Lickel, B., & Markowitz, E. M. (2018). "A few bad apples" or "rotten to the core": Perceptions of corporate culture drive brand engagement after corporate scandal. *Journal of Consumer Behaviour*, *17*(1), 29–41.

Hatch, C., & Stephen, S. A. (2015). Gender effects on perceptions of individual and corporate social responsibility. *Journal of Applied Business and Economics*, *17*(3), 63–71.

Heider, F. (1958). *The psychology of interpersonal relations*. New York, NY: Wiley.

Johnson, A. R., Matear, M., & Thomson, M. (2010). A coal in the heart: Self- relevance as a post-exit predictor of consumer anti-brand actions. *Journal of Consumer Research*, *38*(1), 108–125.

Jones, T. M. (1991). Ethical decision making by individuals in organizations: An issue contingent model. *Academy of Management Review*, *16*(2), 366–395.

Kahan, D. M., Peters, E., Wittlin, M., Slovic, P., Ouellette, L. L., Braman, D., & Mandel, G. (2012). The polarizing impact of science literacy and numeracy on perceived climate change risks. *Nature Climate Change*, *2*(10), 732–735.

Klein, J., & Dawar, N. (2004). Corporate social responsibility and consumers' attributions and brand evaluations in a product–harm crisis. *International Journal of Research in Marketing*, *21*(3), 203–217.

Laufer, D., & Gillespie, K. (2004). Differences in consumer attributions of blame between men and women: The role of perceived vulnerability and empathic concern. *Psychology & Marketing*, *21*(2), 141–157.

Lei, J., Dawar, N., & Gürhan-Canli, Z. (2012). Base-rate information in consumer attributions of product-harm crises. *Journal of Marketing Research*, *49*(3), 336–348.

Lynch, M. J., Stretesky, P., & Hammond, P. (2000). Media coverage of chemical crimes, Hillsborough County, Florida, 1987–97. *British Journal of Criminology*, *40*(1), 112–126.

Malle, B. F., Guglielmo, S., & Monroe, A. E. (2014). A theory of blame. *Psychological Inquiry*, *25*(2), 147–186.

Markowitz, E. M., Chapman, D. A., Guckian, M. L., & Lickel, B. (2017). A corporate scandal that hits close to home: Examining owners' responses to the Volkswagen diesel emissions scandal. *Environmental Communication*, *11*(6), 740–755.

McElreath, R. (2016). *Statistical Rethinking: A Bayesian Course with Examples in R and Stan*. Boca Raton, FL: Chapman and Hall/CRC Press.

McMahon, J. M., & Harvey, R. J. (2006). An analysis of the factor structure of Jones' moral intensity construct. *Journal of Business Ethics*, *64*(4), 381–404.

Mohr, L. A., Webb, D. J., & Harris, K. E. (2001). Do consumers expect companies to be socially responsible? The impact of corporate social responsibility on buying behavior. *Journal of Consumer Affairs*, *35*(1), 45–72.

Morey, R. D., Hoekstra, R., Rouder, J. N., Lee, M. D., & Wagenmakers, E. J. (2016). The fallacy of placing confidence in confidence intervals. *Psychonomic Bulletin & Review*, *23*(1), 103–123.

Orts, E. W., & Smith, N. C. (Eds.). (2017). *The moral responsibility of firms*. Oxford: Oxford University Press.

Pew Research Center (2016). *Partisanship and political animosity in 2016*. Washington, DC: Author.
Pew Research Center (2017). *The partisan divide on political values grows even wider*. Washington, DC: Author.
Rockoff, J. D. (2016). Mylan faces scrutiny over EpiPen price increases. *The Wall Street Journal*. Retrieved from https://www.wsj.com/articles/mylan-faces-scrutiny-over-epipen-price_increases-1472074823
Roehm, M. L., & Tybout, A. M. (2006). When will a brand scandal spill over, and how should competitors respond? *Journal of Marketing Research*, *43*(3), 366–373.
Romani, S., Grappi, S., & Bagozzi, R. P. (2013). My anger is your gain, my contempt your loss: Explaining consumer responses to corporate wrongdoing. *Psychology and Marketing*, *30*(12), 1029–1042.
Russell, C. A., Russell, D. W., & Honea, H. (2016). Corporate social responsibility failures: How do consumers respond to corporate violations of implied social contracts? *Journal of Business Ethics*, *136*(4), 759–773.
Schönbach, P. (1980). A category system for account phases. *European Journal of Social Psychology*, *10*(2), 195–200.
Schranz, M., & Eisenegger, M. (2016). Organizational crisis and the news media. In A. Schwarz, M. W. Seeger & C. Auer (Eds.) *The handbook of international crisis communication research* (Vol. 43, pp. 165–174). Hoboken, NJ: Wiley-Blackwell.
Scott, M. B., & Lyman, S. M. (1968). Accounts. *American Sociological Review*,*33*(1) 46–62.
Sen, S., & Bhattacharya, C. B. (2001). Does doing good always lead to doing better? Consumer reactions to corporate social responsibility. *Journal of Marketing Research*, *38*(2), 225–243.
Shen, L. (2017). The ten biggest scandals of 2017. *Fortune*. Retrieved from http://fortune.com/2017/12/31/biggest-corporate-scandals-misconduct-2017-pr/
Silvera, D. H., Meyer, T., & Laufer, D. (2012). Age-related reactions to a product harm crisis. *Journal of Consumer Marketing*, *29*(4), 302–309.
Sims, R. R., & Brinkmann, J. (2003). Enron ethics (or: Culture matters more than codes). *Journal of Business Ethics*, *45*(3), 243–256.
Stan Development Team. (2018). RStan: The R interface to Stan. R package version 2.16.2. Retrieved from http://mc-stan.org
Trump, R. K. (2014). Connected consumers' responses to negative brand actions: The roles of transgression self-relevance and domain. *Journal of Business Research*, *67*(9), 1824–1830.
Trump, R. K., & Newman, K. P. (2017). When do unethical brand perceptions spill over to competitors? *Marketing Letters*, *28*(2), 219–230.
Wagenmakers, E-J., & Farrell, S. (2004). AIC model selection using Akaike weights. *Psychonomic Bulletin & Review*, *11*(1), 192–196.
Watanabe, S. (2010). Asymptotic equivalence of Bayes cross validation and widely applicable information criterion in singular learning theory. *Journal of Machine Learning Research*, *11*, 3571–3594.
Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, *92*(4), 548.
Xie, C., Bagozzi, R. P., & Grønhaug, K. (2019). The impact of corporate social responsibility on consumer brand advocacy: The role of moral emotions, attitudes, and individual differences. *Journal of Business Research*, *95*, 514–530.

Supplementary Information

Additional supporting information may be found online in the Supporting Information section at the end of the article.

Table 1. Bayesian Mixed-Effects Regression Summaries: Simplified Models

MEAGHAN GUCKIAN, PhD is core faculty in the Department of Environmental Studies at Antioch University New England. Her research and teaching interests include examining the drivers of environmental decision-making and behavior, with a particular emphasis on social influence and interpersonal communication. She holds a PhD in environmental conservation from the University of Massachusetts Amherst.

DANIEL CHAPMAN, PhD is a science communication researcher in the Annenberg Public Policy Center at the University of Pennsylvania and a research fellow for the Cultural Cognition Project at the Yale Law School. His research interests include science and environmental communication, barriers to effective environmental decision-making, natural disaster resiliency, and methodological reform in the social sciences. Daniel holds a PhD in psychology of peace and violence from the University of Massachusetts Amherst. In addition to his academic research, Daniel is the research director for the See Change Institute, a collection of researchers and practitioners working to apply behavioral science insights to large-scale social problems.

BRIAN LICKEL, PhD is a professor of psychology in the Department of Psychological and Brain Sciences at University of Massachusetts Amherst. His lab's research focuses on the intersection of social conflict, activism, and environmental issues. He teaches classes on the social and biological bases on human cooperation and conflict, human responses to climate change, and the science of well-being. He received his PhD from UC Santa Barbara.

EZRA MARKOWITZ, PhD is associate professor of environmental decision-making in the Department of Environmental Conservation at the University of Massachusetts Amherst. His research and teaching focus on the intersection of decision-making, persuasive communication, public engagement with science, and environmental sustainability. He is particularly interested and expert in the practical application of behavioral science to improve individuals' and communities' environmental decision-making. He holds a PhD in environmental sciences, studies, and policy and an MS in psychology from the University of Oregon.