Blame contagion: The automatic transmission of self-serving attributions

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ABSTRACT

When people blame others for their mistakes, they learn less and perform worse. This problem is magnified when blame becomes embedded in the shared culture of groups and organizations. Yet, little is known about whether—and, if so, how—the propensity to blame spreads from one person to another. Four experiments addressed this issue, demonstrating that blame is socially contagious: observing an individual make a blame attribution increased the likelihood that people would make subsequent blame attributions for their own, unrelated, failures (Experiments 1, 2, and 4). Results also indicated that this "blame contagion" is due to the transmission of goals. Blame exposure led to the inference and adoption of a self-image protection goal (Experiment 3), and blame contagion was eliminated when observers had the opportunity to alleviate this self-image protection goal via self-affirmation (Experiment 4). Implications for research on causal attributions, social contagion, and cultural transmission are discussed.

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Introduction

Richard Nixon had many admirable leadership qualities that helped him become the 37th President of the United States. He was also known, however, to harbor an intense need to enhance and protect his self-image, a chronic goal that led to a propensity to blame others for his personal shortcomings. According to former aids, Nixon's self-serving tendency to blame spread like a cancer throughout his administration, and it was this widespread tendency to blame that ultimately led to his political downfall (Gergen, 2000). Similarly, but in a different context, NASA's culture of excuse making and finger pointing became increasingly rampant over a period of years and is believed to be a key factor behind disasters such as the Columbia Shuttle accident in 2003 (Mason, 2004; Oberg, 2003). These and similar examples highlight an important fact: the spread of blame is detrimental to individual and collective well-being and overall performance.

In the present research we seek to shed light on *how* blame—defined as the act of attributing a personal failure to another person or event (see Campbell & Sedikides, 1999; Snyder & Higgins, 1988; Tennen & Affleck, 1990)—might spread from one individual to another in social settings. We do so by examining whether blame is socially contagious. In contrast to previous work, which has focused primarily on differences in personality, cultural background, or situation-based incentives to blame, we test the hypothesis that merely *observing* someone make a blame attribution for a failure increases the odds that the observer will adopt a self-image protec-

tion goal and, as a result, engage in subsequent blaming for other, unrelated, failures.

Why do people blame, and with what consequences?

People are generally motivated to cultivate and defend a positive self-image (Greenwald, 1980). One common way that people protect their self-image, especially when threatened, is to blame other people and/or external circumstances for their failures in order to avoid having to admit the painful truth that they are responsible for an undesirable outcome (Blaine & Crocker, 1993; Bradley, 1978; Miller, 1976; Snyder & Higgins, 1988; Zuckerman, 1979). But this form of self-protection comes at a cost. Repeated blaming leads to several negative consequences, including decreased health and well-being (Tennen & Affleck, 1990) and damage to one's reputation (Forsyth, Berger, & Mitchell, 1981; Forsyth & Mitchell, 1979; Lee & Robinson, 2000; Lee & Tiedens, 2001). Blaming is also harmful in-group settings. Groups and organizations in which blame is routinely expressed are less psychologically rewarding for their members, less conducive to learning and innovation, and less productive than those in which people feel safe to take personal responsibility for their own mistakes (Edmondson, 1996, 1999; Gittell, 2003). And, companies whose executives attribute failures to external factors suffer from inferior stock performance relative to otherwise comparable companies (Lee, Peterson, & Tiedens, 2004).

Given these far-ranging negative outcomes, understanding the psychological processes that facilitate the development and spread of blame is important. To date, researchers have identified a variety

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of factors that influence how people respond to failures, including personality traits (Peterson & Seligman, 1984; Wood, Giordano-Beech, Taylor, Michela, & Gaus, 1994), cross-cultural differences (Kashima & Triandis, 1986; Mennon, Morris, Chiu, & Hong, 1999; Morris, Mennon, & Ames, 2001; Yamaguchi, 2001), and the presence or absence of negative consequences for taking responsibility for one's mistakes (Barach & Small, 2000; Edmondson, 1999) (for reviews see Fiske & Taylor, 1991; Zhao & Olivera, 2006). In the present work, we move beyond these lines of research to examine the possibility that blame is socially contagious.

Blame contagion

Social contagion refers to the automatic transference of a psychological state or behavior from one person to another (e.g., Barsade, 2002; Neumann & Strack, 2000). Thus, we define "blame contagion" as the tendency for a person to engage in blaming behaviors shortly after being exposed to another individual making a blame attribution for a failure. Importantly, our definition of blame contagion does not apply to instances in which an individual is motivated to blame as a result of having *been blamed* by others, or to cases where one is persuaded or influenced to make a specific attribution for a *particular* event. Instead, it refers to a phenomenon where the target and topic of an individual's blame need not be related to the target and topic of the blame that was overheard.

No previous work has examined whether causal attributions are contagious. However, it is well established that observers tend to mimic and/or "catch" a variety of other behaviors and states displayed by others, including both physical movements (Chartrand & Bargh, 1999; Chartrand, Maddux, & Lakin, 2005) and affective states (Barsade, 2002; Hatfield, Cacioppo, & Rapson, 1994; Neumann & Strack, 2000; Sy, Côté, & Saavedra, 2005). These effects are most frequently believed to be a result of the perception–behavior link (Chartrand & Bargh, 1999), which suggests that any observable movement, posture, or expression of one person has the potential to be mimicked by another person. For instance, emotional contagion takes place when people mimic specific facial expressions and then automatically adopt emotions that are consistent with the expressions (Hatfield et al., 1994).

It is unlikely, though, that the perception–behavior link would lead to blame contagion, because blame attributions do not involve a distinct posture or behavior that can be mimicked. But blame does have one feature that could be transmitted from actor to observer: a *goal* of protecting one's self-image. More specifically, observers of an individual who publicly blames others for a mistake could infer that the individual is seeking to protect his or her self-image (Blaine & Crocker, 1993; Bradley, 1978; Miller, 1976; Snyder & Higgins, 1988; Zuckerman, 1979), and to the degree that observers do perceive such a self-image protection goal, it could activate a similar goal in the observer. This possibility is consistent with evidence that goals can be primed by the environment (Gollwitzer & Bargh, 2005) and that goal-oriented behaviors of others can serve as such primes (Aarts, Gollwitzer, & Hassin, 2004), making goals socially contagious. Specifically, Aarts et al. (2004) showed that exposure to a socially acceptable behavior that implies a goal (e.g., working in order to make money) activates the same goal among individuals who already hold the goal (e.g., undergraduates who needed cash worked harder on a task for which they were paid).

Taken together, these findings indicate that blame might be contagious. Specifically, observers of blame may automatically infer, adopt, and pursue (via subsequent blaming) a self-image protection goal. Accordingly, we examine both the idea that blame is contagious as well as the idea that goal transference is the mechanism that drives the effect. If blame contagion is, indeed, caused by the transmission of a self-image protection goal, then the effect should be eliminated when participants are given an opportunity to boost their self-image before making an attribution for a mistake. Self-affirmation—which involves writing about and/or being primed with a value or belief that is especially important to one's sense of self—is a commonly used method to demonstrate that a process is driven by self-image protection motives (see e.g., Cohen, Aronson, & Steele, 2000; Fein & Spencer, 1997; Steele, 1988). Self-affirmation tasks enhance self-esteem and reduce defensiveness by reminding people what is truly important to them and, as a result, lessen the tendency to defensively protect one's self-image (see Sherman & Cohen, 2006; Sherman & Kim, 2005). Thus, based on the idea that blame contagion is a result of the goal of protecting one's self-image, we predict that the opportunity to self-affirm will block the blame contagion effect.

In testing these predictions, we aim to demonstrate for the first time that blame attributions can spread from one person to another. Along with identifying a novel determinant of blame, such evidence would highlight a possible mechanism through which relationships, groups, and organizations can come to be characterized by blame and blaming. Also, by examining whether self-image protection goals are contagious, we join with others to extend contagion research beyond effects related to the perception–behavior link (e.g., mimicry of physical behaviors, movements, and facial expressions). Finally, we hope to contribute a better understanding of the emerging literature on goal contagion by testing the idea that blame—a socially undesirable behavior (Forsyth & Mitchell, 1979; Forsyth et al., 1981; Leary & Baumeister, 2000; Lee & Robinson, 2000; Lee & Tiedens, 2001)—can produce goal contagion. Such a finding would offer a clear exception to the notion that socially undesirable behaviors do not elicit goal contagion—a possibility raised by Aarts et al. (2004).

Overview of the present experiments

We conducted four experiments to test these predictions. In Experiments 1 and 2 we examined the hypothesis that exposure to blame by another individual (a politician in Experiment 1, and a student in Experiment 2) leads to subsequent blaming for one's own, unrelated, failures. Next, we explored the mechanism for this effect. In Experiment 3 we tested the idea that observing an actor make a blame attribution for a personal failure leads to both the inference and adoption of a self-image protection goal. An alternative possibility, social learning (i.e., coming to believe that blame is more socially appropriate after observing it), was also examined. In Experiment 4 we tested the hypothesis that blame contagion is eliminated when individuals are given an opportunity to boost their self-image via a self-affirmation task.

Experiment 1

In Experiment 1 we tested the hypothesis that people are more likely to make a blame attribution for a personal failure after first observing another individual engage in blame. We asked participants to read a news clip about a failure by the Governor of California, Arnold Schwarzenegger. In one condition, the news excerpt included a statement by Schwarzenegger blaming special interest groups for the failure (blame condition). In a second condition, participants read about Schwarzenegger taking full ownership of the failure (responsibility condition). Later in the experiment, participants recalled and wrote about an unrelated failure of their own. After writing about the failure, they were asked to explain what caused the failure. We predicted that those who had earlier been exposed to blame would be more likely to make blame attributions for their own failures.

Method

Participants and design

A total of 100 participants (29 men, 70 women, 1 unidentified) took part in the study in exchange for a $5 gift certificate from an online retailer. Participants were recruited through an online national database maintained by a West Coast university. Ages ranged from 19 to 61 years ($M = 31.06$; $SD = 9.06$). A two-condition (exposure to blame attribution versus responsibility attribution for a failure), between-subjects design was used.

Procedure

Participants were emailed a link to the experiment website and completed the study from their own computers. After agreeing to participate in the study, participants were asked to read about and respond to a failure on the part of the California Governor, Arnold Schwarzenegger. The failure involved a controversial special election in 2005 that Schwarzenegger called in order to pass four propositions. All four propositions were soundly defeated and the special election ended up costing the State more than $250 million. The failure was described as follows:

> The Governor claimed his agenda would clear the way for correction of the problems he was elected to solve. California voters rejected all four of his propositions, leading to a significant defeat and drop in public support for Schwarzenegger. The special election was believed to have been the most expensive in California history, costing more than $250 million.

Attribution exposure. After reading about the failure, participants were exposed to Gov. Schwarzenegger either taking full responsibility for the failure ($n = 51$) or blaming special interest groups for causing the election fail ($n = 49$). Participants in the responsibility condition read the following:

> Schwarzenegger said the responsibility for the election rests solely with him. "The buck stops with me," he said. "One should not shy away from that. It was my idea to have the special election, and I said this is the year for reform and I told my team: 'Let's make it happen…. This is the year we're going to reform the system.' However, the people of California did not like what I proposed and now we must move forward."

In, contrast, participants in the blame condition read the following:

> Schwarzenegger blamed bitter political partisanship for the results of the special election, arguing that the changes he proposed still need to be made. "Yes, I am upset," he said. "It is unfortunate that certain special interest groups in California can think only about their own interests instead of doing what is best for California. I do not blame anyone on my team or myself for what happened. For the reasons mentioned, the election didn't work out."

Participants then indicated the extent to which they thought Schwarzenegger failed by responding to the following item: "To what extent was the special election a failure for Gov. Schwarzenegger?" Answers were given on a 7-point scale ranging from 1 (*not at all a failure*) to 7 (*very much a failure*). This question was included to ensure that participants in both conditions correctly perceived the event to be a failure and did not construe it differently based on whether or not they were exposed to blame.

Participant attributions. After the first portion of the study, participants completed a filler task, which was framed as a separate study (they rated how familiar they were with a series of profes-

sional baseball players, which served as a pre-test for an unrelated study). Following the filler task, participants were asked, ostensibly as part of a third study, to think of a personal failure and write it down. After describing what happened, they were then asked to indicate who or what was responsible for the failure.

Measures of blame and responsibility. In order to obtain measures of responsibility and blame, two independent coders who were blind to the conditions rated the degree to which participants took responsibility and the degree to which they blamed. Responsibility ratings ranged from 1 (*no responsibility*) to 5 (*explicit responsibility*); blame ratings ranged from 1 (*no blame*) to 5 (*explicit blame*) for the failure. The coders' scores were reliable for both blame ($r = .86$, $M = 2.13$, $SD = 1.36$) and responsibility ($r = .83$, $M = 3.58$, $SD = 1.23$), so the coders ratings were combined. Finally, participants were probed for suspicion in order to ensure that they were unaware of the purpose of the study. Specifically, they were asked: "Did any answers on one task affect your answers on any other task? If so, please explain below." They were then given space to type in their answers.

Results and discussion

Five participants did not provide any attribution for their failures, leaving a total of 95 participants. The suspicion probes confirmed that none of the participants were aware of the purpose of the study. In addition, there were no differences in people's perceptions of whether or not the special election was a failure, $t(98) = 0.06$ ns. Those in the responsibility condition ($M = 5.43$, $SD = 1.35$) and blame condition ($M = 5.45$, $SD = 1.39$) both perceived the event as a failure.

As predicted, there were differences in blaming between conditions. Participants who had been exposed to blame earlier in the experiment made stronger blame attributions for the failure ($M = 2.41$, $SD = 1.44$) than did those who were in the responsibility condition ($M = 1.84$, $SD = 1.22$), $t(93) = 2.06$, $p = .04$ (see Fig. 1). There were no differences in responsibility attributions; those who had been exposed to responsibility attributions did not take greater responsibility for their failures ($M = 3.55$, $SD = 1.38$) than did those in the blame condition ($M = 3.61$, $SD = 1.07$), $t(93) =$
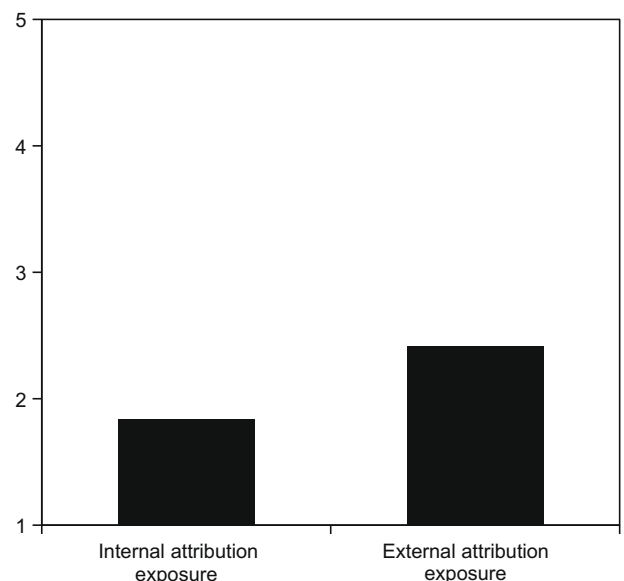
Fig. 1. Extent to which participants in each condition made a blame attribution for their personal failure, ranging from 1 (*no blame*) to 5 (*explicit blame*), Experiment 1. Results show that blame (i.e., external attribution) exposure led to more subsequent blaming than did responsibility (i.e., internal attribution) exposure.

0.21 ns. This is likely because of a ceiling effect, as participants were explicitly asked to write about a personal failure (i.e., a failure for which they were presumably at least partly responsible).

In sum, participants who observed an actor make a blame attribution for a failure were more likely to make blame attributions for their own, unrelated, failures. Importantly, the contagion effects that we observed were not the result of a rational persuasion process (i.e., persuaded to make a specific attribution for a specific failure), as the two failures were different and unrelated. Thus, this study offers support for our blame contagion hypothesis. There are, however, two limitations. First, it could be that exposure to blame (versus responsibility) actually caused participants to choose different types of events. It is important to rule this out as an alternative explanation for our findings. Second, it could be that exposure to responsibility was solely responsible for the effects. We think this is unlikely because blame is a more likely candidate than responsibility to trigger a pre-existing goal (i.e., self-image protection). However, we address both of these concerns in Experiment 2.

Experiment 2

In Experiment 2 we designed a controlled scenario that exposed participants to an actor's attribution for a failure and then required them to provide a causal attribution for an unrelated failure that we provided. We did so by conducting two ostensibly unrelated studies. First, we asked university students to give their reactions to an article reporting that students from their university had been having difficulty finding jobs after graduation. Included in the article were the comments of a student making an internal attribution (responsibility), no attribution (neutral), or an external attribution (blame) for his lack of job success. In order to disguise the true purpose of this manipulation, participants were asked to rate how interesting they found the article. They then went on to provide an attribution for an unrelated failure, ostensibly as part of a different experiment. Consistent with our findings from Experiment 1, we predicted that those who were exposed to blame would be more likely than those in the neutral and responsibility conditions to make blame attributions for the subsequent failure.

Method

Participants and design

133 university students (54 men, 76, women, 3 unidentified) participated in this study as part of an hour-long mass testing session. Ages ranged from 18 to 28 years ($M = 20.08$; $SD = 1.88$). Participants received $20 upon completion of the entire session. In a between-subjects design, each participant was randomly assigned to one of three conditions: blame condition ($n = 45$), neutral condition ($n = 44$), or responsibility condition ($n = 44$).

Procedure

Because participants were completing questionnaires for several different studies we were able to make the present study appear to be two separate studies. In the first part, participants read a passage that had supposedly been written for a student newspaper. The passage stated that a number of the students from the participants' university had trouble finding good jobs after graduation, largely because they lacked focus in their studies. Participants in the neutral condition were not exposed to any attributions. Participants in the blame and responsibility conditions read a quote by a student who had been interviewed for the article. In the responsibility condition, the student took responsibility for having difficulty finding a job. Participants in this condition read the following:

One student who was interviewed said, "I am responsible for my difficulty in the job market." The student said that he didn't actively pursue as much support as he needed. "Some students know early on what they want to do when they leave here and others figure it out over time—I did neither."

In the blame condition, the student who was interviewed blamed the failure on the school, stating that the university did not give enough support to students. Participants in this condition read the following:

One student who was interviewed said, "[*University name*] is to blame for my difficulty in the job market." This person reported that current students don't receive as much support as they need. "While some students come here knowing what they want to do when they leave, the rest end up falling through the cracks."

After reading the passage, students rated how interesting they found the article (there were no differences between conditions). They then went on to complete what they thought was an unrelated study (it was included in the packet of multiple studies and the font and formatting was different from the first portion of the study). This portion of the study assessed the tendency to make blame attributions for an unrelated failure.

In the second part of the study, participants read about a hypothetical company and were instructed to imagine working for the company. Their job in the organization involved working with teams to create reports aimed at helping the company increase productivity. They read that their most recent project had been a failure—the company followed the group's advice and lost a lot of money as a result. In order to clearly establish that they were at fault in the failure while simultaneously leaving room to blame others, participants read the following: "You realize that, to a large degree, you are to blame for how the project turned out (you overlooked some key data). However, others on the team could have worked harder than they did." They were then asked to imagine meeting with their supervisor to explain what happened. They were given seven lines to construct a response to the supervisor's opening request: "Tell me what led to the failure of your report."

Measures of blame and responsibility. As in Experiment 1, two independent coders who were blind to the conditions used 5-point scales to rate the degree to which participants took responsibility and made blame attributions. The coders' scores were reliable for both blame ($r = .80$) and responsibility ($r = .75$), so they were combined to form single measures ($M = 2.93$, $SD = 1.34$, and $M = 4.38$, $SD = 0.99$, respectively).

Results and discussion

Three of the participants did not make any attributions, leaving a total of 130 participants. Our main interest was whether or not exposure to blame would increase the tendency to make blame attributions. This prediction was supported: analysis of variance produced a difference between conditions, $F(2, 127) = 3.11$, $p < .05$. Planned contrasts showed, as hypothesized, that participants who had been exposed to blame made stronger blame attributions ($M = 3.28$, $SD = 1.26$) than did those who were exposed to responsibility attributions ($M = 2.58$, $SD = 1.24$), $t(127) = 2.50$, $p = .01$ (see Fig. 2). Blaming by participants in the neutral condition ($M = 2.93$, $SD = 1.43$) fell between the blame and responsibility conditions and did not differ significantly from either. As in Experiment 1, there was no effect of condition on the tendency to take responsibility ($Ms = 4.32–4.45$, $SDs = .82–1.10$), $F(2, 127) = 0.20$ ns. Once again, this is not surprising considering that participants had been told explicitly that they were responsible for the failure.
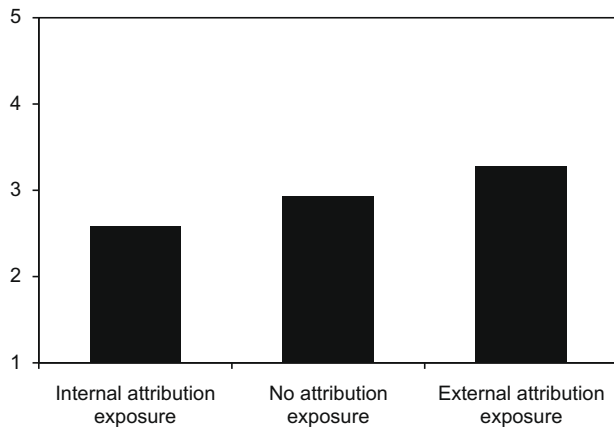
Fig. 2. Extent to which participants in each condition made a blame attribution for their personal failure, ranging from 1 (*no blame*) to 5 (*explicit blame*), Experiment 2. Results show that those in the exposure to blame (i.e., external attribution) condition engaged in more subsequent blaming than did those in the neutral (i.e., no attribution) and exposure to responsibility (i.e., internal attribution) conditions.

These results are consistent with those from Experiment 1. Furthermore, the fact that we found similar results using a self-generated failure in Experiment 1 and an assigned failure in the present experiment suggest that the earlier findings were not merely due to participants selecting incidents similar to the prime. It is worth noting, however, that we have not obtained direct measures of either the inference or adoption of self-image protection goals, so it might be the case that blame contagion occurs via a mechanism other than goal contagion. In order to investigate the mechanism involved in the present findings, we conducted Experiments 3 and 4.

Experiment 3

In Experiment 3 we examined potential mechanisms for the phenomenon observed in the first two studies. We exposed participants to a social actor who either took responsibility for an organizational failure (responsibility condition) or blamed external sources for the failure (blame condition). We then assessed whether this exposure to blame led to an inference and adoption of a self-image protection goal. If so, it would provide initial evidence for our hypothesis that blame contagion is the result of goal transference.

We also examined two alternative mechanisms by which exposure to blame might increase subsequent blaming. Some have suggested that mood influences the likelihood of blaming (Forgas & George, 2001), so we assessed participants' emotional states to see if exposure to blame might induce a negative mood (which could then, perhaps, lead to further blaming). Additionally, it could be the case that observing a person make a blame attribution leads to social learning, serving to legitimize blame as a socially acceptable action, much like observing trash on the ground serves to legitimize the act of littering (Cialdini, Reno, & Kallgren, 1990). Thus, we measured the degree to which exposure to blame causes people to report that blame is a good and acceptable response to failure.

Method

Participants and design

117 participants (35 men, 82 women) took part in the study in exchange for a $5 gift certificate from an online retailer. Partici-

pants were recruited from an online national database maintained by a West Coast university. Ages ranged from 18 to 62 years ($M = 33.64$; $SD = 10.47$). In a two-condition, between-subjects design, each participant was randomly assigned to either a blame condition ($n = 60$) or a responsibility condition ($n = 57$).

Procedure

Participants were emailed a link to the experiment website and completed the study from their own computers. After agreeing to participate in the study, participants read a fabricated news report about a failure by a large philanthropic foundation. According to the news correspondent, the foundation awarded several grants to organizations with policies that directly undermined the goals of the foundation. The article characterized these actions as a clear failure to engage in the thoughtful research and evaluation necessary to be effective in philanthropy. The failure was described as follows:

The William T. Clyde Foundation is one of the largest charities in the world. Being big means that it can give away a lot of money. But being big also means that the foundation has the potential to do harm as well as good. This week, the *Los Angeles Times* looked into how the Clyde Foundation allocates some of the billions of dollars that are in its portfolio and found several instances in which the foundation made grants to organizations with policies that actively undermine the social welfare goals of the foundation. In many cases these investments have done more harm than good. "These findings represent a failure to engage in the thoughtful research and evaluation practices necessary to do the job well," stated the correspondent from the *Times*.

Exposure to blame. Next, participants read the foundation director's response. The director either took responsibility for the failure (responsibility condition) or blamed the grant recipients (blame condition). In the responsibility condition the director explained the failure with an internal attribution: "I failed to engage in the research and strategic processes necessary to successfully meet our objectives." In contrast, in the blame condition the director made an external attribution: "Several of our grants did fail to meet their objectives, but this is a result of grantees stretching the truth about what they can accomplish and what they plan to accomplish." In order to ensure that participants in the two conditions did not differ in the degree to which they perceived the event as a failure, participants indicated the extent to which they agreed with a statement that the foundation had failed to meet its goals, measured on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

Inference of a self-image protection goal. To assess whether or not participants perceived that the foundation director was trying to protect his self-image, they were asked to report the degree to which: "The person interviewed was trying to protect his image" and "The person interviewed was trying to avoid being blamed." Answers were given on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The two items were highly correlated ($r = .66$, $p < .001$), so we combined them to form a single measure of self-image protection goal inference.

Activation of a self-image protection goal. To assess whether a self-image protection goal had been activated, participants were asked to respond to two items tapping the desire to be seen in a positive light (these items were counterbalanced with the previous items about the observed actor's goal in order to rule out possible order effects—there were none). Participants rated how important it was for them: "To make a good impression on people" and "To be respected by others"; the items were measured on a 7-point Likert

scale ranging from 1 (*very unimportant*) to 7 (*very important*). The two items were highly correlated ($r = .59$, $p < .001$), so we combined them to form a single measure of self-image protection goal activation.

Mood. Mood was measured with the Positive and Negative Affect Schedule (PANAS) (Watson, Clark, & Tellegen, 1988). The PANAS consists of two sets of 10 items, one set measuring positive mood ($\alpha = .91$) and the other set measuring negative mood ($\alpha = .94$).

Perceived acceptability of blaming. To assess the degree to which participants' perceived blaming others for a failure as socially acceptable, they rated the appropriateness of the following behaviors: "To blame someone else for your own failure" and "To avoid being blamed for a failure." Answers were given on a 7-point Likert scale ranging from 1 (*not at all appropriate*) to 7 (*very appropriate*). The items were only moderately correlated ($r = .23$, $p = .01$), so we analyzed them separately.

Results and discussion

As intended, participants in the responsibility condition and blame condition did not differ in their perceptions that the described event was a failure ($M = 4.70$, $SD = 1.41$; $M = 4.85$, $SD = 1.51$, respectively), $t(115) = 0.55$ ns. As predicted, participants who were exposed to blame were more likely to infer that the actor was protecting his or her self-image ($M = 5.43$, $SD = 1.40$) than those who were exposed to responsibility ($M = 3.94$, $SD = 1.29$), $t(115) = 5.98$, $p < .001$. Also as predicted, participants who were exposed to blame were more likely to adopt a self-image protection goal ($M = 5.75$, $SD = 1.10$) than those in the responsibility condition ($M = 5.17$, $SD = 1.36$), $t(115) = 3.31$, $p = .01$. As noted above, these two measures were counterbalanced and there were no order effects.

Next, we examined the two other potential mechanisms. First, exposure to blame did not affect mood. There was no difference in positive mood between those in the blame condition ($M = 3.18$, $SD = 0.88$) and those in the responsibility condition ($M = 3.16$, $SD = 0.75$), $t(115) = 0.07$ ns. Likewise, there was no difference in negative mood between those in the blame condition ($M = 1.58$, $SD = 0.70$) and those in the responsibility condition ($M = 1.78$, $SD = 0.84$), $t(115) = -1.42$ ns. Second, the manipulation did not lead to social learning. Put differently, it did not alter people's perceptions of whether or not blame is a socially acceptable behavior. Participants in the blame condition and responsibility condition rated blaming others for failure as equally low in social acceptability ($M = 1.43$, $SD = 0.89$; $M = 1.54$, $SD = 1.17$, respectively), $t(115) = 0.58$ ns. Likewise, those in the blame condition were just as likely as those in the responsibility condition to say that an attempt to avoid admitting personal blame is inappropriate ($M = 3.38$, $SD = 1.71$; $M = 3.18$, $SD = 1.45$, respectively), $t(115) = 0.71$ ns. Importantly, not only did the two conditions not differ from each other, but they were significantly lower than the midpoint of the scale—$t(116) = 26.37$, $p < .001$, and $t(116) = 4.90$, $p < .001$, respectively—indicating that blame is, indeed, perceived to be socially undesirable.

The present results help to rule out mood and social learning effects as possible routes by which blame might transfer from one person to the next. Because exposure to blame did not influence mood or alter people's perceptions of whether or not blame is socially appropriate, it is not likely that either of these factors are mechanisms for blame contagion. In contrast, however, the present findings support—in part—our hypothesized mechanism for blame contagion: exposure to an actor making a blame attribution for a failure led both to the inference of a self-image protection goal and to the adoption of a self-image protection goal. It is also worth noting that participants, across the board, believed that blame is

socially inappropriate, suggesting that the spread of blame can be considered the contagion of a socially inappropriate behavior. Building on these findings, we conducted Experiment 4, in which we further examined our proposed mechanism by testing for a moderating effect of self-affirmation.

Experiment 4

If blame contagion is due to the transference of a self-image protection goal, then it should disappear when observers are made to feel better about themselves (i.e., when the self-image protection goal has been satisfied). Based on the clarity of this prediction, combined with the problematic possibility that measuring the mediator could draw attention to it and, thus, alter the dependent variable (see Spencer, Zanna, & Fong, 2005), we elected to use a 2×2 design to test our proposed mechanism. Specifically, we manipulated whether or not participants had an alternate means of protecting their self-image (i.e., other than blame) by providing half of the participants with an opportunity to bolster their self-worth via self-affirmation. Previous research has shown that self-affirmation (i.e., affirming values that are central to one's self-concept) provides people with a sense that the self is valuable, important, and safe, by allowing them to focus on positive aspects of the self (see, e.g., Cohen et al., 2000; Fein & Spencer, 1997; Steele, 1988). Thus, when in an affirmed state, people are less defensive (Sherman & Cohen, 2006). We hypothesized that having an opportunity to affirm the self should eliminate the blame contagion effect.

Method

Participants and design

Seventy-three participants (22 men, 48 women, 3 unidentified) took part in the study in exchange for a $5 gift certificate from an online retailer. Participants were recruited through an online national database maintained by a West Coast university. Ages ranged from 18 to 61 years ($M = 34.15$; $SD = 10.59$). We used a 2 (Attribution exposure: blame, responsibility) $\times$ 2 (Affirmation: self-affirmation, no self-affirmation), between-subjects design.

Procedure

Participants were emailed a link to the experiment website and completed the study from their own computers. After agreeing to participate in the study, participants read the same stimuli used in the previous study about a failure by a fictional philanthropic foundation.

Attribution exposure. After reading about the failure, participants were randomly assigned via computer to the condition in which the foundation director took responsibility for the failure ($n = 38$) or the condition in which the director blamed the grantee organizations for stretching the truth about their intentions ($n = 35$).

Self-affirmation. Participants were also randomly assigned via computer to a self-affirmation condition ($n = 42$) or a no self-affirm condition ($n = 31$). In the affirmation condition participants selected the one core value from a list of four (i.e., business/economics, art/music/theater, social life/relationships, science/pursuit of knowledge) that they considered most important to them and wrote a paragraph about why this value was important to them (see Fein & Spencer, 1997). In the no self-affirm condition participants selected the one value from the same list that was least important to them and wrote a paragraph about why the value might be important to someone else.

Blame. After completing the affirmation task, participants were asked to think of a personal failure and write it down. They were then asked to explain why the failure occurred.

Measures of blame and responsibility. As in Experiments 1 and 2, two independent coders who were blind to the conditions used 5-point scales to code the degree to which participants took responsibility and made blame attributions. The coders' scores were reliable for both blame ($r = .91$) and responsibility ($r = .93$), so the coders' ratings were combined to form single measures ($M = 2.46$, $SD = 1.47$, and $M = 3.09$, $SD = 1.51$, respectively). Finally, participants were probed for suspicion in order to ensure that they were unaware of the purpose of the study. Specifically, they were asked: "Did any answers on one task affect your answers on any other task? If so, please explain below." They were then given space to type in their answers.

Results and discussion

Two participants did not provide any attributions and an additional participant failed to complete the self-affirmation task, leaving a total of 70 participants. None of the participants correctly identified the true purpose of the study. As predicted, a two-way attribution exposure condition x self-affirmation condition emerged, $F(1, 69) = 6.32$, $p = .01$ (see Fig. 3). Among participants who did not affirm their self-worth, those had been exposed to blame made stronger blame attributions ($M = 3.21$, $SD = 1.41$) than did those who were exposed to responsibility attributions ($M = 1.92$, $SD = 1.38$), $F(1, 29) = 6.18$, $p = .02$. In contrast, among participants who did affirm their self-worth, those had been exposed to blame did not make stronger blame attributions ($M = 2.06$, $SD = 1.46$) than did those who were exposed to responsibility attributions ($M = 2.52$, $SD = 1.43$), $F(1, 39) = 1.01$ ns. We also examined whether self-affirmation influenced the tendency to blame in each condition. In the blame exposure condition, self-affirmation significantly reduced the tendency to blame, $F(1, 33) = 5.43$, $p = .03$. In the responsibility exposure condition, however, self-affirmation had no effect on the tendency to blame, $F(1, 35) = 1.50$, $p = .23$ ns.

In line with the Experiments 1 and 2, there was not a significant attribution exposure condition × self-affirmation condition interaction on the strength of responsibility attributions,

$F(1, 69) = 3.01$, $p = .09$. However, because the interaction term was marginally significant, we probed further. Among participants who did not affirm their self-worth, those had been exposed to blame did not differ in their responsibility attributions ($M = 3.23$, $SD = 1.63$) relative to those who were exposed to responsibility attributions ($M = 2.79$, $SD = 1.59$), $F(1, 29) = 0.54$ ns. However, among participants who did affirm their self-worth, those had been exposed to blame made marginally stronger responsibility attributions ($M = 3.74$, $SD = 1.32$) than did those who were exposed to responsibility attributions ($M = 3.03$, $SD = 1.59$), $F(1, 39) = 3.40$, $p = .07$. This marginal effect was not predicted, but it is not inconsistent with our hypotheses.

In sum, consistent with our findings in Experiments 1 and 2, participants who were exposed to an actor making a blame attribution for a failure made greater attributions for their own, unrelated, failures. Importantly, the blame contagion effect was *eliminated* in a group of participants who had the chance to affirm their self-worth after observing the blame attribution and before making their own attribution. This latter finding is conceptually consistent with the results of Experiment 3 and adds further support for our proposed mechanism for blame contagion: the transference of a self-image protection goal from one individual to another. By offering participants the opportunity to bolster their self-worth, we removed their need to self-protect by making external attributions for failure and, in so doing, eliminated the need to self-protect via subsequent blaming.

General discussion

Four experiments indicated that blame is socially contagious. Exposure to blame attributions by a politician (Experiment 1), a student (Experiment 2), and an organizational representative (Experiment 4) led to subsequent blaming for unrelated failures. Experiment 2 demonstrated that this effect is driven by the exposure to blame attributions rather than exposure to responsibility attributions. Experiment 3 supported the idea that the spread of a self-image protection goal is the mechanism by which blame spreads: exposure to an individual making a blame attribution for a personal failure led to the inference of a self-image protection goal in the actor and to the activation of a self-image protection goal in the observer. In contrast, blame exposure did not affect two other possible mechanisms: mood and social learning. Indeed, across conditions, participants viewed blame as a socially inappropriate behavior. This indicates that the blame contagion phenomenon is not due to a social learning process, whereby people come to view blame as more appropriate after seeing it displayed by another person. Finally, building on the previous three studies, Experiment 4 demonstrated that blame contagion can be eliminated by giving people an alternate means of achieving the goal of protecting their self-images. Taken in concert, these findings indicate that (a) blame is socially contagious, and (b) blame contagion occurs as a result of the transference of self-image protection goal from one individual to another.

It is worth noting that exposure to blame did not have an effect on responsibility attributions. However, this is likely a function of our experimental designs—the participants' attributions in the present experiments were for failures in which the participants clearly had at least some fault. Thus, it was unlikely that participants would not acknowledge at least partial responsibility for the mistake, leading to a possible ceiling effect. It might also, however, be the case that blame is more contagious than responsibility, perhaps because blame implies a clear goal that most people share—self-image protection—whereas it is less clear what commonly-shared goal or goals responsibility attributions would imply. This issue deserves attention in future research.
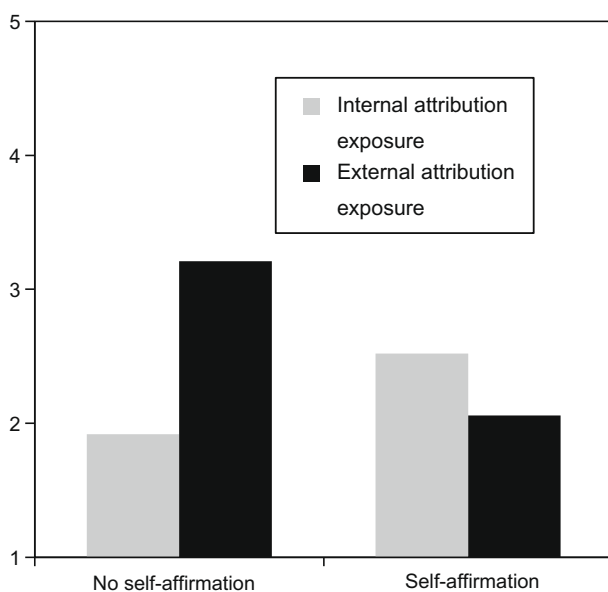
Fig. 3. Extent to which participants in each condition made a blame attribution for their personal failure, ranging from 1 (*no blame*) to 5 (*explicit blame*), Experiment 4. Results show that blame (i.e., external attribution) exposure led to more subsequent blaming in the no self-affirmation condition, but that this effect was eliminated among participants in the self-affirmation condition.

Another potential issue is related to the self-affirmation manipulation in Experiment 4. Recent work has raised questions about the mechanism/s involved in self-affirmation manipulations (see Crocker, Niiya, & Mischkowski, 2008). According to Crocker et al., affirming core values leads to feelings of love, which could, in turn, explain why threatened individuals no longer behave in a threatened manner. In the present research, it makes sense that the affirmation effect represents evidence of self-image threat as a mechanism, given that blame has been closely linked to self-threat (see Campbell & Sedikides, 1999). However, the question of how and why self-affirmation eliminates threat-related behaviors is an issue that ought to be examined more closely in future work.

It is also worth noting that the dependent measures in the present experiments were quite similar. In each case, participants made causal attributions for a mistake they had made in the past (Experiments 1 and 4) or a prescribed mistake (Experiment 2). In the present research we were primarily interested in observing blame contagion in action—whether or not observing blame would lead to subsequent blame attributions. However, it could be fruitful to explore a variety of additional measures in future research. It would be interesting, for example, to examine whether exposure to blame affects behavioral and/or emotional tendencies (e.g., reward allocation preferences, expressions of guilt after a mistake).

Implications and directions for future research

The present findings offer several important implications for research on causal attributions and social contagion. They show that self-protective causal attributions for failures can be contagious. In so doing, they demonstrate that people's explanations for failures stem not only from personality traits, cross-cultural differences, and context-based incentives, but also from recent exposure to others making blame versus responsibility attributions. This is surprising in light of existing theory suggesting that the pursuit of goals via socially inappropriate behaviors is not contagious (Aarts et al., 2004).

Our findings lead us to posit a few possibilities that should be considered in future research. First, it might be that the observed social *actor* is just as important as (or perhaps even more important than) the actual behavior in determining whether or not goals are contagious. In other words, if a socially attractive actor (e.g., an in-group member or a high-status actor) engages in a behavior that is typically considered inappropriate, it still may spread to the observer as a result of the motive to affiliate with and/or emulate the attractive individual (e.g., see Chartrand et al., 2005; Cheng & Chartrand, 2003; Lakin & Chartrand, 2003). Alternatively, it might be the case that socially undesirable behaviors tend to foster goal contagion, regardless of the actor, as long as the undesirable behavior is not considered to be morally wrong and/or the behavior triggers a clear, pre-existing goal in the observer. Each of these possibilities is feasible and should be examined in future goal contagion research.

The present findings also offer potential implications for research on cultural emergence and inertia. If blame spreads automatically from one person to another, it is possible that this mechanism is at least partially responsible for the development and/or reinforcement of cultures of self-protectiveness, such as those mentioned in the introduction (see Adams & Markus, 2004). If this idea is supported in future research, it would offer further evidence that individual group members can impact the development and spread of culture (Sy et al., 2005), although this impact might often tend to be more automatic than intentional. Future research should explicitly test the possibility that social contagion, along with other automatic processes, may influence the development and transmission of organizational culture.

Finally, evidence that blame is contagious has implications for research on leadership. Scholars have increasingly noted that one of the important roles of leaders is to manage the cultures and climates of their organizations in such a way as to maximize organizational health and performance (e.g., Chatman & Cha, 2003; O'Reilly & Chatman, 1996). The notion that social contagion processes influence group members' behaviors in potentially unintended ways could make the job of leaders and managers a particularly challenging one. Although the answer is not necessarily to stop giving critiques or assigning blame, one strategy leaders might adopt is to become more intentional about what they say publicly and what they say privately. For example, baseball Hall-of-Famer, Ted Williams, was known as a manager for doling out praise for a job well done in front of others while offering harsh critiques behind closed doors (Baldwin, 2001). One of the potential benefits of this practice, given the results of the present studies, is that it might help prevent the development and spread of blame by minimizing the extent to which public displays of blame occur. A related strategy might involve taking public ownership for failures rather than blaming external factors (but see Kim, Dirks, Cooper, & Ferrin, 2006). In addition to demonstrating that one is in control of key outcomes (Lee & Tiedens, 2001) and signaling how failures ought be handled (Schein, 2004), taking responsibility for a failure, instead of blaming others, will reduce the likelihood of priming organizational members with a self-image protection goal and, in turn, should reduce the spread of blame.

Possible moderators

Experiment 4 showed that self-affirmation moderates the blame contagion effect, apparently because it removes the need to protect the self via blaming. It would be interesting to explore additional situational and dispositional factors that moderate blame contagion. For example, it might be the case that blame contagion is less likely to occur in a context that is marked by psychological safety (Edmondson, 1999), as the tendency to experience self-image protection goals would be reduced in such a setting. And perhaps individuals who have particularly high and/or resilient self-esteem are less likely to "catch" the goal of protecting one's self-image. Likewise, having a high level of power and/or status could serve as a buffer for one's sense of self-worth, making one less susceptible to feeling vulnerable and, as a consequence, less likely to take on self-protective goals. Finally, it might be the case that factors that increase the degree to which people generally feel threatened (e.g., traits associated with a high chronic fear of negative evaluation, settings that are low in psychological safety) might increase the degree to which blame is contagious.

Future research could also examine variables associated with the target person who does the original blaming (see Loersch, Aarts, Payne, & Jefferis, 2009). Loersch et al. found that goal contagion is more likely to take place among in-group members. Thus, perhaps blame contagion is more likely to occur when the original target is an in-group member. The social status of the observed target might also affect whether or not blame is contagious. In general, people are more attentive to those with high status (Fiske, 1993), are more likely to use them as referents (Festinger, 1954; Snodgrass, 1985; Zanna, Goethals, & Hill, 1975), and are more likely to emulate, imitate, and be influenced by high-status actors (e.g., Anderson, Keltner, & John, 2003; Anderson & Thompson, 2004; Bono & Ilies, 2006; Gregory & Webster, 1996; Schminke, Ambrose, & Neubaum, 2005). In sum, it is possible that people are more likely to "catch" the self-image-protection goals embedded in blame attributions when these attributions are displayed by high-status actors and/or members of one's group.

Conclusion

In addition to raising several potentially fruitful avenues for future research, the present studies indicate that the goal of protecting one's self-image (embedded in the act of blaming others for one's failures), is socially contagious. It is our hope that the findings presented here will help generate further interest in understanding how goal contagion affects the decisions and behaviors of individuals in-group contexts as well as the potential of these effects to influence processes of cultural emergence and transmission in general.

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