Cheap Talk?

Follower Sarcasm Reduces Leader Overpay by Increasing Accountability

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Abstract

Leaders often engage in costly, self-interested behaviors when they have the power and discretion to do so. Because followers are well-positioned to reduce these behaviors, I test how a specific follower communication—sarcasm expression—affects a particularly costly behavior: leader overpay. In three behavioral experiments and a field study (*N*s = 240-526), I test the effect of follower sarcasm on leaders' self-pay. I also test a moderator—leader moral identity—because leaders with low moral identity are more likely to overpay themselves and are more open to social norm violations (including follower sarcasm), as well as a mechanism—leader accountability—because I propose that follower sarcasm decreases leaders' overpay by increasing leaders' perceived accountability. As expected, follower sarcasm reduced leader overpay (vs. the control/no humor and vs. non-sarcastic humor), especially for leaders with weak moral identity. Study 3 replicated these results while showing explicit evidence of the accountability mechanism. Study 4 further supported these ideas with correlational data from real leaders recalling a more (vs. less) sarcastic follower, but only when the sarcasm was publicly (vs. privately) enacted. While talk is cheap, these results show that follower sarcasm can also be valuable, because it reduces leaders' overpay by increasing accountability.

Introduction

Leaders often engage in self-interested behavior when they have the power and discretion to do so, including awarding themselves with overly generous benefits and bonuses (de Cremer & van Dijk, 2005; Kaplan, 2008; Morris, 2020; Rus et al., 2012; Wade et al., 2006). Because leader compensation is often uncorrelated with performance, particularly negative performance (Kaplan, 2008; Olaniyi, 2019), and leaders' overpay also negatively affects their followers and organizations (Cobb & Frey, 1996; Finkelstein & Boyd, 1998; Steffens et al., 2020; Wade et al., 2006), leaders' overpay can also be considered unjustified or immoral. Because of these damaging consequences, it is important to understand how such behaviors can be mitigated.

Various governance practices reduce leaders' self-interested behaviors by increasing accountability (e.g., policy, monitoring, and stakeholder action; Castilla, 2015; Fox, 2015; Kaplan, 2008), although it remains unclear if these systems effectively reduce such behaviors (see Rus et al., 2012). Furthermore, these governance practices tend to target top-level executives, while lower- and mid-level leaders maintain much discretion over aspects of their pay and benefits (Abraham, 2017; Finkelstein & Boyd, 1998). Because humor[1] facilitates articulating critical messages (Collinson, 2002; Grugulis 2002), especially more aggressive, teasing humor—such as sarcasm—which can effectively convey (managerial) resistance (Korczynski, 2011), I proffer follower humor can reduce leaders' self-interested behaviors. That is, to address overpay (i.e., pay in excess of one's objective, performance-based earnings) in lower- and mid-level leaders, I test a cost-free intervention: follower sarcasm (i.e., the construction of or exposure to contradictions between stated and intended meanings directed at a

[1] Scholars disagree on the definition of humor (see Cooper, 2005). I define it here as "a psychological response characterized by the positive emotion of amusement, the appraisal that something is funny, and the tendency to laugh" (Warren & McGraw, 2016; p. 407), Thus, consistent with Warren and McGraw (2016), I consider a stimulus to be humorous to the extent that, on average, it elicits greater perceptions of humor.

specific person; Huang et al., 2015; Lee & Katz, 1998). I also test if sarcasm is more effective in triggering behavioral change in leaders who are at the greatest risk of self-interested behavior: leaders with weak moral identity (DeCelles et al., 2012), namely, a self-conception organized around a set of moral traits such as honest and fair (Aquino & Reed, 2002).

Scholars have long hinted at the links between power and humor. Ancient philosophers such as Plato and Aristotle conceptualized humor as a form of mockery (Aristotle, 1939), wherein humor users exert superiority, often over others (Gruner, 1997; Hobbes, 1840). Thus, although power (i.e., the asymmetric control over valued resources; Magee & Galinsky, 2008) increases power holders' self-interested behaviors (Keltner et al., 2003; Magee & Smith, 2013), follower humor may reduce perceived hierarchical-differences (Cooper, 2008; Dwyer, 1991; Rodrigues & Collinson, 1995), potentially reducing power holders' overpay. More precisely, I propose that a specific form of humor—sarcasm—triggers accountability, "the implicit or explicit expectation that one may be called on to justify one's beliefs, feelings, and actions to others" (Lerner & Tetlock, 1999, p. 255). Sarcasm is a known managerial mockery and control tactic, lubricating messages up the hierarchy that would be otherwise ineffective or inexpressible (Korczynski, 2011). Such a tactic may be especially effective for leaders with weak moral identity, because they may be most likely to overpay themselves and more open to social norm violations (Yam et al., 2018), such as upward sarcastic humor expression.

Together, this research extends the leadership and power literatures by integrating the humor literature. A rich body of work has shown the (mostly positive) effects of humor for those in positions of power (Avolio et al., 1999; Cheng et al., 2019; Cooper & Sosik, 2012; Decker & Rotondo, 2001; Holmes & Marra, 2002; Hughes & Avey, 2009; Lundberg, 1969; Robinson & Smith-Lovin, 2001; Vecchio et al., 2009; Yam et al., 2018; see Kong et al., 2019, for a review).

However, this research is often conducted in the typical direction of power relations (Dosier et al., 1988) known as authority ranking relationships (Fiske, 1991, 1992). By flipping the hierarchy, I test if follower sarcasm triggers the opposite effect: although leaders may use sarcasm to reinforce existing hierarchies, followers can use sarcasm to reduce the same hierarchies by increasing accountability.

In doing so, this research also contributes to the humor literature by testing humor's effectiveness to communicate *up* the hierarchy, that is, from a follower to a leader. Existing studies have examined humor use within approximately the same hierarchical level (e.g., Evans et al., 2019; Lehmann-Willenbrock & Allen, 2015; Prusaczyk & Hodson, 2020; Thai, et al., 2019; Terrion & Ashforth, 2002; Thomas et al., 2020) or down the hierarchy (i.e., a leader with their followers; e.g., Avolio & Sosik, 1999; Cooper et al., 2018; Yam et al., 2018; Yam et al., 2019; see Kong et al., 2019, for a review). But because higher status and power entail a broader range of acceptable behavior (see Magee & Galinsky, 2008, for a review), followers may not reap the same benefits as leaders when using humor with an authority person. Thus, the current research complements related qualitative research (e.g., Dwyer, 1991; Korczynski, 2011) by quantitatively testing if upward sarcasm can indeed elicit benefits by examining its effect on leaders' behaviors, namely, leaders' pay recommendations for themselves.

Finally, contributing to the humor and behavioral ethics literatures, recent research has begun to explore humor and leader morality (e.g., Yam et al., 2018, 2019). Chiefly relevant here, Yam and colleagues (2018) showed that aggressive leader sense of humor *increases* follower deviance. The current research aims to extend this work by testing if follower sarcasm—often framed as a mild form of aggressive humor (see Huang et al., 2015; Yam et al., 2018)—*decreases* leader deviance. Put simply, while aggressive *leader* humor signals the acceptability

of norm violations, thereby increasing followers' immoral behaviors (Yam et al., 2018), I propose that aggressive *follower* humor signals accountability, thereby decreasing leaders' immoral behaviors. In the following, I describe the relevant theory and literature leading up to my hypotheses, which I test and replicate with three behavioral experiments and a field study.

Self-Interested Behavior in Leaders with Weak Moral Identity

When leaders have high power, they tend to show more self-interested and fewer group-interested responses (e.g., DeCelles, et al., 2012; Fiske, 1993; Galinsky et al., 2003; Keltner et al., 2003; Maner & Mead, 2010; Mead & Maner, 2012). When people have more power, they tend to place greater importance on their own interests while also subordinating others' interests (Keltner et al., 2003). This idea is also supported by the social distance theory of power, because with greater power comes greater social distance and construal level (Lammers et al., 2012; Magee & Smith, 2013), which may also increase leaders' self-focus/decrease their other-focus.

Research in moral psychology has shown similar effects, albeit through a different mechanism. This work has shown that people emphasize their needs over others because of their moral identity (Aquino et al., 2009; Reed & Aquino, 2003). As previously stated, moral identity involves a self-conception organized around a set of moral traits (e.g., caring, fair, and honest; Aquino & Reed, 2002). Generally, people who value these traits engage in more ethical behavior and less unethical behavior (Aquino et al., 2009; Reed & Aquino, 2003; Yam et al., 2018).

Integrating the power and moral identity literatures, DeCelles and colleagues (2012) showed that power and moral identity interact to predict individuals' self-interested behavior. Specifically, power made those with low moral identity less aware of the moral implications of their actions. In turn, power holders prioritized their own interests and committed more self-interested behaviors (e.g., more chances to win money and more organizational deviance).

Because leaders in all studies have power (e.g., discretion over resources such as pay):

> *Hypotheses 1a-b: Leaders engage in overpay, (b) particularly those with weaker (vs. stronger) moral identity.*

Sarcasm Reduces Leaders' Self-Interested Behavior via Accountability

A rich stream of quantitative research has examined the effects of leaders' humor with their followers (e.g., Avolio & Sosik, 1999; Cooper et al., 2018; Yam et al., 2018; Yam et al., 2019; see Kong et al., 2019, for a review). Yet, of the work that has explicitly considered hierarchical differences, it is often in the typical direction of power relations (i.e., top-down; Dosier et al., 1988; Fiske, 1991, 1992). Some qualitative and theoretical research has discussed the function of humor in hierarchical relationships (e.g., Cooper, 2008; Holmes, 2000; Rodrigues & Collinson, 1995); in general, this work confirms the idea that leaders use humor to maintain and reinforce their positions of power, while also acknowledging the possibility that followers can use humor to express dissent to challenge the power structures within which leaders operate. In other words, humor may break down the interpersonal barriers of formal hierarchies (Locke, 1996; Vinton, 1989), increasing leader accountability and reducing leaders' self-interested acts.

Sarcasm may be a particularly effective form of follower humor to achieve this aim. Martin and colleagues (2003) developed a framework to represent people's general humor tendencies or styles, one of which—aggressive humor—includes teasing, ridicule, and sarcasm. Although it may be rare to observe a blatantly aggressive joke at work (e.g., racist or sexual humor; Romero & Cruthirds, 2006), employees use milder forms of aggressive humor such as sarcasm much more often, typically to convey disapproving information (Yam et al., 2018). To illustrate, if one colleague says to the other, "Working hard or hardly working?", they sarcastically insinuate that the person is not exerting enough effort. Similar examples are regularly used to directly mock supervisors (e.g., "Come on I'm timing you" to imply that a passing supervisor

is not moving fast enough; Korczynski, 2011, p. 1434). Aggressive forms of humor such as this convey disapproval and resistance, but in a clever and humorous manner (Huang et al., 2015). In this way, the violation of openly conveying disapproval and resistance towards a superior becomes more acceptable (McGraw & Warren, 2010) and thus, a more effective communication and potential strategy to increase leaders' perceived accountability.

Accountability enhances leaders' self-censure by anticipating others' potential objections to their decisions (Lerner & Tetlock, 1999; Tetlock et al., 1989). Indeed, believing that one might have to justify their decisions to others causes people to act more vigilantly (Tetlock, 1985), increasing accuracy and more careful decision-making (Ford & Weldon, 1981; Rozelle & Baxter, 1981). Critically, when someone engages in sarcasm or teasing communication about people or problems at work, their colleagues may interpret it as an act of accountability, expecting them to speak up about other people or problems at work (Eliezer & Major, 2011; Metee et al., 1971). Because these acts are taken as evidence of an underlying trait, they inform personality attributions (see Cooper, 2008), meaning that leaders will anticipate more objections in the future (Lerner & Tetlock, 1999; Tetlock et al., 1989). Central to my theorizing, leaders may then compensate for anticipated future objections with extra accuracy and vigilance (Ford & Weldon, 1981; Rozelle & Baxter, 1981; Tetlock, 1985). In this way, follower sarcasm may trigger a sense of increased perceived accountability in leaders, particularly for leaders with weak moral identity who show more self-interested behaviors (DeCelles et al., 2012) and are also more receptive to social norm violations (Yam et al., 2018), which may include upward sarcasm.

But using sarcasm is not the only means through which to affect leaders' accountability. If others observe an act of follower criticism or sarcasm, for example, it may similarly increase leaders' accountability by more widely sharing information about the leader, their performance,

and/or follower concerns about the leader or the leader's performance (Zajonc & Sales, 1966). Because simply anticipating having to share information in the future influences leader behavior by increasing accountability (Klimoski & Inks, 1990; Tetlock, 1985), actually sharing information with more people by having witnesses may similarly influence leader behavior via accountability. To illustrate, both of the previously mentioned examples of follower sarcasm also clearly demonstrated that at least one observer was present—the sarcasm expresser (Korczynski, 2011)—further underlining the important role of direct witnesses as accountability triggers. Thus, the accountability of having others present or knowledgeable of an event may also enhance leaders' self-censure and more careful decision-making, thereby also counteracting the self-interested inclinations induced by high power (Keltner et al., 2003; Rus et al., 2012). Taken together, I formally propose:

> *Hypotheses 2a-d: (A) Follower sarcasm (vs. no humor) reduces leader overpay (b) particularly for leaders with weak (vs. strong) moral identity and (c) in the presence of others (vs. private), (d) because it increases leaders' accountability.*

Finally, sarcasm likely increases leaders' accountability concerns more than other forms of humor. For example, positive, affiliative humor is often touted as the "least risky" form of humor, consistently predicting more positive effects on organizationally-relevant outcomes than other forms of humor (e.g., other-disparaging humor; Pundt & Herrmann, 2015; Romero & Arendt, 2011; see Mesmer-Magnus et al., 2012, for a review). However, these positive forms of humor convey warmth (Bitterly & Schweitzer, 2019), thereby creating a sense of trust and psychological safety (Romero & Pescosolido, 2008) rather than accountability. Hence, although both forms of humor comprise plausible deniability—an essential criterion to successfully communicate up the hierarchy (see Tynan, 2005)—sarcasm is more aggressive in its content and tone, more clearly triggering a sense of accountability. Thus, to further demarcate the role of

sarcastic humor versus humor more generally, I also test a non-sarcastic joke as a comparison (i.e., affiliative humor; Martin et al., 2003) and predict stronger effects of follower sarcasm:

Hypothesis 3: Follower sarcasm (vs. affiliative humor) reduces leader overpay.

Overview of Studies

Taken together, I propose that leaders engage in overpay when they have the power and discretion to do so, especially less moral leaders, but follower sarcasm—particularly in the presence of others—reduces leaders' overpay because it makes leaders feel more accountable. To test these hypotheses, I conduct three behavioral experiments and a field study. In Study 1, I aim to show first evidence for the idea that leaders engage in overpay, but that follower sarcasm reduces this overpay. Then, in Study 2, I aim to replicate and extend findings from Study 1 by comparing sarcasm to non-sarcastic humor and including a second sarcastic joke to increase generalizability. Moreover, I also test the moderating role of leader moral identity in Study 2, because the effect of leaders' increased power on their self-interested behaviors may be driven by leaders with weak moral identity. In Study 3, I manipulate the mediator (Spencer et al., 2005) to show explicit evidence of the theorized mechanism: leader accountability. Finally, in Study 4, I test the accountability mechanism again in a field study with real leader-follower pairs.

As a more technical note, Studies 1-3 received ethics committee approval (EK 2019-N-144) but Study 4 was exempt from formal review because it did not include deception. Sample sizes were pre-determined before data collections commenced. I report all measures, manipulations, and exclusions. I consider $p < .05$ statistically significant and have made the data available.[2]

Study 1 Method

[2] See here https://osf.io/t8c2b/ on the Open Science Framework.

Sample and Procedure

I recruited 250 employed American adults via Prolific Academic, a web-based survey platform with a reputation for high-quality data (Gloor et al., 2021; Peer et al., 2017); 6 did not finish. A further 4 were excluded for self-reported dishonest responses (see Vesteinsdottir et al., 2019). The remaining 240 participants (96% completion rate) identified as women (42.5%) or men (57.5%). Participants reported being an average age of 37.85 (*SD* = 11.70) years with 19.53 (*SD* = 13.91) years of work experience. Participants identified as White/Caucasian (84.4%), Black/African American (6.7%), Latinx (6.3%), Asian American/Pacific Islander (5.8%), Native American (2.5%), and mixed/other (0.4%); multiple selections were possible.

The study was framed as a test of "leadership and cognitive ability." It was a 2-condition, between-subjects experiment. I manipulated follower sarcasm (vs. a non-humorous control) to examine its effect on leaders' pay recommendations. Participants began the study by answering a few questions such as dominance motivation (Cassidy & Lynn, 1989), leadership experience, and number of direct reports, ostensibly to inform leader selection for the subsequent task; this is consistent with recent procedures to examine leadership and power (e.g., Maner & Mead, 2010). Participants were told that they would be completing a task alongside two others, whom they would see in a virtual chatroom. The chatroom simulated a real interaction between the participant and two other players (see Figure 1).[3]

Participants were always assigned to the higher power role (i.e., the leader and humor responder), while the two other (fictional) participants were always in the lower power roles (i.e., the humor appreciator and the humor user for chatroom Players 1 and 2, the ostensible other

[3] This manipulation–and deception–was essential because the design required experimental control and the phenomenon of interest is social. For a similar chat room set-up to facilitate experimental realism, see Reh, Troester, and Van Quaquebeke (2017). For a similar ostensible team set-up to facilitate experimental and mundane realism, see Reich and Herschcovis (2014).

people in the chatroom, respectively). However, participants were told that the leader assignment could be changed in Round 2, based on everyone's performance in Round 1.

The participant received the details of the task, a version of the Remote Associates Task (i.e., the RAT; Mednick, 1968), wherein participants must select one word that tied together a set of three words. For example, if given "white," "scramble," and "shell," the fourth word to tie them all together would be "egg." Participants were instructed that their goal was to complete as many word associations as possible from the set of 15 within a short amount of time (i.e., 1-min).

In the chatroom running alongside the RAT, the leader joined to see brief messages from Players 1 and 2. If assigned to the sarcasm condition, after about 45 seconds, Player 2 made a sarcastic joke towards the leader through the chat function (e.g., "hey, what does it take to be a leader around here? apparently, it takes a lot of time ;-) "). The humor user used a winking emoji, while Player 1 also wrote "Haha," to further emphasize the humor attempt, its appropriateness, and its success as a funny joke. If assigned to the no humor condition, Player 2 wrote, "time is running out. you almost finished, leader?" after which Player 1 wrote "15 seconds." Thus, in both cases, the upward communication was initiated by Player 2 and reinforced by Player 1.

Shortly afterwards, participants were notified that the chat had "timed out" and their screens automatically advanced. After this, participants were given a short explanation that Round 2 would not be played after all due to time constraints, debriefed about the true purpose and design of the study, and then redirected back to the Prolific Academic survey platform.

Measures

Leader performance. Leaders' performance was objectively measured as the number of correct responses they provided in the RAT task described above (Mednick, 1968); range 0 – 15.

Pay recommendations. Leaders' pay recommendations were measured with three single items indicating leaders' pay recommendations for Player 1, Player 2,[4] as well as themselves. After the following instructions, "Participants receive .10/correct response. Please indicate how much you would pay each participant, relative to their earnings. As the leader of this task, we may take your opinion into account when making the final payments." Participants reported their responses on three separate sliding scales from -100 to 100, one for each of the referents. Participants were additionally informed the following for clarification: "For example, 0 would mean a 0% change, and the participant would receive what they earned." To be clear: due to the scale and scoring, all positive values indicate pay in excess of performance-based earnings.

Perceived humorousness. At the end of the survey, I asked participants about Player 2's communication. Amongst other, unrelated filler items to reduce participant suspicion and demand effects, I included 3 items to assess perceived humorousness (e.g., humorous, funny, entertaining) from 1 ("not at all") to 7 ("extremely"; Bitterly et al., 2017; $\alpha = .92$), with the addition of a fourth item to assess perceived sarcasm ($\alpha = .87$).

Control variables. Morality (see Jaffee & Hyde, 2000, for a review), as well as financial behavior (Gupta et al., 2020), may significantly differ by participant gender. Thus, I included participant gender as a covariate (0 = male, 1 = female). Although the gender of the person expressing the humor or sarcasm may also alter its interpretation (Gloor, 2019; Katz et al., 2004), the sarcasm expresser (Player 2) as well as the sarcasm recipient (Player 1) were both expressly designed to be gender neutral in the current research paradigm. Results for this and the subsequent analyses remain largely unchanged in size/significance when calculated without gender.

[4] Although I predict an effect of follower sarcasm on leaders' pay recommendations for themselves, I do not predict an effect of follower sarcasm on their pay recommendations for Player 1 or Player 2 (i.e., the two followers). Indeed, a common response to experiencing high power is an increased self-focus (e.g., de Cremer & van Dijk, 2005; Galinsky et al., 2006; Lammers et al., 2010; See et al., 2011; see Williams, 2014, for a review). Although negative reactions towards others is possible (e.g., punishment; Maner & Mead, 2012; Milliken et al., 2003), particularly in response to power threats (which could include sarcasm and critical follower communication), the focus of the current research is on the former.

Other variables. Consistent with recent practices (e.g., see Schmid, 2020), to further reinforce the cover story, I asked additional items typical of a leader and person with power to control resources, reward and/or penalize the followers, including perceived performance ratings, willingness to play again (and if so, with whom), and two scales assessing how much power they felt (i.e., "As the leader, how powerful did you feel?," from (1) "completely powerless" to (7) "completely powerful" and an 8-item measure of generalized sense of power, e.g., "If I wanted to, I got to make the decisions," measured from (1) "disagree strongly" to (7) "agree strongly" (Anderson et al., 2012, $\alpha = .83$). Results revealed no difference in the power leaders felt according to the experimental condition on the single item ($M_{humor} = 3.02$, $SD = 1.66$, $M_{control} = 3.18$, $SD = 1.57$; $b = -0.13$, $SE = .21$, $p = .535$) nor the 8-item generalized sense of power scale ($M_{humor} = 3.89$, $SD = 0.96$, $M_{control} = 3.88$, $SD = 1.02$; $b = 0.002$, $SE = .13$, $p = .988$), indicating the power manipulation worked similarly to induce average levels of power for the sarcasm and control conditions. Given the focus of this research on leaders' tangible, self-interested behavior (i.e., overpay), I do not analyze these items nor do I report further results related to these here.

Study 1 Results

I use Generalized Structural Equation Modeling (GSEM) to estimate path models, first a combined model with all 3 pay recommendations (including their covariances), then a robustness check controlling for leader performance. Although single-item measures are typically not ideal in psychology research, they are common and acceptable in judgment and decision-making research (e.g., Bergkvist & Rossiter, 2007); guidelines for the use of single-item measures in decision-making research proposed by Diamantopoulos and colleagues (2012) also verify its appropriateness here. SEM and GSEM offer empirical advantages over more commonly used methods (e.g., ANOVA; see Bagozzi & Yi, 1989; Breitsohl, 2019), such as greater flexibility,

the ability to simultaneously analyze multiple dependent variables, and clustering *SE*s (which becomes relevant in Studies 2-4 to account for nested data). A simple explanation for less familiar readers is that ordinary least squares regression is simply a limited or special case of SEM and GSEM is a special case of SEM (i.e., in GSEM but not in SEM, I can use factor notation for binary variables and their interactions). See Table 1 for descriptives and correlations.

Participants rated the sarcasm condition (M = 3.29, SD = 1.36) as more humorous than the control condition (M = 2.98, SD = 1.32), b = 0.31, SE = 0.17, p = .071. Although this effect only approaches significance, it is consistent with the idea that jokes are often deemed less funny if they are initiated by a lower status humor user (e.g., see Lundberg, 1969).

Leaders recommended that they should be paid an additional 17.22 pence (SD = 43.38) above their performance-based pay, showing evidence of overpay, supporting Hypothesis 1a. However, as predicted, follower sarcasm decreased leaders' self-pay recommendations (b = -13.71, SE = 5.49, p = .013, Cohen's d = -.33;[5] see Table 2, Figure 2), supporting Hypothesis 2a.

In contrast, there was no effect of follower sarcasm on leaders' pay recommendations for Players 1 or 2 (bs = 3.59 – 3.78, SEs = 4.74 – 4.77, ps = .428 - .448)—nor was one predicted. As a reminder, a null effect here is consistent with the idea of performance-based pay, such that each player or the leader earns .10/correct response. These results support the idea that leaders pay themselves less in response to follower sarcasm (vs. no humor), but they do not punish the sarcastic follower nor the follower who laughed, at least in terms of pay.

As robustness checks, analyses show that follower sarcasm did not significantly relate to leaders' objective performance on the RAT task (b = -0.30, SE = 0.41, p = .457), nor did

[5] A post-hoc power analysis with .05 alpha, N = 240, and 1 covariate revealed .75 power (G*Power, version 3.1.9.7; Faul et al., 2007, 2009).

including leaders' performance as a covariate eliminate the previously reported significant effect of follower sarcasm on leaders' self-pay recommendations (b = -14.15, SE = 5.40, p = 0.009).

Study 2 Method

Study 1 showed initial support for the core idea of this research: sarcasm reduces leaders' self-interested behavior (i.e., overpay). In Study 2, I aim to extend these results by testing the role of leader moral identity and including a new joke that does not explicitly address the leader to more closely examine the effect of sarcasm (vs. non-sarcastic humor). I also add a new sarcastic joke to increase generalizability (i.e., to show that the effect is about sarcasm more broadly rather than an artefact of the particular joke). Finally, I doubled the sample size to increase the power to detect the interaction effect of leader moral identity and follower sarcasm.

Sample and Procedure

The sample, design, and procedure mimicked Study 1, with two exceptions. First, I manipulated follower sarcasm with a new leader-directed joke to better ensure the elicited effects are due to sarcasm rather than an artifact of the specific joke. This joke was constructed as a sarcastic pun as in Study 1 but still with helpful task-related information as in Study 1 ("in a rut or a hole, leader? (like the answer to the last one) ;-)");. I also included a similarly constructed joke with an analogous humor tone but without explicitly referencing the leader (which scholars argue is a key criterion of sarcasm; e.g., Lee & Katz, 1998), as more affiliative, non-sarcastic joke ("since you're probably flaking out or daydreaming after #7-8, go for 'gold' in #9 ;-)"). These jokes also provide information to complete the task; "hole," "flake," "day dream," and "gold" were all task answers. Second, I took 3 quality measures due to the COVID-19 crisis which occurred after Study 1 data collections and was ongoing during this data collection.[6]

[6] I took three precautions to preserve data quality and consistency despite the COVID-19 crisis. First, I added a new worker criterion such that participants must have been employed before and after the crisis to control some of the financial or job insecurity which may cloud results related

This was a 4-condition, between-subjects experiment. I manipulated follower humor/sarcasm and measured participants' moral identity to examine their main and interactive effects on leaders' self-pay. Although I aimed to recruit 500 employed American adults, an extra 37 participated due to a technical error; Prolific could not explain this nor did they charge me for them. Analyses are reported for $N = 526$ due to 2 outlier exclusions (as determined by having leverage and cooks scores above .019 and .008, respectively), and 9 due to dishonest responses (see Vesteinsdottir et al., 2019). Of these 526, participants identified as 59.4% male and 40.6% female. Participants reported being an average age of 32.95 years ($SD = 8.29$) with an average of 13.79 ($SD = 10.97$) years of work experience. Participants identified as White/Caucasian (79.7%), Black/African American (8.3%), Latinx (5.0%), Asian American/Pacific Islander (10.8%), Native American (1.5%), or other (1.5%); multiple selections were possible.

Measures

I measured leader performance, self-pay recommendations,[7] a sarcasm manipulation check, and participant gender as in Study 1.

Leader moral identity. Participants completed a validated measure of the internalization dimension of the moral identity scale (5-items; Aquino & Reed, 2002) to assess the extent to which being "moral" is a self-defining, central aspect of one's self-concept. Although I included this measure at the end of the survey, it assesses the extent to which moral content is chronically assessable (see Aquino et al., 2009), and therefore, should be relatively stable. Indeed, of the two

to the key outcome of interest: leaders' self-pay. Second, I added two questions at the end of the survey to assess participants' COVID-19 crisis-related perceptions, including how much they have been affected by it (from 1 "not at all" - 5 "extremely"), as well as if it might have influenced their answers to this study (no/perhaps a little/yes very much). Although the first item was uncorrelated with leader self-pay and moral identity ($rs(524) = -.02$ - $.07$, $ps = .119$ - $.670$), the second item was correlated with moral identity ($r(524) = -.22$, $p < .001$), but not self-pay ($r(524) = .04$, $p = .303$). Because of this, and because 114 participants reported "perhaps a little" and 12 reported "yes, very much so," I included the second item in the model to cluster the *SEs* (in line with recent recommendations by McNeish & Stapleton, 2016; McNeish et al., 2017).

[7] Because I no longer analyze follower pay, I hereafter refer to this more simply as "pay."

facets of moral identity: internalization and symbolization (Aquino & Reed, 2002), the former is a more reliable predictor of behavior across a range of behaviors (see Mayer et al., 2012).

As in Yam and colleagues (2019), participants read: "Listed below are some characteristics that may describe a person: caring, compassionate, fair, honest, helpful, friendly, generous, kind, and hardworking. The person with these characteristics could be you or someone else. For a moment, visualize in your mind the kind of person who has these characteristics. Imagine how that person would think, feel, and act. When you have a clear image of what this person would be like, answer the following questions." Then, participants rated the following 5 items: "It would make me feel good to be a person who has these characteristics," "I would be ashamed to be a person who has these characteristics" (reverse-coded), "I strongly desire to have these characteristics," "being someone who has these characteristics is an important part of who I am," and "Having these characteristics is not really important to me" (reverse-coded), from "strongly disagree" (1) to "strongly agree" (5) (α = .72). I then standardized it for ease of interpretation.

Study 2 Results

For descriptives and correlations, see Table 3. Data are analyzed and reported as in Study 1 (see Table 4). Because there were no differences in participants' ratings of the two sarcastic jokes (b = 0.11, SE = 0.15, p = .478), and participants rated the sarcastic jokes (M_{time} = 3.60, SD_{time} = 1.68 and M_{hole} = 3.14, SD_{hole} = 1.58) as more sarcastic than the affiliative joke (M = 2.92, SD = 1.58) and the control (M = 2.71, SD = 1.66), I collapsed the data across sarcastic jokes. While the affiliative joke did not differ from the control condition in sarcasm ratings (b = 0.20, SE = 0.20, p = .314), the sarcastic jokes were rated as more sarcastic than the control (b = 0.65, SE = 0.17, p < .001). These results indicate the sarcasm manipulation was successful.

Leaders recommended that they should be paid an additional 16.40 pence (*SD* = 42.55). This shows evidence of overpay, replicating Study 1 and further supporting Hypothesis 1a.

As predicted, follower sarcasm reduced leader pay (b = -2.11, SE = 0.75, p = .005, d = -.25;[8] see Table 4). In contrast, there was no effect of non-sarcastic follower humor on leader pay (b = -4.52, SE = 5.75, p = .431, d = -.07).[9] Although the effects of follower sarcasm differed from zero and the effects of follower humor did not, these conditions did not significantly differ from each other ($\chi^2(1, N = 526) = 0.19$, p = .663). These results replicate Study 1, showing further support for Hypothesis 2a, while showing some evidence of the divergent effects of follower sarcasm and humor, partially supporting Hypothesis 3.

Leader moral identity did not influence leader pay (b = -1.84, SE = 2.03, p = .363), showing a lack of support for Hypothesis 1b. However, as predicted, these effects were qualified by an interaction with follower sarcasm (b = 10.20, SE = 2.65, p < .001, d = .26),[10] such that the effect of follower sarcasm on leader pay was larger for leaders with weak moral identity (simple slope at moral identity -3*SD*: b = -33.64, SE = 9.34, p < .001) than for leaders with strong moral identity (simple slope at moral identity +1*SD*: b = 7.16, SE = 2.56, p = .005; see Figure 3), supporting Hypothesis 2b. The interaction of sarcasm and moral identity significantly differed from the effects of follower affiliative humor and moral identity ($\chi^2(1, N = 526) = 14.78$, p < .001) and the effect of the control and moral identity ($\chi^2(1, N = 526) = 17.07$, p < .001), although the latter two effects did not differ from each other ($\chi^2(1, N = 526) = 0.32$, p = .573).

Robustness checks show that including leaders' RAT performance as a covariate in the models did not alter the previously reported interaction of follower sarcasm and leader moral

[8] A post-hoc power analysis with .05 alpha, N = 526, and 1 covariate revealed .85 power.
[9] A power sensitivity analysis with .05 alpha, N = 526, 1 covariate, and .80 power revealed critical d = .24.
[10] A post-hoc power analysis with .05 alpha, N = 526, and 1 covariate revealed .80 power.

identity (b = 10.23, SE = 2.87, p < 0.001) while the interaction between follower humor and leader moral identity also remained non-significant (b = 1.89, SE = 2.26, p = 0.404).

Study 3

As predicted, results from Studies 1-2 have generally supported my hypotheses. Thus, in Study 3, I aim to replicate and extend these findings by showing more explicit evidence of the theorized mechanism: accountability. In doing so, I complement the pair of studies thus far with a manipulated mediator design (see Spencer et al., 2005) and a pre-registered study.[11]

Sample and Procedure

The sample, design, and procedure mimicked Study 2, except that I also manipulated leader accountability. I randomly assigned leaders to 1 of 3 accountability conditions: yes ("your performance and decisions related to the task will be shared with the other players between Rounds 1 and 2"), no ("your performance and decisions related to the task will not be shared with the other players between Rounds 1 and 2"), and a control condition with no information about accountability. Thus, this was a 6-condition, between-subjects experiment, wherein I manipulated follower sarcasm (yes/no) and leader accountability (yes/no/control) to measure their main and interactive effects on leaders' self-pay recommendations.

Although 540[12] employed American adults were recruited, 534 finished with complete data. Analyses are reported for N = 524 due to 2 outlier exclusions (1 in the sarcasm and 1 in the control condition, both in the accountability condition, due to high leverage and cooks scores), 5

[11] The preregistration is accessible here; the data and stimuli are provided here.
[12] Although I planned to collect data from 500 participants, after collecting data from 39 participants, I received a notification from Prolific that the average payment was too low because participants required more time to complete the study than expected. Thus, I paused the study, awarded these participants a .15GBP bonus each, and then relaunched the study to collect data from 500 participants with this higher pay rate. Because this affected the randomization and incentives, I conservatively used this data collection wave variable (i.e., pilot/0 main study/1) as a *SE* clustering variable rather than excluding a large share of the sample.

due to dishonest responses (3 in the sarcasm, 2 in the control condition, all 5 in the no accountability condition; see Vesteinsdottir et al., 2019), and 3 for missing data on gender.

Participants identified as male (56.1%) or female (43.9%). Participants reported being 35.6 years of age (*SD* = 9.15) with 15.03 years (*SD* = 10.67) of work experience. Participants identified as White/Caucasian (83.9%), Black/African American (9.7%), Latinx (2.3%), Asian American/Pacific Islander (6.6%), Native American (0.7%), and mixed/other (0.7%).

Measures

I measured leader pay, moral identity, a sarcasm manipulation check (α = .86), and participant gender as in Studies 1-2. I also manipulated leader accountability (control/yes/no).

Leader accountability. At the end of the survey, I asked participants 4 items adapted from Rus and colleagues (2012): "In answering the previous questions, did you feel… you would have to explain why you did certain things?", "you would be held accountable for your actions?", "Player 1 may scrutinize your responses/decisions?", and "Player 2 may scrutinize your responses/decisions?" These items were rated from (1) "strongly disagree" to (7) "strongly agree" (α = .88). Participants reported more accountability in the accountability (vs. control) condition ($\chi^2(1) = 9.95$, $p = .002$); thus, the high accountability manipulation was successful. The low accountability (vs. control) conditions did not differ from each other ($\chi^2(1) = 1.59$, $p = .208$).

Control variables and alternative models. As in Study 2 and in the pre-registration, I tested the two COVID-19 items from Study 2 as covariates and as *SE* clustering variables. As in Study 2, the first item was uncorrelated with leader moral identity and pay (*r*s(524) = -.00 - .01, *p*s = .767 - .999), the second item was correlated with both leader moral identity and pay (*r*(524) = -.29 - .14, *ps* $\leq$ .001). Because of this, and because 84 participants reported "perhaps a little" and 16 reported "yes, very much so," I included the second item in the model to cluster the *SEs*

(in line with recent recommendations by McNeish & Stapleton, 2016; McNeish et al., 2017; and as in Study 2). Because clustering the data by this second COVID-19 item also yielded similar results as the model clustering the data by wave (as reported below) (i.e., the 3-way interaction of follower sarcasm, leader moral identity, and accountability remained significant, b = -4.37, SE_{robust} = 0.94, $p < .001$, but the 3-way interaction with no accountability became non-significant, b = -12.24, SE_{robust} = 6.70, p = .068), this suggests the results are rather robust to these choices.

Study 3 Results

For descriptives and correlations, see Table 5. Participants rated the sarcastic conditions as more humorous (M = 3.23, SD = 1.33; b = 0.15, SE = 0.06, p = .014) and as more sarcastic (M = 3.09, SD = 1.68; b = 0.17, SE = 0.06, p = .003) than the control condition (M = 2.86, SD =1.43; M = 2.64, SD = 1.51, respectively), indicating the follower sarcasm manipulation was successful.

Leaders engaged in overpay (M = 24.49, SD = 40.16), replicating Studies 1-2 and showing further support for Hypothesis 1a. However, follower sarcasm surprisingly *increased* leader self-pay (vs. control; b = 4.23, SE = 0.20, $p < .001$), showing a lack of support for Hypothesis 2a. A 2-way interaction between follower sarcasm and leader moral identity (b = 2.49, SE = 1.00, p = .013) revealed that while the effect of follower sarcasm on leader self-pay decreased self-pay for leaders with weak moral identity as predicted, although with only marginal significance (simple slope at moral identity -3SD: b = -3.07, SE = 2.60, p = .237),[13] it surprisingly increased self-pay for leaders with strong moral identity (simple slope at moral identity +1SD: b = 6.87, SE = 1.41, $p < .001$). These results echo the results from Study 2 at weak leader moral identity, showing some support for Hypothesis 2b.

[13] This effect became significant after controlling for leader performance on the RAT task (simple slope: b = 6.63, SE = 2.11, p = .002).

Having no accountability (b = 0.42, SE_{robust} = 3.19, p = .895) or accountability (b = 1.77, SE_{robust} = 2.46, p = .472) did not affect leader pay compared to the control condition (see Table 6). However, these effects were qualified by a significant interaction of accountability and sarcasm (b = -17.22, SE_{robust} = 0.61, p < .001), such that follower sarcasm increased leader pay in the control condition (simple slope: b = 10.13, SE_{robust} = 0.41, p < .001) and without accountability (simple slope: b = 9.61, SE_{robust} = 1.11, p < .001), but decreased leader pay in the accountability condition (simple slope: b = -7.09, SE_{robust} = 0.21, p < .001), supporting Hypothesis 2d (Figure 4).

Results further revealed an interaction between follower sarcasm, leader accountability, and leader moral identity for the no accountability condition (vs. the control; b = -12.75, SE_{robust} = 1.46, p < .001) and for the accountability condition (vs. the control; b = -4.96, SE_{robust} = 1.46, p = .001). Echoing the results from Studies 1 and 2, follower sarcasm reduced pay for leaders with weak moral identity when they were accountable (simple slope: b = -14.97, SE_{robust} = 1.14, p < .001), supporting Hypothesis 2d; results revealed a similar, albeit smaller effect in the control accountability condition (simple slope: b = -11.68, SE_{robust} = 2.89, p < .001). In contrast, follower sarcasm *increased* pay for leaders with weak moral identity with no accountability (simple slope: b = 25.10, SE_{robust} = 6.30, p < .001; see Figure 5).

As robustness checks, while leaders' RAT performance significantly predicted pay (b = -0.43, SE_{robust} = 0.16, p = .008), including it as a covariate did not alter the conclusions drawn from the previously reported interaction effects of follower sarcasm and accountability on leader pay (b = -17.12, SE_{robust} = 0.44, p < 0.001), nor the 3-way interactions of follower sarcasm and leader moral identity with no accountability (b = -11.49, SE_{robust} = 1.87, p < 0.001) or follower sarcasm and leader moral identity with accountability (b = -3.85, SE_{robust} = 0.22, p < 0.001).

Study 3 Discussion

Although I predicted in the pre-registration that follower sarcasm might reduce leader pay the most when leader accountability was low, reasoning that it would replace the missing accountability, these results showed the opposite effect. Specifically, follower sarcasm (vs. the control) was the most effective in reducing leader overpay when leader accountability was high.

The positive effect of follower sarcasm on leader self-pay was also unexpected—and seemingly conflicting with Studies 1-2 and the preregistration—but the subsequently reported interaction with leader accountability showed that this effect was driven by the control and no accountability conditions. To better understand these findings, I analyzed an item I included at the end of the survey just before the debriefing, which showed that 79.2% of participants did not believe that they were interacting with two other people, a figure that was highest in the control and no accountability. This means that even in the control condition in Study 3—the condition that best aligns with the designs in Studies 1-2—participants did not necessarily believe that the other "players" might question their pay allocation choices nor that a follower could become their leader in a second round. This effectively made the control like the no accountability condition, which also explains why these two conditions did not differ in perceived accountability ($\chi^2(1, N = 524) = 1.59, p = .208$). Thus, I now conduct one more study with real leader-follower dyads to better assess the role of accountability.

Study 4

Across 3 studies, results have shown causal evidence that follower sarcasm reduces leader overpay, particularly when leaders have low moral identity and are accountable. However, the design in Studies 1-3 was somewhat artificial and included deception (i.e., leaders were not actually interacting with 2 other real people), and many participants in Study 3 did not believe

they were interacting with two others, particularly undermining the control condition. Thus, to better test the effects of follower sarcasm on leaders' perceived accountability and ideally show evidence of the effect's generalizability, I aim to extend this idea by testing real leaders and their followers. In doing so, I can also explicitly test the effects of the presence of other people (vs. a private event) and more (vs. less) follower sarcasm on leaders' perceived accountability.

Study 4 Methods

Sample and Procedure

To examine leaders' real interactions with their followers, I conducted an experimental recall task (adapted from Bitterly et al., 2017). Leaders were randomly assigned to 1 of 2 conditions to recall an act of follower sarcasm (i.e., "a story or a joke that one of your followers told you that you thought was funny, cheeky, and/or sarcastic") or a follower greeting (i.e., "a greeting that one of your followers told you that you thought was nice, warm, and/or friendly"). Participants were told "to use at least 100 characters to write about the situation with enough detail that someone who did not know you or the person you wrote about could understand the situation." Thus, this was a 2-condition, between-subjects experiment, wherein I manipulated follower sarcasm (yes/no) and measured if others witnessed the event and leader accountability.

I aimed to recruit 500 participants (decided prior to data collection) who were employed adults in the United Kingdom with current leadership/supervisory duties; 501 finished with complete data. Participants identified as male (49.1%), female (50.7%), and non-binary/other (.2%). Participants reported being 36.1 (*SD* = 9.79) years old with 8.80 (*SD* = 10.96) years of work experience and an average of 8.16 (*SD* = 19.65) direct reports at work. Participants identified as White/Caucasian (88.0%), Black/African (3.2%), Latinx/Hispanic (2.3%), Asian/Pacific Islander (6.6%), and mixed/other (2.0%); multiple selections were possible.

Measures

I included a slightly different manipulation check here to better differentiate between sarcasm and other forms of humor (which I manipulated in Study 2). Thus, I included 3 items to assess if the follower's communication was sarcastic, teasing, and critical (α = .72). I collected gender as in Studies 1-3. I also included a 4-item measure of leaders' perceived accountability to the follower (Rus et al., 2012; α = .77), which was a manipulation check in Study 3.

Presence of others. I included a self-developed, 4-item measure assessing the private or public nature of the recalled event (e.g., "Did other employees hear or learn about it later?", "Did other employees witness it?", reverse-coded: "The event stayed between you and the employee." and "It remained private."). Items were rated from "No" (1) to "Yes" (5) (α = .84). For a more intuitive interpretation, I dichotomously transformed it via mean-split ("yes" (1), "no" (0)).

Study 4 Results

For descriptives and correlations, see Table 7. Participants rated the sarcastic conditions as more sarcastic (M = 3.18, SD = 1.44) than the control condition (i.e., the greeting; M = 1.66, SD = 1.01; b = 1.52, SE = 0.11, p < .001), indicating the manipulation was successful. However, closer inspection of participants' written responses showed that many participants recalled non-sarcastic stories or jokes for the sarcasm condition (e.g., a follower not realizing they was wearing pajamas on a Zoom call) and some communications that were not warm nor greetings for the greeting condition (e.g., a follower was sad because they recently lost a pet).[14]

[14] Rather than making subjective, post-hoc exclusions, I used participants' self-reported sarcasm in the interaction as the main predictor rather than the experimental manipulation. Thus, for full transparency: this study no longer presents causal results, but correlational results. However, to account for participants' nesting within experimental conditions (see Judd et al., 2012), I cluster the *SE*s by the recall manipulation (consistent with recent recommendations by McNeish & Stapleton, 2016; McNeish et al., 2017); multi-level analyses revealed nearly identical results, i.e., the interaction: b = .23, SE = .09, p = .017, although the linear model did not differ from the random effects model, $\chi^2(1) = 1.21$, p = .136.

As predicted, follower sarcasm was associated with more leader accountability (b = 0.09, SE_{robust} = 0.03, p = .006, d = 0.25; see Table 8),[15] supporting Hypothesis 2c. The presence of others was also associated with more leader accountability (b = 0.32, SE_{robust} = 0.02, p < .001, d = 2.47).[16] However, as predicted, results further revealed a significant interaction between follower sarcasm and the presence of others on leader accountability (b = 0.33, SE_{robust} = 0.11, p = .003; d = 0.27),[17] such that there was a non-significant association between follower sarcasm and leader accountability when the event was private—only between the leader and the follower (simple slope: b = -0.11, SE_{robust} = 0.10, p = .275), but a positive association when the event was public—when others were present or knowledgeable about the event (simple slope: b = 0.22, SE_{robust} = 0.01, p < .001; see Figure 6). These results show support for Hypothesis 2c.

Robustness checks showed that the interaction effect remained generally unchanged in size and significance after controlling for tenure (i.e., how many years the leader and follower have worked together), single-item indicators of leader and follower performance (i.e., "In general, do you/your follower perform well?" from "Never (0)" to "Always (4)"), and a measure of general accountability (i.e., the original scale by Rus et al., 2012), b = 0.14, SE = .04, p = .001.

General Discussion

Results from three behavioral experiments and a field study showed that leaders paid themselves more than they earned based on their performance (Studies 1-3), which was more prominent for leaders with weak moral identity (Studies 2-3), but follower sarcasm reduced it (Studies 1-4) when leaders were accountable to their followers (vs. control; Study 3) or when others witnessed the event (Study 4). These effects were robust to several controls, including

[15] A post-hoc power analysis with .05 alpha, N = 501, and 1 covariate revealed power of 0.76.
[16] A post-hoc power analysis with .05 alpha, N = 501, and 1 covariate revealed power of 1.
[17] A post-hoc power analysis with .05 alpha, N = 501, and 1 covariate revealed power of nearly 0.76.

leader performance, leader tenure with the follower, and how accountable generally leaders felt (Studies 1-4). I discuss the implications of these findings for theory and practice.

Theoretical Implications

By testing the effects of follower sarcasm on leaders' self-interested behaviors, this research extends the leadership and power literatures by integrating insights from the humor literature. A long line of literature has shown the power of humor for those in power (Avolio et al., 1999; Cheng et al., 2019; Cooper & Sosik, 2012; Decker & Rotondo, 2001; Holmes & Marra, 2002; Hughes & Avey, 2009; Lundberg, 1969; Robinson & Smith-Lovin, 2001; Vecchio et al., 2009; Yam et al., 2018; see Kong et al., 2019, for a review). However, this research is almost exclusively conducted in the typical direction of power relations (Dosier et al., 1988; Fiske, 1991, 1992). By flipping the hierarchy, I proposed that follower sarcasm triggers the opposite effect and findings from three behavioral experiments and a field study generally support this idea. While research has shown that leaders' humor reinforces their power, this research suggests that followers can use sarcasm to reduce the same hierarchy. Indeed, findings consistently showed that a simple act of follower sarcasm affected leader behavior by reducing their overpay, particularly with less moral leaders and when leaders were accountable to others. In doing so, these findings also complement an emerging area of research on followership (e.g., Ahmad et al., 2020; Uhl-Bien et al., 2014; Van Vugt, 2006), which emphasizes followers as understudied yet active and influential part of the leader-follower dyad. That is, despite the hierarchical differences between leaders and followers, these results highlight an important theoretical insight at the intersection of role theory and humor theory: a follower communication —sarcastic humor—significantly affects leader behaviors (e.g., leaders' pay recommendations).

By explicitly examining the effects of follower sarcasm on leader behaviors, this research also contributes to the humor literature by testing humor's effectiveness *up* the hierarchy. Existing studies have generally examined humor use within approximately the same hierarchical level (e.g., Evans et al., 2019; Lehmann-Willenbrock & Allen, 2015; Prusaczyk & Hodson, 2020; Thai, et al., 2019; Terrion & Ashforth, 2002; Thomas et al., 2020) or down the hierarchy (i.e., a leader with their followers; e.g., Avolio & Sosik, 1999; Cooper et al., 2018; Yam et al., 2018; Yam et al., 2019; see Kong et al., 2019, for a review). But because higher status and power entail a broader range of acceptable behavior (see Magee & Galinsky, 2008, for a review), it was possible that followers would not reap the same benefits if using humor with an authority person higher in the hierarchy. Although upward follower sarcasm was technically risky because it flouted the traditional flow of information and communication (i.e., top-down; Anderson & Brown, 2010; Shaw, 1964), and is generally not as easily understood nor appreciated as other forms of humor (Fredrickson & Losada, 2005; Gottman & Silver, 1999; Romeo & Cruthirds, 2006), Study 1 findings suggest that leaders did not punish the follower who enacted the sarcasm (i.e., Player 2) nor the follower who laughed at it (i.e., Player 1). Thus, by allowing leaders and followers to save face (McGraw & Warren, 2010; Tynan, 2005) while maintaining a hint of dissent, followers influenced leaders' behavior while avoiding retaliation or punishment. But, leaders' pay decisions were not zero-sum, potentially dampening follower punishment effects.

Finally, by outlining the role of leader moral identity, this research also contributes to the humor and behavioral ethics literatures. Recent work has begun to explore humor and leader morality, including Yam and colleagues (2018) who showed that aggressive leader sense of humor *increases* follower deviance. However, the current research extends this line of work by showing that the mildly aggressive form of humor—follower sarcasm (Huang et al., 2015; Yam

et al., 2018)—can also *decrease* leader deviance. Through the mechanism of accountability, Studies 2 through 4 showed more definitive evidence that follower sarcasm decreases less moral leaders' self-interested behavior in the form of excess pay relative to performance. These findings complement research that has largely documented follower responses to leader aggressive humor (e.g., Yam et al., 2018) or leader unethical behavior in response to more moral follower behavior (Ahmad et al., 2020). By showing a positive leader reaction to follower sarcasm in leaders with weak moral identity, these findings also extend recent research that has shown more moral leaders' negative responses to follower humor (e.g., lack of humor appreciation; Yam et al., 2019). And in doing so (although without manipulating power), this research shows how situational factors such as power shape the effect moral identity has on leaders' self-interested behaviors (Aquino et al., 2009; DeCelles et al., 2012; Shao et al., 2008).

On a more general level, the bulk of existing humor research has studied the effects of humor on relationships (e.g., Cooper et al., 2018), (team) communication or performance (Lehmann-Willenbrock & Allen, 2015), as well as attitudes and perceptions (e.g., Bitterly et al., 2017; Bitterly & Schweitzer, 2019; Evans et al., 2019). Although sarcasm has also been shown to increase creative behavior of the humor user and the recipient (Huang et al., 2015), and leader humor has been shown to affect follower deviant behavior (Yam et al., 2018), to my knowledge, research has not yet demonstrated how humor or sarcasm affects financial behavior. This is a particularly impressive pattern of effects, because the humor user here was also a lower power person, and thus, easily ignored; indeed, a common response when leaders have power is that they ignore the group's collective interests (DeCelles et al., 2012; Keltner et al., 2003).

Finally, a slightly different question is if the same communication benefits afforded by humor that facilitate followers' upward communication may also cause leaders to deem the

information as less veracious or requiring action (e.g., Bitterly & Schweitzer, 2019; Ford, 2000; Mallett et al., 2016; Thomas et al., 2020). If true, this could undermine the act and its long-term effectiveness. Thus, future work should test sarcasms' potential diminishing returns over time.

Practical Implications

First, communicating up the hierarchy is risky (see Morrison, 2014, for a review). Using humor at work—particularly sarcasm—can also be risky (Bitterly et al., 2017; Evans et al., 2019; Fredrickson & Losada, 2005; Gloor, 2019; Gottman & Silver, 1999; Romeo & Cruthirds, 2006). However, employees may face fewer personal consequences if communicating up the hierarchy with humor. Although not explicitly tested here, based on recent research, I can also recommend that employees further reduce the 'risk' of sarcasm and upward humor by telling appropriate sarcastic jokes (e.g., puns, like those tested here) and avoiding inappropriate jokes (e.g., references to minority groups and/or sexual humor; Bitterly et al., 2017; Thomas et al., 2020).

Second, the humor tested in Studies 1-3 were jokes directed towards the leader—a requirement of sarcasm (Lee & Katz, 1998)—and they both alluded to the leader's (under) performance but neither joke directly addressed leader morality or pay. Indeed, such jokes may be appraised as too personal or too psychological close, thereby losing their humor (McGraw & Warren, 2010). As a result, leaders may interpret such jokes as threatening, making them ineffective to improve leaders' behavior—potentially exacerbating overpay if leaders feel threatened or illegitimate (de Cremer & van Dijk, 2005). Future research is needed to test this idea.

Third, the current research focused on pay because of its prevalence and relevance to modern organizational life. But less moral leaders may also commit immoral behavior in other domains (e.g., blaming a coworker for one's own mistake; Ward & King, 2018). Indeed, high-power persons also commit immoral behaviors such as unwanted sexual attention and harass-

ment (Carlsen et al., 2018). However, humor becomes fundamentally unfunny if there is a threat of real harm (McGraw & Warren, 2010). If managing to maintain its levity, it may also empower bias, sexism, and prejudice (Ford et al., 2001, 2008, 2013; Thomas & Esses, 2004; Thomas et al., 2020). Hence, I urge caution in using humor or sarcasm if the potential for real harm is present.

Fourth, although not studied here, given the intrapersonal stress-relief (Ford et al., 2004) and task-related benefits of humor (e.g., persistence; Cheng & Wang, 2015), even if sarcasm does not reduce leaders' immoral behaviors, it may offer important benefits for humor users.

Finally, by highlighting sarcasm as a strategy to facilitate fair leader pay, I do not intend to imply that the onus should be on followers to ensure their leaders behave morally. Indeed, the bulk of leaders' pay is typically determined by contract, which followers cannot influence regardless of how much sarcasm they use. But, increasingly popular work arrangements (e.g., contracting) entail greater flexibility and autonomy overpay allocation in projects, income inequalities that accumulate over time (Gill, 2002). Thus, I aim to proactively arm followers with evidence-based agency to reduce leaders' overpay *and* its negative consequences.

Strengths, Limitations, and Future Directions

This research provided causal evidence via experiments (in Studies 1-3), a method necessary to avoid confounds that would pervade such a study in organizational contexts. For example, employees may be generally less likely to engage in humor up the hierarchy compared with down the hierarchy (Lundberg, 1969). Although followers may communicate more up the hierarchy when they feel psychologically safe to do so (Walumbwa & Schaubroeck, 2009), that is, when they are in a team climate characterized by "respect and trust…that situations are secure, predictable, and clear" (Edmondson, 1999; Kahn, 1990, p. 705), employees may also feel more psychologically safe by using more humor (e.g., see Romero & Pescosolido, 2008). Thus,

by testing these ideas via experiments, this research aimed to enrich an area of research on communication up the hierarchy often referred to as "voice" that is rarely experimental (although notable exceptions include Burris et al., 2017; Fast et al., 2014; and Lam et al., 2019), by developing a novel chat room paradigm to enhance both experimental *and* mundane realism.

Although a key strength of Study 4 was showing the influence of follower sarcasm in real interactions, I cannot rule out participants' misattribution (i.e., recalling a joke by someone other than their follower; see Bitterly et al., 2017, for a similar discussion). Paired with the causal links and converging results from Study 3, however, this potential threat seems less concerning.

I studied sarcasm and its effects in two different countries in an attempt to show some evidence of generalizability (i.e., in the U.S. in Studies 1-3 and in the U.K. in Study 4). Despite differences in humor styles (i.e., more aggressive, sarcastic humor in the U.K. than in the U.S.; Kaniuka et al., 2020), both are Western, industrialized, educated, rich, and democratic countries (see Henrich et al., 2010). Thus, future research should explicitly test sarcasm as an intervention for leader moral behavior or overpay in other contexts (e.g., Asia; see Yam et al., 2021).

Finally, this research focused on one self-interested behavior: self-pay. Because leaders make daily decisions related to other kinds of resource allocation (see Kelemen et al., 2020), I encourage future work to explore if these decisions are similarly influenced by follower sarcasm.

Conclusions

Findings from three behavioral experiments and a field study showed that leaders engage in overpay, but follower sarcasm reduces it, especially for leaders with weak moral identity and when leaders were accountable to their followers. Hence, as implied in the title: talk *is* cheap, because it is arguably free. However, talk is also valuable, because a swift instance of follower sarcasm can reduce leader overpay by increasing accountability.

Open Science Statement

1. Although reported in-text, the URL to the pre-registration for Study 3 is here.
2. Yes, this plan was registered prior to examination of the data or observing the outcomes.
3. Yes, all registrations (as well as exclusions) have been reported and explained in-text.
4. No, there were no changes to the preregistered plan for the primary/confirmatory analysis except for those explained in-text.
5. Yes, all of the analyses described in the registered plan are reported in the article.
6. All data (Studies 1-4) and study stimuli (Studies 1-3) can be found here.

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Table 1

Descriptive Statistics and Correlations (Study 1)

Variables	*M*	*SD*	1	2	3	4	5
1. Follower Sarcasm	.51	.50	-				
2. Player 1 Pay	24.50	36.60	.04	-			
3. Player 2 Pay	24.37	36.87	.04	.95***	-		
4. Leader Self Pay	17.22	43.48	-.17**	.20**	.25***	-	
5. Leader Gender	.43	.50	-.11†	.05	.06	.15*	-

Note. Coding: control/no humor (0), sarcasm (1); participant gender: 0 (man), 1 (woman). $N = 240$.
* $p < .05$, ** $p < .01$, *** $p < .001$

Table 2

GSEM Results (Study 1)

	Player 1 Pay	Player 2 Pay	Self-Pay
Variable	*b (SE)*	*b (SE)*	*b (SE)*
Constant	21.12(4.06)***	20.60(4.08)***	19.17(4.70)***
Follower Sarcasm	3.59(4.74)	3.78(4.77)	-13.71(5.49)*
Participant Gender	3.90(4.79)	4.60(4.83)	11.95(5.55)*
Pseudo Loglikelihood		-3369.08	
AIC		6768.17	
BIC		6820.38	

Note. Coding: control/no humor (0), sarcasm (1); participant gender: 0 (man), 1 (woman). $N = 240$.
* $p < .05$, ** $p < .01$, *** $p < .001$

Table 3

Descriptive Statistics and Correlations (Study 2)

Variables	*M*	*SD*	1	2	3	4	5
1. Follower Sarcasm	.50	.50	-				
2. Follower Affiliative Humor	.25	.43	-.57***	-			
3. Leader Moral Identity	4.58	1.27	.10*	-.03	-		
4. Leader Self-Pay	16.49	42.55	-.00	-.03	-.04	-	
5. Leader Gender	.41	.49	.05	-.01	.15	.02	-

Note. Coding: Sarcasm and affiliative humor are each coded (1) compared with the control/no humor condition (0); follower gender: 0 (man), 1 (woman). $N = 526$.
* $p < .05$, ** $p < .01$, *** $p < .001$

Table 4

GSEM Results (Study 2)

	Leader Self-Pay	Leader Self-Pay	Leader Self-Pay
Variable	*b* (SE_{robust})	*b* (SE_{robust})	*b* (SE_{robust})
Constant	18.05(1.26)***	18.11(0.93)***	19.01(1.03)***
Follower Sarcasm	-2.11(0.75)**	-2.58(0.80)***	-3.04(2.37)
Follower Humor	-4.52(5.75)	-4.71(6.01)	-5.31(6.42)
Leader Moral Identity	-	-1.84(2.03)	-7.73(3.49)*
Follower Sarcasm	-	-	
× Leader Moral Identity			10.20(2.65)***
Follower Humor	-	-	1.28(2.28)
× Leader Moral Identity			
Leader Gender	1.52(4.97)	2.10(5.24)	1.98(4.73)
Pseudo Loglikelihood	-2718.23	-2717.74	2714.39
AIC	5440.46	5439.49	5432.78
BIC	5448.99	5448.02	5441.31

Note. Follower sarcasm and follower humor are compared to the control/non-humorous condition. Leader moral identity is standardized. $N = 526$.
* $p < .05$, ** $p < .01$, *** $p < .001$

Table 5

Descriptive Statistics and Correlations (Study 3)

Variables	*M*	*SD*	1	2	3	4	5
1. Follower Sarcasm (vs. Control)	.67	.47	-				
2. Leader ACC (vs. Control)	.33	.47	-.02	-			
3. Leader Moral Identity	4.40	0.63	.03	-.03	-		
4. Leader Self Pay	24.49	40.16	.05	.02	-.04	-	
5. Participant Gender	.44	.50	-.01	-.02	.11*	.01	-

Note. Coding: Sarcasm and accountability (ACC) are each coded (1) compared with the control (0); participant gender: 0 (man), 1 (woman). $N = 524$.
* $p < .05$, ** $p < .01$, *** $p < .001$

Table 6

GSEM Path Model Results (Study 3)

	Leader Self Pay	Leader Self Pay	Leader Self Pay
Variable	*b* (SE_{robust})	*b* (SE_{robust})	*b* (SE_{robust})
Constant	20.87(0.55)***	17.01(0.08)***	15.95(0.98)***
Follower Sarcasm	4.23(0.20)***	10.13(0.41)***	11.19(0.27)***
Leader ACC	1.77(2.46)	13.05(1.96)***	13.94(2.85)***
Leader No ACC	0.42(2.46)	0.40(4.41)	1.22(3.51)
Leader Moral Identity	-	-	-10.54(0.67)***
Leader ACC	-	-17.22(0.61)***	-18.18(0.35)***
× Follower Sarcasm			
Leader No ACC	-	-0.52(1.52)	-1.47(0.97)
× Follower Sarcasm			
Leader ACC	-	-	11.89(0.50)***
× Leader Moral Identity			
Leader No ACC	-	-	11.90(2.54)***
× Leader Moral Identity			
Follower Sarcasm	-	-	7.62(1.05)***
× Leader Moral Identity			
Leader ACC	-	-	-4.96(1.46)**
× Follower Sarcasm			
× Moral Identity			
Leader No ACC	-	-	-12.75(1.46)***
× Follower Sarcasm			
× Moral Identity			
Leader Gender	0.14(1.01)	0.27(1.02)	0.82(60.96)
Pseudo Loglikelihood	-2677.40	-2675.10	-2671.22
AIC	5356.80	5352.19	5344.44
BIC	5361.06	5356.45	5348.70

Note. ACC = Accountability; ACC and No ACC conditions are compared to the control condition. Leader Moral Identity is standardized. $N = 524$.
* $p < .05$, ** $p < .01$, *** $p < .001$

Table 7

Descriptive Statistics and Correlations (Study 4)

Variables	*M*	*SD*	1	2	3	4	5
1. Sarcasm Manipulation	.49	.50	-				
2. Follower Sarcasm	2.41	1.45	.52***	-			
3. Presence of Others	.61	.49	.11*	.10*	-		
4. Leader Accountability	4.19	1.52	-.04	.07	.11*	-	
5. Leader Gender	.51	.50	.04	-.05	-.02	-.07	-

Note. Coding: Sarcasm is coded (1) compared with the control/greeting (0); leader and follower gender: 0 (man), 1 (woman), because there was only 1 non-binary participant, so these statistics could not remain anonymous. $N = 500$.
* $p < .05$, ** $p < .01$, *** $p < .001$

Table 8

GSEM Path Model Results (Study 4)

	Leader Accountability	Leader Accountability
Variable	*b* (SE_{robust})	*b* (SE_{robust})
Constant	4.09(0.22)***	4.06(0.12)***
Follower Sarcasm	0.09(0.03)**	-0.10(0.10)
Presence of Others	0.32(0.11)***	0.33(0.15)*
Follower Sarcasm × Presence of Others	-	0.33(0.11)**
Leader Gender	-0.19(0.15)	-0.20(0.14)
Pseudo Loglikelihood	-913.26	-910.43
AIC	1828.53	1822.86
BIC	1832.74	1827.08

Note. $N = 501$.
* $p < .05$, ** $p < .01$, *** $p < .001$

Figure 1

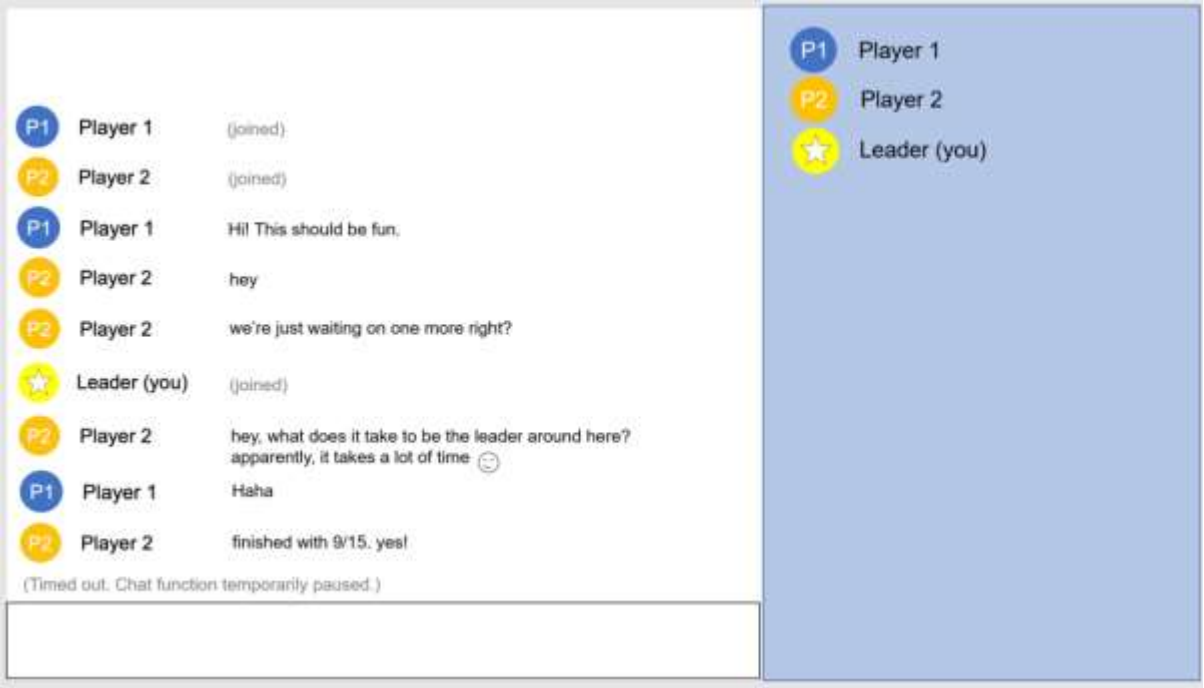
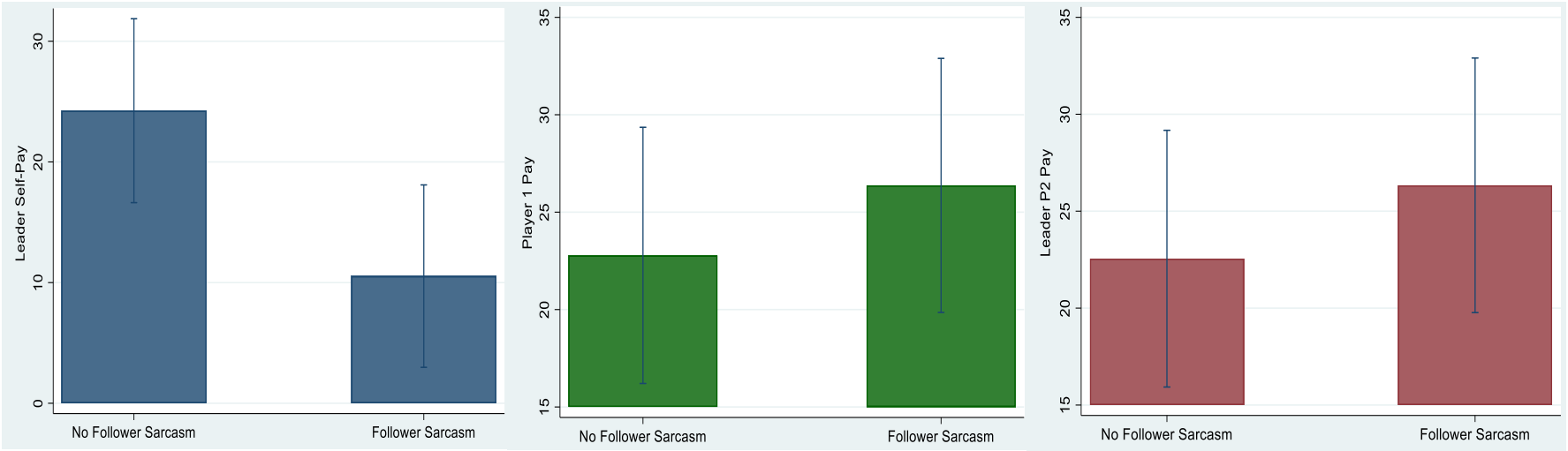

P1 Player 1 (joined)
P2 Player 2 (joined)
P1 Player 1 Hi! This should be fun.
P2 Player 2 hey
P2 Player 2 we're just waiting on one more right?
Leader (you) (joined)
P2 Player 2 hey, what does it take to be the leader around here? apparently, it takes a lot of time
P1 Player 1 Haha
P2 Player 2 finished with 9/15. yes!
(Timed out. Chat function temporarily paused.)
P1 Player 1
P2 Player 2
Leader (you)

Figure 2

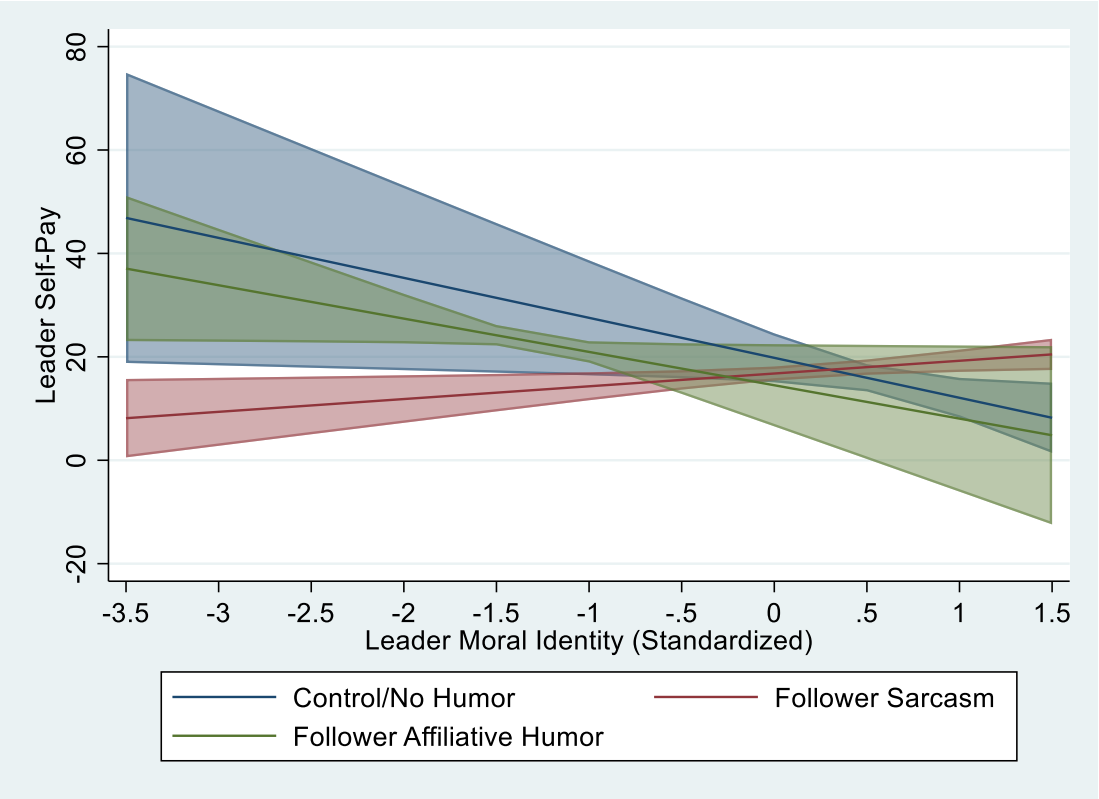
Effects of follower sarcasm on leaders' pay recommendations (Study 1)



Note. Player 2 enacted the sarcasm and Player 1 laughed at it. Bars represent 95% CIs. N = 240.

Figure 3

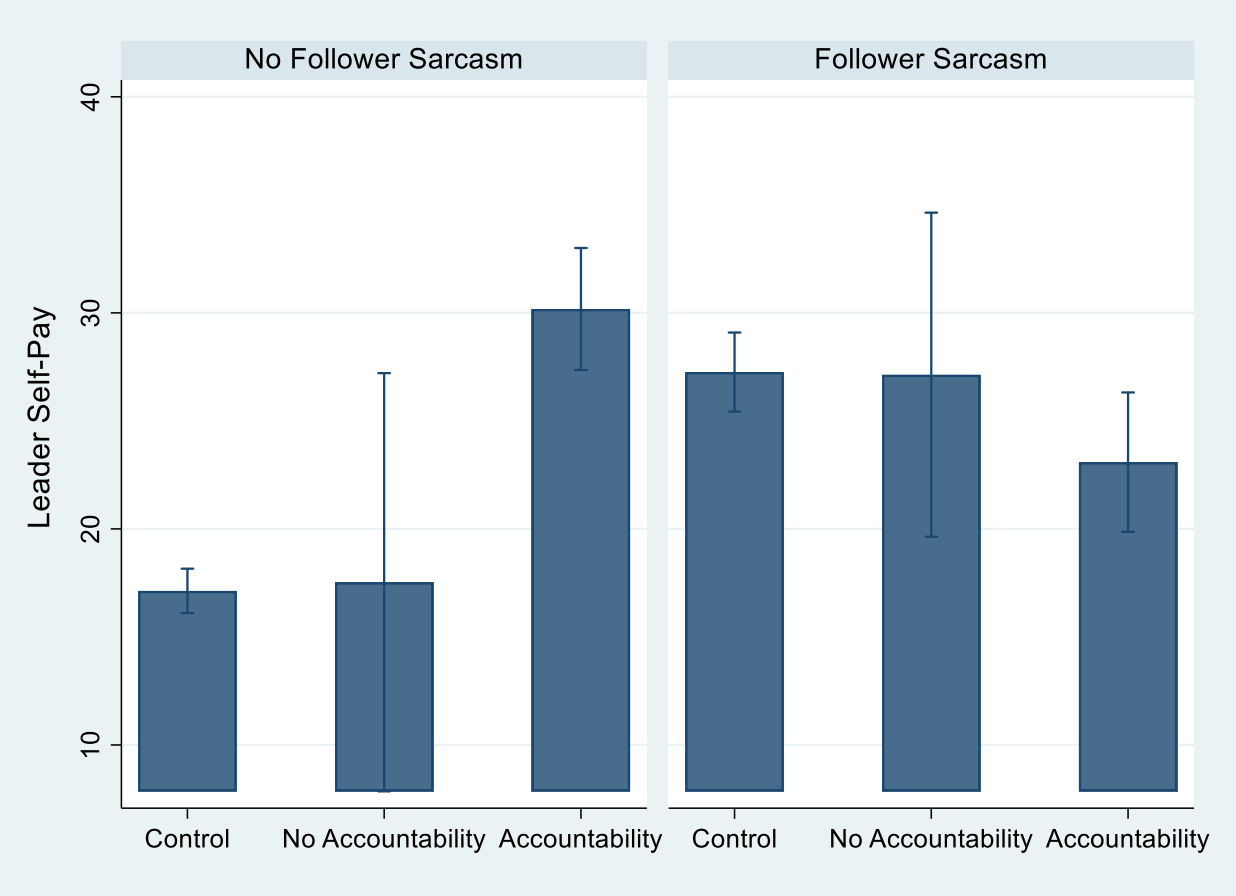
Effects of follower sarcasm, follower humor, and leader moral identity on leader pay recommendations (Study 2)



Note. All pay values above 0 signifies overpay. Bands denote 95% CIs. N = 526.

Figure 4

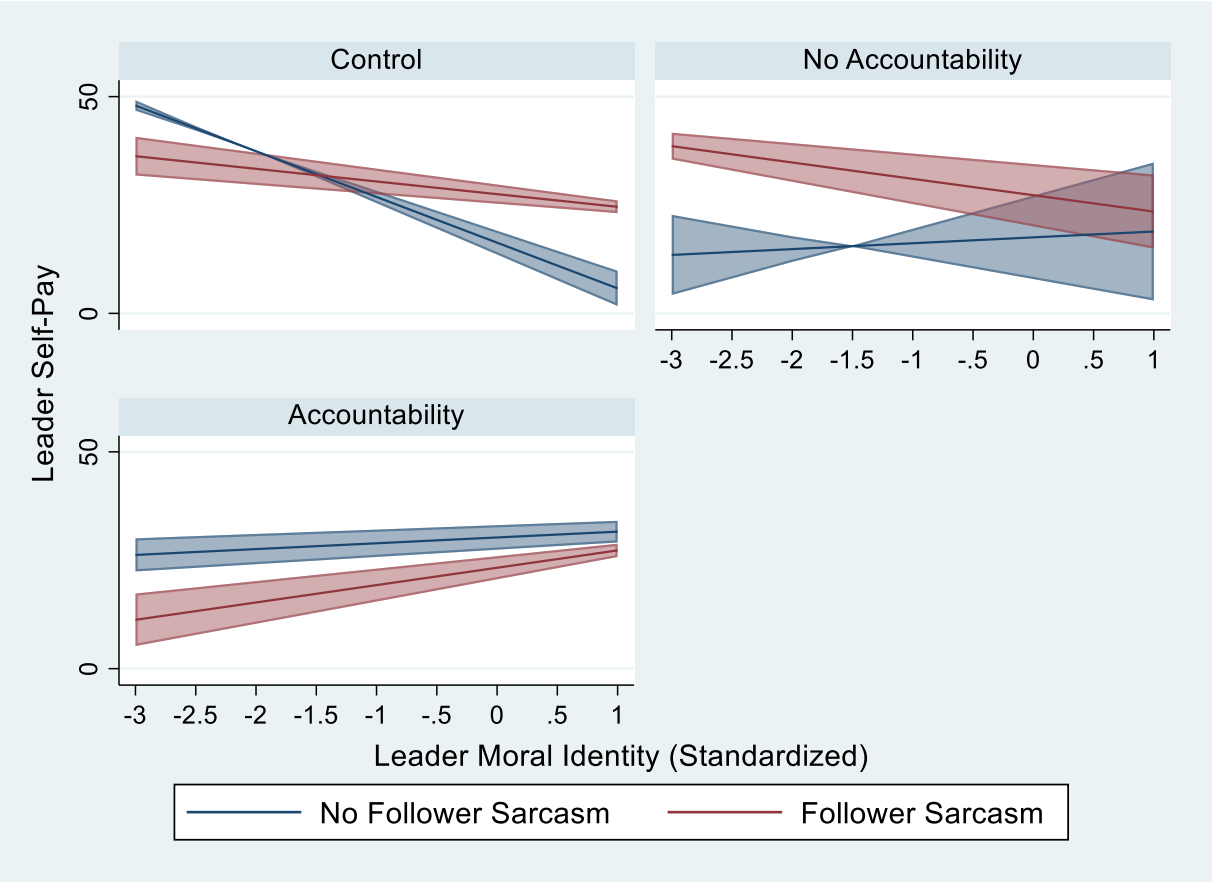
Effects of follower sarcasm and leader accountability on leader pay recommendations (Study 3)



Note. All pay values above 0 signifies overpay. Bands denote 95% CIs. N = 524.

Figure 5

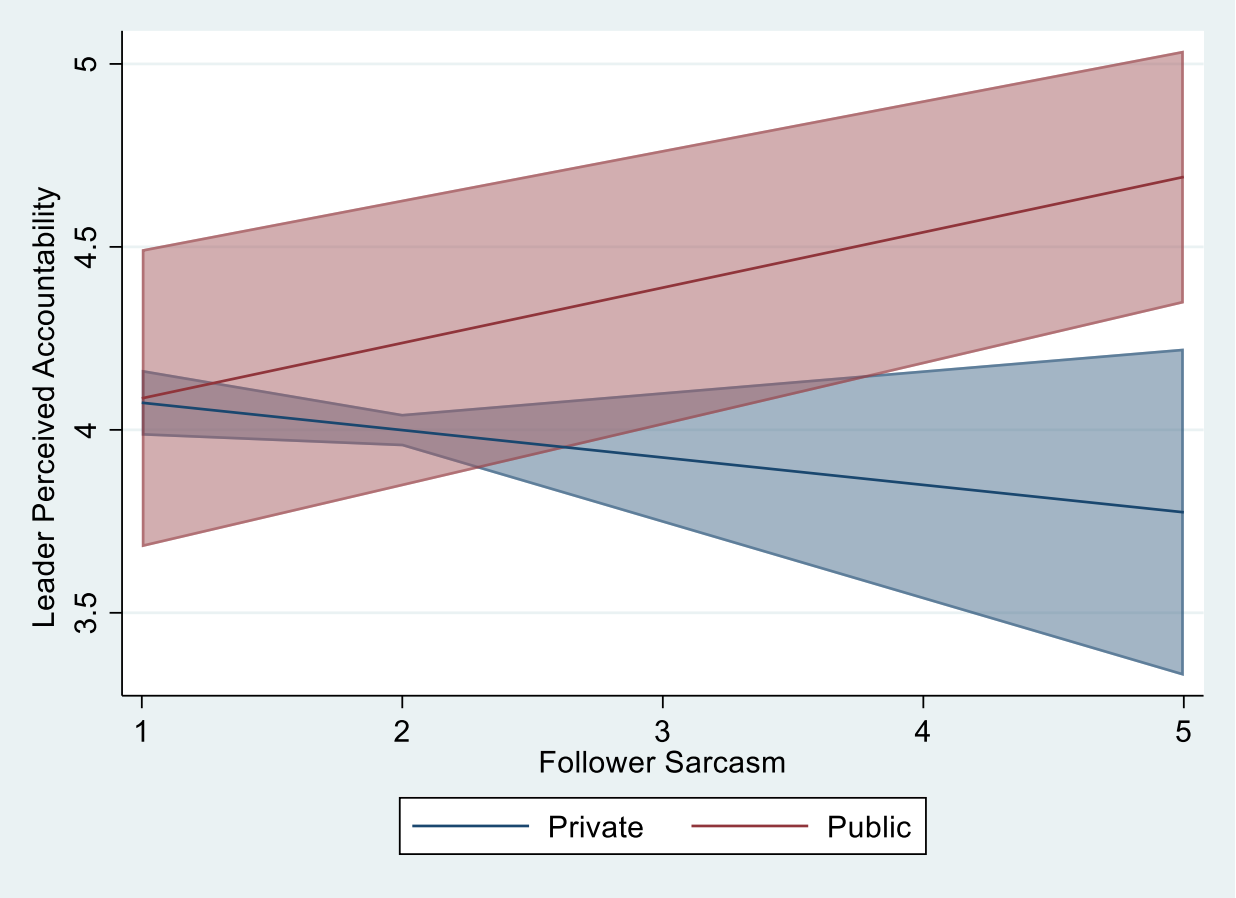
Effects of follower sarcasm, leader accountability, and leader moral identity on leader pay recommendations (Study 3)



Note. All pay values above 0 signifies overpay. Bands denote 95% CIs. N = 524.

Figure 6

Effects of follower sarcasm and the presence of others on leader accountability (Study 4)



Note. Bands denote 95% CIs. N = 501.