

**THE EFFECTS OF ANGER IN THE WORKPLACE:
WHEN, WHERE AND WHY OBSERVING ANGER ENHANCES OR
HINDERS PERFORMANCE**

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ABSTRACT

Most anger research has adopted a within-person view, focusing on the effects of experienced anger on a person's feelings, cognition and behavior. Less research has examined the effects of anger expressed by one person on other people in the workplace. We review available literature on the interpersonal effects of anger and propose a theoretical framework that addresses two main questions: 1) What mechanisms can explain the effects of observed anger on other people? 2) What factors may strengthen or attenuate these effects? We propose that observed anger affects observers' performance via emotional and cognitive routes that are interrelated, and that this effect depends on the properties of the expressed anger, the situation in which the anger occurs, and the task being performed by the observer.

INTRODUCTION

Imagine that as you walk into your office one day you overhear a voice raised in anger. Alex is upbraiding Josh, a colleague of yours, for not replying to his emails and for missing an important deadline. You can tell that Alex is furious at Josh. You sit at your desk and try to focus on your work, which has nothing to do with Alex or Josh. Will your performance be affected by this overheard expression of anger? And what if you empathize with Alex or Josh?

Most of us are occasionally exposed to expressions of anger by others at work. Anger, the most frequent negative emotion experienced in the workplace, is an intense and short-term feeling of displeasure, hostility or antagonism towards someone or something, typically combined with an urge to attack or change another person's behavior (Allred, Mallozzi, Matsui, & Raia, 1997; Fischer & Roseman, 2007). Anger may be caused by perceptions of general unfairness or poor management (Dietz, Robinson, Folger, Baron, & Schulz, 2003; Lazarus, 1991) or by the feeling that one has been personally subjected to some form of injustice or abuse (Andersson & Pearson, 1999; Friedman et al., 2004; Rupp & Spencer, 2006). Anger may elicit other negative emotions (Van Kleef, De Dreu, & Manstead, 2004) and may influence people's willingness to take risks (Fessler, Pillsworth, & Flanson, 2004) and receive advice (Gino & Schweitzer, 2008) their decisions about negotiation options or tactics (Kaufmann & Vosburg, 1997); their scope of attention (Fredrickson & Branigan, 2005); and their satisfaction, well being and performance (Glomb, 2002; Jehn, 1995).

Anger has received considerable research attention in recent years. However, most anger research has adopted a within-person view (Hareli & Rafaeli, 2008), focusing on the effect of experienced anger on the angry person's thinking and decision-making processes, satisfaction and performance. Far less research has examined the effects of an angry agent on other people.¹ By "other people", we refer to *anyone who is not the angry agent him or herself yet somehow encounters the angry agent*. As presented in Figure 1, others include the *target* of the agent's anger. Others also include the *partners* of the angry agent or target ("*partner*" in Figure 1) or uninvolved organizational members who observe the agent's anger or learn about it third-hand ("*third party*" in Figure 1). Our analysis focuses on the effect of angry agents on any of these possible observers -- targets, partners, and third parties.²

Take in Figure 1

Identifying the broader, interpersonal effects of anger as well as the effect of anger on performance is extremely important given the prevalence of anger and hostility in organizations. The few studies that have examined the effect of felt and observed anger on performance have yielded conflicting findings. Some studies have shown anger to be

¹ We limit our analysis to interpersonal forms of anger directed towards specific others in the workplace. Our analysis does not address anger directed at the workplace or organization.

² To facilitate our narrative in the remainder of our analysis we use the term "observer" to refer to anyone observing anger of an agent, regardless of whether the observer is the target, partner or a third party. Only where relevant do we highlight differences between effects on different observers.

associated with negative reactions such as violence (Folger & Baron, 1996), revenge-seeking (Bies & Tripp, 1998), elevated blood pressure and job-related stress (Begley, 1994; Friedman et al., 2004), and decreased cooperation (Allred et al., 1997) and productivity (Jehn, 1995). At the same time, other studies have shown some positive consequences of anger. Anger is associated with a strong sense of control, certainty and responsibility (Litvak, Lerner, Tiedens, & Shonk, in press) and can contribute to problem resolution (Glomb & Hulin, 1997) and optimism (Litvak et al., in press). People tend to express anger when they believe in their ability to change a situation and to affect the behavior of other people (Fischer & Roseman, 2007; Kuppens, Van Mechelen, & Meulders, 2004).

Our goal in this paper is to begin to unpack these mixed findings. We review available literature on the interpersonal effects of anger and use this review to develop a new theoretical framework that addresses two main questions: 1) What mechanisms can explain the effects of angry agents on other people? 2) What factors may strengthen or attenuate these effects? Our theoretical framework helps reconcile apparent inconsistencies by suggesting when anger expressed by an angry agent is likely to have positive versus negative effects over other people. The framework also reveals questions and issues that are as yet unresolved and require future research

THE EFFECTS OF OBSERVED ANGER: A THEORETICAL FRAMEWORK

Anger does not happen in isolation. People are usually angry with someone or something and are likely to discuss a sense of anger with someone other than the anger target (e.g., with partners). Employees who must interact with other people in the course of their work are more likely to personally experience anger and to be exposed to others'

anger (Sloan, 2004). Clearly, exposure to others' anger may have a profound effect on feelings, cognition and behavior, but little is known about these dynamics, and especially lacking is an overarching theoretical framework regarding these effects.

We base our theory of the effects of agent anger on the theory of Emotion Cycles, advanced by Hareli & Rafaeli (2008), which positions emotions as social influence agents. Anger can clearly influence the emotions, thoughts and behaviors of other people who are not the anger agents (cf. Dallimore, Sparks & Butcher, 2007; Van Kleef et al., 2004). We suggest that these effects can occur through emotional and cognitive routes. In the emotional route, the effect is mediated by observers' emotions. Observers may react to the agent anger or mimic the anger because of emotional contagion (Barsade, 2002; Hareli & Rafaeli, 2008; Hatfield, Cacioppo, & Rapson, 1994). The emotions the observers feel may in turn influence their cognition and performance in ensuing tasks.

In the complementary route, the effects of observed anger are mediated by cognitive processing. Observed anger affects observers' perceptions and judgments (Litvak et al., in press). Observers may use others' anger when interpreting an event or when drawing inferences about the status of the angry agent. Observers may also generalize from the anger incident to draw inferences about the environment by perceiving it as unsafe, risky or otherwise negative and unpleasant (Forgas, 2000; Forgas & George, 2001; Tiedens, 2001). Such interpretations can affect observers' emotions, the effort they invest in a task (George & Zhou, 2002; Zhou & George, 2001), the way they process information (Forgas & George, 2001), and as a result their performance on various tasks.

Multiple factors may moderate the effects of observed anger on observers. We identify three types of potential moderators: 1) properties of the expressed anger; 2) properties of the situation; and 3) properties of the performed task. We suggest that these moderators can shape the effect of observed anger on observers' feelings, cognition and performance.

The effect of observed anger on observers' emotions, cognition and performance may vary depending on the role of the observer. Targets have a very subjective and potentially defensive view of themselves as one party in the interaction. Partners and third-party observers, in contrast, can see and relate not only to the anger expressed by the agent but also to the emotion displayed by the target. Thus, while targets may experience contagion of anger or respond to the anger with fear and anxiety, other observers are in a position to "take sides" and pick up on the anger of the agent or the emotion displayed by the target (Glomb & Hulin, 1997). The side that partners and especially third-party observers choose depends on the circumstances and on their perceived similarity to the agent or target.

Moreover, there may be proximity effects, because different observers differ in their proximity to the anger agent. High proximity, such as in the case of anger targets, is likely to elicit stronger emotional and cognitive reactions compared to low proximity (third-party observers). Third-party observers, in turn, may have varying degrees of proximity to either the angry agent or the target. The anger of a teacher at my child, for example, is likely to evoke far stronger reactions in me as a third-party observer than the same teacher's anger directed at another child. The business world offers many parallel examples, such as the anger of a customer service representative directed at my partner

(or, alternatively, my competitor) versus a stranger. All these processes take place through either an emotional or a cognitive route, as we review below.³

The Effect of Observed Anger on Observers: The Emotional Route

The most obvious effect of agent anger is on observers' emotions. This effect may be through contagion, wherein the anger spreads to the observer, or through some form of reaction or response, where the observer develops a different, and most likely complimentary emotion such as fear (Hareli & Rafaeli, 2008; Tiedens & Fragale, 2003).

Contagion is "the tendency to automatically mimic and synchronize expressions, vocalizations, postures, and movements with those of another person's and, consequently, to converge emotionally" (Hatfield, Cacioppo, & Rapson, 1992: 153-154). Negative emotions are known to be more contagious than positive emotions and to affect both individual and group behavior (Barsade, 2002; Rafaeli, Cheshin, & Israeli, 2007). Emotional contagion can result from verbal and nonverbal emotional expressions (Hatfield et al., 1994; Rafaeli, Cheshin, & Israeli 2007) and can be conscious or unconscious. Dallimore et al. (2007) showed that service providers who served angry customers mimicked the facial expressions of anger and reported higher levels of felt anger. Based on this observation they suggested that emotional contagion begins with unconscious mimicking of the anger and develops unconsciously into a personal sense of anger.

³ We acknowledge that suppressed anger or felt anger that is not explicitly expressed by the agent may affect others as well (Geddes & Callister, 2007); however we limit our discussion to anger that is overtly expressed by an agent and is observable to others.

Instead of contagion, observing anger may evoke complementary or reciprocal emotions such as fear or anxiety. Van Kleef et al. (2004), for example, show that in a negotiation situation an opponent's anger induced greater fear and anxiety in targets than the opponent's happiness. Consistent with these findings, reactions to anger are expected to entail high arousal, if only because of anger's physiological effects (Berkowitz, 1990).

The intensity and types of emotion felt by partners and third parties depends on the person with whom the observer empathizes (cf. Dutton, Worline, Frost, & Lilius, 2006). Empathy is sensitivity to another person's emotional state that results in a shared emotional response and feelings of sympathy (Silvester, Patterson, Koczwara, & Ferguson, 2007), and has been considered as both a trait (cf. Davis, 1980) and a state (Dutton et al., 2006; Frost, Dutton, Worline, & Wilson, 2000). Glomb and Hulin (1997) found that undergraduate students who watched a video of a supervisor upbraiding a subordinate tended to empathize with the subordinate and to view him or her in a more positive way. This direction of empathy may be explained by the observers (students) being relatively young and inexperienced, suggesting that if the observers were MBA students or experienced managers their empathy might have been directed differently. A broader prediction drawing on proximity and similarity effects (cf. Walter & Bruch, 2007) may be that observers choose to empathize with the side to which they feel closest or most similar.

Regardless of where the empathy is directed, greater empathy is likely to lead to stronger emotional reactions in observers. For example a colleague who is a close friend of the angry agent (i.e., a partner) is likely to empathize with the agent and to feel more anger than would a remote third party. In these cases, observers experience the emotions

of the anger agent or target as if they were that person (Dallimore et al., 2007). In other words, empathy moderates the relationship between observed anger and observers' felt emotion, with stronger empathy enhancing the relationship. The fine-tuning of these dynamics has not been unraveled by researchers. An outline to guide future research is offered in Figure 2.

Take in Figure 2

The Effect of Observed Anger on Observers: The Cognitive Route

The effect of other's anger on observers can also take place via a cognitive route. Observing anger may influence the *content* of cognition (*what* observers think about the angry agent and the anger situation) as well as the *process* of cognition (*how* they think) (Forgas, 2000: 254). At a most basic level, observers of anger are likely to assume the anger agent is hostile and dangerous (Berkowitz, 1990). They may also use displays of anger as a source of information about the characteristics of the angry agent or the situation and draw various inferences based on this information.

Informational theories of emotion (Forgas, 1995, 2000; Schwarz, 1990) suggest that observers use *their own* emotions as cues about their situation, and adopt behavior based on this information. For example, noting that one feels anger is used as a signal that the environment is problematic (Schwarz, 1990). Extending this theory, we postulate that observers can also use *emotions expressed by others* as signals about the environment. Observing other's anger may influence *what* observers think about the other or the environment.

An important contingency here is that observers are able to recognize that an agent is angry. It has been found that observers are able to notice and identify emotions expressed by others with relatively little effort (e.g., Sloan, 2004; Van Kleef et al., 2004) based on behavior, facial expressions and voice intonations (Banse & Scherer, 1996). People identify angry faces more quickly and accurately than faces expressing other emotions (Hansen & Hansen, 1988; Ackerman, et al., 2006). It is but a small extension to suggest that such gleaned information is mentally processed and likely to lead to various inferences.

Observing anger is a source of information about the motives, intentions and characteristics of the angry agent. Theory and empirical findings about attribution processes note that people observing other people are likely to attribute observed behaviors to internal (personality or motivation) factors and are less likely to recognize the effects of contextual or situational factors (cf. Jones & Nisbet, 1971). Such attribution processes coupled with the cognitive and functional foundations of emotions (Ohman, Flykt, & Esteves, 2001; Smith & Ellsworth, 1985) can lead angry individuals to be perceived as stronger, more competent and independent, and more likely to hold senior social positions (Brescoll & Uhlman, 2008; Hareli & Hess, 2008; Tiedens & Fragale, 2003). In this vein, research on negotiation finds angry opponents to be perceived as difficult to undermine and less likely to settle for a suboptimal outcome (Van Kleef et al., 2004; Wall, 1991). Displays of anger seem to position agents as powerful and to inspire compliance in observers (Brescoll & Uhlmann, 2008; Tiedens, 2001; Tiedens, Ellsworth & Mesquita, 2000).

Observing other's anger may also influence *how* observers think, with negative and positive emotions associated with different processing styles (Forgas, 2000; Staw & Barsade, 1993). Negative emotions such as anger can narrow the range of people's thought and action repertoires, calling forth specific action tendencies and cognitive processing strategies that promote quick and decisive action, and limiting the number of decision possibilities that are considered (Fredrickson & Branigan, 2005; Schwarz, 1990; Staw, Sandelands & Dutton, 1981). For instance, stronger and more persuasive messages were required to change the opinions of people in a negative mood than people in a positive mood (Bless, Bohner, Schwarz, & Strack, 1990). Thus, the thinking of people observing an angry agent may become relatively narrow and rigid, assuming that observing an angry agent makes observers feel negative emotions.

In sum, as summarized in Figure 3, our framework suggests that observing others' anger is likely to affect observers' perceptions and their cognitive processing of the situation. The effect of observed anger on the content of cognition has been tested mainly with third-party observers (e.g., Glomb & Hulin, 1997; Tiedens, 2001), while the effect on the process of cognition has been tested mainly with anger targets (e.g., Van Kleef et al., 2004), offering us little room for speculation about differential effects on different types of observers. However, we can suggest that the cognitive route seems to apply more to observers who are *similar* to the anger agent or target than to dissimilar observers. Our speculation is that the more similar to the target a third-party observer is, the more likely he or she is to perceive the anger incident as a personal threat, and thus to respond with increased focus and a narrowed action repertoire.

Take in Figure 3

The Effects of Observed Anger on Observers: Interplay between Emotion and Cognition

The emotional and cognitive routes can be conceptually distinct but their operation is interrelated, as depicted in Figure 4. Observers' cognition can be directly affected by the observed anger, which occurs for example with attributions about status (cf. Tiedens, 2001). However, it is also likely that inferences and attributions are affected by the emotions of the observers, such as when anger affects the way the observers process information and the information they pay attention to. Felt anger causes selective attention to anger-congruent stimuli (DeSteno, Petty, Rucker, & Wegner, 2000) and inspires a recall of anger-related information (Litvak et al., in press). In other words, felt emotion may be a full or a partial mediator of the effects of observed anger on observers' cognition.

In a complimentary vein, the effect of others' anger on observers' emotions is likely to be mediated by the observers' frame of mind. Rupp and Spencer (2006), for example, found that participants who had been exposed to impolite and disrespectful customers perceived higher levels of interactional injustice, which elicited higher levels of anger. Thus, observing anger arguably creates attributions, which in turn lead to emotions. More broadly, observed anger is likely to have greater effects on observers' emotions when observers perceive the situation as unstable and pervaded by risk than when they perceive it as stable and secure.

Take in Figure 4

OBSERVED ANGER AND WORK PERFORMANCE

The main reason managers and organizations should be interested in the effect of observing anger is because of its potential effects on observers' performance. A few studies have showed that being the target of another person's anger influenced targets' emotions and performance in negotiation tasks (Van Kleef et al., 2004; Van Kleef & Cote, 2007). However, other than this line of research, the effects of observed anger on performance has received very little research attention.

We suggest several reasons for an influence of encountering other's anger on observers' behavior. First, the emotions observers feel when they observe anger – the emotional route depicted in Figure 2 – may influence performance. As noted, observing an angry person increases observers' negative emotion (e.g. anger, fear). The ideas of “limited mental resources” and “ego depletion” (cf. Baumeister, Bratslavsky, Muraven, & Tice, 1998; Weiss & Cropanzano, 1996) suggest that the discomfort and anxiety associated with any exposure to anger requires mental resources from observers, limiting the resources available for handling other aspects of the situation, including the performance of work tasks.

A sense of threat and the concomitant stress in response to observing anger can also prompt rigidity and black-and-white thinking (Staw et al., 1981) that may lead people to base their behavior on “working solutions” and to overlook other available information (Van Kleef, et al., 2004). People who feel fear, for example, in reaction to observing

anger can be expected to focus their attention on features of the environment that concern safety or danger (Mathews & MacLeod, 1994), rather than on the performance of any relevant tasks. However, some available research suggests that felt negative emotion improves rather than hampers task performance (Geddes & Callister, 2007; George & Zhou, 2002, 2007; Glomb & Hulin, 1997; Zhou & George, 2001). To reconcile this seeming contradiction we offer possible moderating variables such as the nature of the observed anger; the characteristics of the observer, angry agent and situation; and the complexity and creativity of the performed task. Below we elaborate on the effect of each moderator.

Nature of Observed Anger

The effect of another's anger on observer emotion, cognition and performance may vary depending on some properties of the observed anger. Two key properties are intensity (is the observed anger mild or intense?) and directness (is the observed anger expressed directly or indirectly?).

How Intense is the Observed Anger?

Intense anger expressed by an observed agent is likely to have more powerful effects on observers than mild or non intense anger. The intensity of expressed emotion is reflected in the pitch level, pitch range, volume tempo and other facets of the agent's speech, regardless of the particular words spoken, as well as physical gestures and body language (Scherer, 1981, Wallbot & Scherer, 1986). Emotions expressed with greater intensity are more likely to attract observers' attention and thus increase the opportunity for contagion (Barsade, 2002) as well as the influence on observers' emotions of observers (stimulation of the emotional route). Intense emotions are also likely to be

communicated more clearly and accurately than non-intense emotions (Barsade, 2002), meaning that the negative effects of observed anger on cognition are likely to rise. Therefore, more intense anger may also enhance the effect of observed emotion on observers' cognition (stimulation of the cognitive route).

The intensity of anger is thus likely to strengthen the effect of observed anger on performance. Glomb (2002), for example, found the severity of aggressive incidents to moderate the effect of anger on targets' performance. Minor incidents of workplace aggression had little or no effect on observers. Similarly, Geddes and Callister (2007) argued for "thresholds" of expressed anger in different organizations. Intense anger that deviates from acceptable modes of behavior is likely to result in unfavorable outcomes. Less intense or mild anger, however, is likely to lead to less negative and potentially even positive outcomes.

Assuming that observers proximate to the anger agent witness a greater intensity of expressed anger, the effect of the anger on direct targets is expected to be more powerful than the effect of anger on partners or third-party observers. Similarly, partners who are closer to the agent or target relative to remote third-parties are likely to perceive the anger as stronger and to be influenced by the anger to a greater degree.

How Directly is the Anger Expressed?

Research on anger tends to focus on anger expressed directly, with typical manipulations including explicit use of the word "angry" or its derivatives (e.g., Van Kleef et al., 2004; Van Kleef & Cote, 2007). However, expressions of anger can also be indirect, for instance through irony or sarcasm. Irony allows people to express emotions that are otherwise inappropriate or difficult to communicate (Gibbs, Leggitt & Turner,

2002), by muting a harsh, negative message so as to appear less rude (Dews, Kaplan & Winner, 1995). *Sarcasm*, the most typical form of ironic discourse (Gibbs, 2000), is often used to communicate anger in an unthreatening fashion; sarcasm employs humor by, for instance, using positive vocabulary where the opposite is expected, or exaggerated intonation (Gibbs, 1994; Winner, 1988; Shamay-Tsoory et al., 2005). Research finds that people can identify sarcastic expressions as conveying negative-aggressive emotions (e.g., anger) (Leggitt & Gibbs, 2000). Yet the effect of sarcasm on observers' feelings and performance has yet to be studied systematically.

Sarcasm works partly by creating an incongruence between a statement's verbal and nonverbal elements, which can lead to ambivalence in observers. Ambivalence was found by Fong (2006) to increase people's sensitivity to unfamiliar associations and to enable unusual interpretations of the environment. In one study, individual and team creativity both went up when participants were primed for a task by reading product descriptions involving paradoxes or contradicting elements (Miron-Spektor & Argote, 2008).

Consistently, we postulate that as with direct expressions of anger, indirect expressions, via sarcasm and the like, elicit ambivalent emotions in observers and may affect performance. In contrast to direct expressions, however, indirect expressions of anger may have weaker negative effects, or even positive consequences. Thus, we propose the directness of observed anger as a moderator that influences the link between observed anger and observer's emotions. In accordance with this prediction, we found that targets who listened to sarcastic conversation were more creative than targets who

listened to an emotionally neutral or an angry conversation (Miron-Spektor, Efrat, Schwarz-Cohen, & Rafaeli, working paper).

What is the Situation in Which Anger is Encountered?

Anger incidents happen within an organizational or social context. Properties of the situation may moderate its effects. As depicted in Figure 4 and elaborated below, we identify three categories of situation moderators: properties of the angry agent, properties of the observers, and properties of the context.

Properties of the Angry Agent

The social status and gender of someone displaying anger are likely to influence the effect of an anger display on observers. These effects occur mainly through the cognitive route.

Anger expressed by a high-status agent is likely to have a stronger influence on the target's cognition and performance compared to anger expressed by a low-status agent. It has been claimed that anger may serve as a tool in the hands of high-status individuals to influence lower-status others (Clark, 1990). Indeed, the greater the status differences between the angry agent and the target of anger, the greater the chances that the higher-status agent will authentically express his or her anger towards the target (Gibson & Schroeder, 2002). Thus, not only do higher-status individuals have greater freedom to express their anger, they are more likely to benefit from it by affecting others (Sloan, 2004). Research has shown that low-power parties were willing to pay more to their angry opponent compared to a nonemotional one, regardless of the appropriateness of the expressions of anger (Van Kleef & Cote, 2007). Based on these findings we propose the status of the anger agent relative to the target as a moderator in our model

(see Figure 4). The relative status is likely to strengthen the affect of observed anger on observers' cognition, and thus indirectly influence observers' performance .

The gender of the angry agent is a second characteristic that may shape the effect of other's anger on observer performance via the cognitive route. Anger is considered to be gender consistent for men but not for women – that is, anger enhances masculinity for men but detracts from the femininity of women. Anger in men expresses dominance and control over the situation or environment, whereas anger in women conveys a loss of self-control (Campbell & Muncer, 1994). As such, anger expressed by women is likely to provoke more negative emotions from other people than anger expressed by men (Brescoll & Uhlmann, 2008).

According to Kelley's (1967, 1973) attribution theory, when a behavior is unique and deviates from the norm (low consensus) observers are likely to attribute it to internal causes, while behavior consistent with the norm is attributed to the situation. Thus, female anger is likely to be attributed to the individual ("she is an angry person") while male anger is likely to be attributed to objective circumstances ("something really bad must have happened."). When anger is attributed to internal causes, the angry person is seen as the problem – increasing chances of organizational sanctions against that person while deflecting attention away from the initial anger-provoking event (Geddes & Callister, 2007).

Brescoll and Uhlman (2008) demonstrated this dynamic. They made participants view an interview with angry or sad male or female candidates, and showed that the anger of the male candidate was attributed to external causes, while the anger of the female candidate was attributed to her internal dispositions. Angry women were

perceived as “out of control” and as less competent than women expressing no emotion. Similarly, female leaders who displayed anger were considered less effective than those who displayed no emotion. In contrast, male leaders who displayed anger were rated significantly more effective than male leaders who displayed sadness, and as effective as those who displayed no emotion (Lewis, 2000). Thus, anger expressed by a man is likely to have a stronger impact on observers’ feelings and performance than the same anger expressed by a woman.

The moderating effect of status and gender may vary depending on whom the partners and third parties identify with. Greater similarity between observers and either agent or target in terms of status and gender is likely to increase identification with that person. For example, people of low status may feel threatened when a high-status agent (e.g., a senior manager) expresses anger toward a similar low status other. In a similar vein, a female observer may feel threatened and fearful when she encounter anger displayed to another female target. Greater similarity can further be expected to enhance the effect of anger on observers’ cognition.

Properties of the Observer

Incremental evidence on individual differences suggests that observers differ in their ability to recognize anger expressed by an agent and in their response to anger. An essential point of departure for our analysis is that observers need to recognize expressed anger – that is, to analyze cues in the agent's expression and behavior and to infer that he or she is angry (Elfenbein, 2007).

The ability to recognize and respond to the emotions of others is denoted in the concept of "emotional intelligence", defined as "the ability to perceive emotions in the

self and in others, use emotions to facilitate performance, understand emotions and emotional knowledge, and regulate emotions in the self and in others” (Cote & Miners, 2006:1). Emotional intelligence was found to enhance performance in various populations and occupations, including students, managers, professionals, officers and sales persons (Bachman, Stein, Campbell & Sitarenios, 2000; Lam & Kirby, 2002; Sue-Chan & Lathm, 2004). Individuals with high emotional intelligence are better able to detect anger expressed by others, and as a result are more likely to function better in various situations (Goleman, 1998). Their performance is likely to be higher because they can regulate their feelings and decisions in response to observing anger (Cote & Miners, 2006). Responding to another’s anger with rumination, or thoughts that revolve repetitively around a common theme, for example, will intensify negative emotions in observers and hinder their performance. In contrast, reappraisal of the situation can attenuate negative feelings and reduce or prevent their negative effects on performance (Ray, Wilhelm & Gross, 2008). Thus, emotional intelligence is expected to affect the links between observed anger and observers’ emotion and cognition and the interplay between the emotional and cognitive routes.

The effect of emotional intelligence has been shown to be stronger among people with lower compared to higher cognitive intelligence (Cote & Miners, 2006). It appears that individuals with low cognitive intelligence benefit more from the ability to recognize and regulate their emotions than individuals with high cognitive intelligence (Cote & Miners, 2006). In a similar vein, we recently found that observers with high levels of sensitivity to others (which can perhaps be labeled "emotional intelligence") performed well in spite of the presence of agent anger, especially if they (observers) had lower

compared to higher levels of task-relevant ability (Gabai & Rafaeli, 2008). Thus, as summarized in Figure 4, the ability to recognize anger expressed by others and to regulate one's own emotions is suggested to attenuate the link between agent anger and observer feelings (i.e., the emotional route) and between agent anger and observer cognition (the cognitive route), as well as the link between observer emotion and observer cognition and performance. These moderating effects are expected to be stronger for less intelligent compared to more intelligent observers

Properties of the Situation

The context in which an anger incident occurs may attenuate or exacerbate observers' emotions, cognition and performance. We identify two properties of the anger situation: (a) organizational norms regarding anger expression (or to what extent is anger expression appropriate), and (b) the interpersonal history between the anger agent, target and other observers

Is anger expression appropriate? The effect of another's anger on observers is contingent on whether or not the expressed anger is perceived as appropriate and socially acceptable (Geddes & Callister, 2007). Observers as well as the angry agent are influenced by the social context in which they operate. Cultural norms, organizational values, and local emotion display rules determine whether expressed anger is socially acceptable, and whether its effects will be more or less favorable (Geddes & Callister, 2007; Martin, Knopoff, & Beckman, 1998; Rafaeli & Sutton, 1989) Some expressions of anger may be encouraged and acceptable in some occupations or some cultures, but inappropriate in others (Rafaeli & Sutton, 1991). Where anger is appropriate or expected, the cognitive and emotional effects of anger may be less severe than where it is not

appropriate and unexpected. For instance, the anger of a bill collector can be predicted to be far less startling than anger expressed by a flight attendant (Hochschild, 1985; Sloan, 2004; Sutton, 1991).

The Dual Threshold Model of Anger (Geddes & Callister, 2007) identifies organizational norms regarding thresholds for anger expressions, which helps delineate situations in which anger will have favorable or unfavorable consequences. Observed anger exceeding the impropriety threshold is expected to have more consequential and negative emotional and cognitive effects. When it is socially acceptable to express anger and when anger is expressed according to acceptable norms, however, observed anger may have positive consequences. The latter would emerge as an emotion-based form of employee voice that unveils existing problems and promotes constructive discussion and resolution of disagreements.

In support of these predictions, Van Kleef and Cote (2007) showed the same anger expression to have a different effect on observers' behavior depending on its perceived appropriateness. When perceived as justified, anger expression led high-power negotiation opponents to retaliate to a smaller degree compared to when the anger was perceived as unjustified. When perceived as inappropriate, uncivilized and rude, others' behavior negatively affected performance in both creative and structured tasks. Porath and Erez (2007) similarly found that another's rudeness elicited negative emotions in observers and hindered their performance in routine and creative tasks. This happened both when participants were directly exposed to the other's rudeness and when they were asked to imagine it.

Similarly, perceived unfair behavior of a customer was argued by Rupp and Spencer (2006) to increase the emotional labor of customer service representatives (see also Holub, Rupp & Spencer, 2008). Thus, we can suggest the perceived appropriateness of the expressed anger to moderate the link between agent anger and others' emotions (i.e., emotional route) and cognition (i.e., cognitive route). Specifically, the effect of agent anger on observers' feeling, cognition and performance will lead to negative results when the anger is perceived as unjustified or inappropriate. In contrast, anger that is perceived as justified will motivate observers to change the current situation, learn from it and remove the cause of the anger (Zhou & George, 2001).

The interpersonal history of the people involved in an anger incident is a second key element of an anger situation. First, the stronger the relationship between the anger agent and observers, the more accurate the observer will be in recognizing the anger. People vary in how they tend to express anger, and those who know them well are most likely to pick up their verbal or nonverbal cues. Elfenbein, Polzer and Ambady (2007) found that teams of full-time public service interns were able to recognize each other's nonverbal expressions of emotion better than those of strangers. Thus, familiarity with the other people involved in an anger episode allows people to be more sensitive to others' personal styles (Elfenbein, 2007), and to respond respectively. In addition, the emotional and cognitive effects of observing anger may depend on what one has come to expect of the angry agent – for instance, is the person known to have a hot temper.

Task Properties

Another moderator that may help explain when and why observed anger has favorable or unfavorable outcomes involves the characteristics of the task being

performed by the observer. Tasks vary in their complexity and in the extent to which they require creative thinking (Wood, 1986). Complex tasks involve a high level of information load, which can result from the presence of multiple desired outcomes, more than one path to each outcome, conflicts among these paths, or high levels of uncertainty (Campbell, 1988). As a specific case of complex tasks, creative tasks require generation of novel and useful ideas or solutions to problems (Amabile, 1983, 2000). Simple and structured tasks, in contrast, usually have one possible correct solution and a clear path leading to the solution. Simple and structured tasks also involve lower levels of ambiguity and require lower levels of cognitive load. When solving relatively simple tasks people can employ solutions that have previously proved effective in similar circumstances.

These differences are important because the effects of observing anger on task performance may depend on the extent to which the task to be performed is structured. As noted in our analysis of the cognitive route (Figure 3), observing anger narrows and restricts cognitive processing. This suggests that task performance may be more or less effective following observed anger depending on whether well-rehearsed and rigid thinking patterns improve or hamper task performance. Thus, the integration of the emotional route (yielding negative emotions in observers) and the cognitive route (yielding rigid thinking) hampers performance of complex tasks following observations of anger. It was found, for example, that exchanging threats during a negotiation inhibited creativity and flexible thinking and resulted in less integrative agreements (De Dreu, Giebels, & Van de Vliert, 1998).

For similar reasons, observed anger can improve performance in simple and well-known tasks. Through the emotional route, observed anger may increase observers' arousal (Zajonc, 1965) and felt negative emotion (i.e., fear), which – through the cognitive route – is likely to reduce cognitive flexibility. Performance in structured and analytic yet familiar tasks is enhanced by the relatively narrow thought-action repertoire and application of previously learned schemas that can be transferred from one problem to another (Logan, 1988; Schneider & Shiffrin, 1977; Staw et al., 1981).

Thus, task characteristics moderate the link between observers' emotion and cognition on their performance. In simple and structured tasks observed anger is likely to improve performance, while in complicated and creative tasks the same anger is expected to hamper performance. This prediction was supported in our own work on the effect of others' anger on observers' performance: In a series of lab studies (Miron-Spektor, Efrat, Schwarz Cohen, & Rafaeli, working paper), we asked participants to listen to a conversation between a customer and a customer service representative (CSR) and then perform either a simple and structured task or a complex and creative task. We found that the type of task moderated the effect of observed anger on observers' performance. Observed anger hindered performance in creative tasks and enhanced performance in structured tasks.

SUMMARY

Although organizational members are often exposed to expressions of anger by others, research thus far has adopted a within-person view and has examined the link between felt or expressed anger and the behavior of an anger agent. Focusing on the anger agent falls short of fully capturing the anger phenomenon, in that expressed anger

may also affect observers, who are somehow exposed to but are not the initiators of the anger. Our aim in this paper was to develop a theoretical framework for the effect of observing other's anger on observers' performance. Our framework contributes to the anger literature and the literature of emotion cycles (Hareli & Rafaeli, 2008). Our framework also helps reconcile inconsistent findings in available literature.

Our broad premise is that observing others' anger may affect observers' performance via emotional and cognitive routes. In the former, observed anger elicits negative emotions in observers, which affect performance in ensuing tasks. These felt emotions are likely to be stronger in situations where the observers feel empathy towards either the agent of anger or its target. The particular object of empathy (agent or target) also helps determine an observer's felt emotion (e.g., anger or fear). Cognitive processes and responses such as adopting a systematic thinking strategy and drawing on dominant responses also mediate the effect of observed anger on performance. Our framework includes several moderators, namely properties of the expressed anger, the situation, and the performed task.

The theoretical framework presented in this paper offers several questions for future research. While we describe some empirical evidence consistent with parts of our model, additional research is required to examine the validity of our framework. Experimental survey and field research could all add depth to the understanding of the effects of anger. To the best of our knowledge, no study has, for example, compared the effects of observed anger on different types of observers. The "cyclic effect" of observed anger also requires empirical support. Hareli and Rafaeli (2008) suggested that observed anger is likely to influence future interactions and relationships of observers with an

anger agent and with other involved or uninvolved people. By reacting to the observed anger, the observer may influence the anger agent, who may change his or her behavior in ways that can again influence the observer (Cote, 2005). Initial support for such cycles has come from research on teams, where, for example, anger expressed by one member in a virtual team was shown to influence both anger and performance of the other members in the team (Rafaeli et al., 2007). Similarly, aggressive behavior and incivility are argued to have an escalatory pattern, with serious episodes being preceded by one or more trivial or minor interactions (Andersson & Pearson, 1999; Glomb, 2002). But these are but a few sporadic studies. Future research should continue this line of work to understand the fine differences between targets, partners and third parties and test the possible feedback loops inherent in emotional cycles. Clearly such cycles exist, but further investigations are essential to understand their dynamics and the boundary conditions of our analytic framework.

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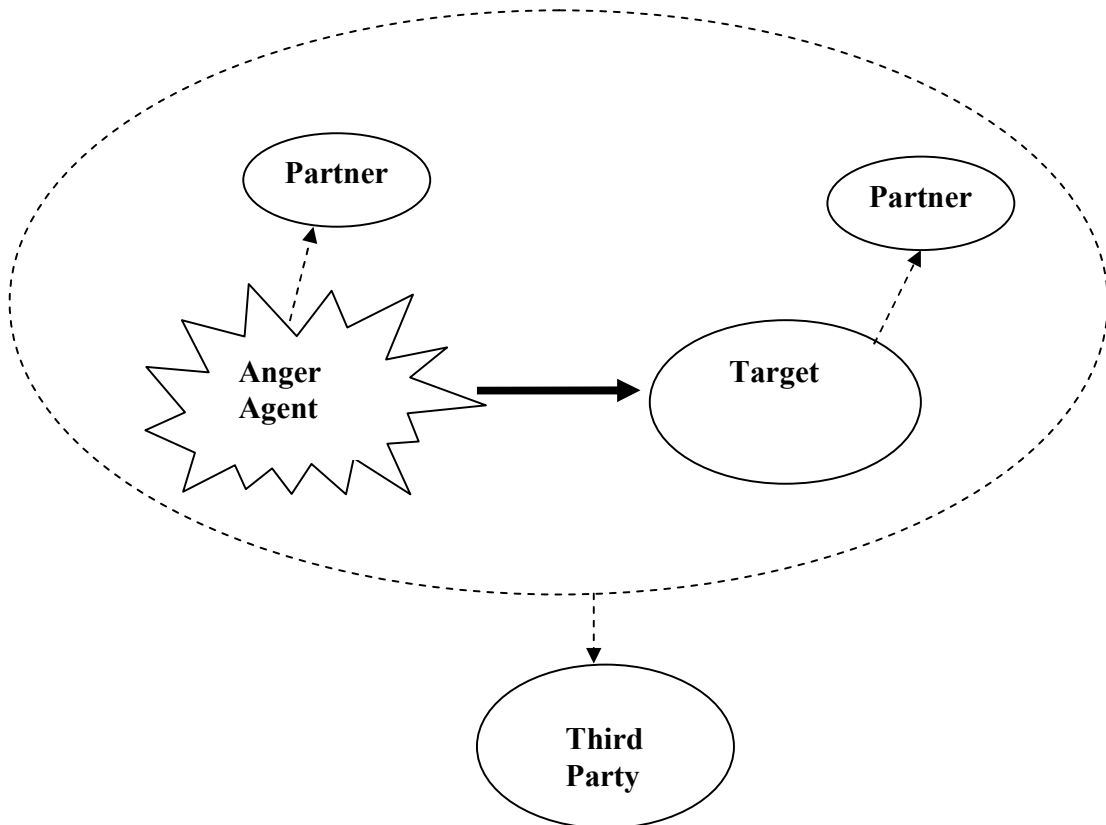
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Figure 1

People Potentially Influenced by an Angry Agent⁴



⁴ For scientific consistency we are employing terms used by previous researchers, notably Hareli & Rafaeli (2008) and Forgas (2005). “**Anger agent**” refers to a person who experiences and expresses anger; “**Target**” refers to a person towards whom anger is directed; “**Partner**” refers to a person who is somehow connected or related to the anger agent or target and learns from one of them about the anger; “**Third Party**” refers to a person who directly observes the anger interaction or learns about it third-hand, but is not personally involved with any of the participants.

Figure 2

The Emotional Route: Emotional Effects of Observing an Angry Agent

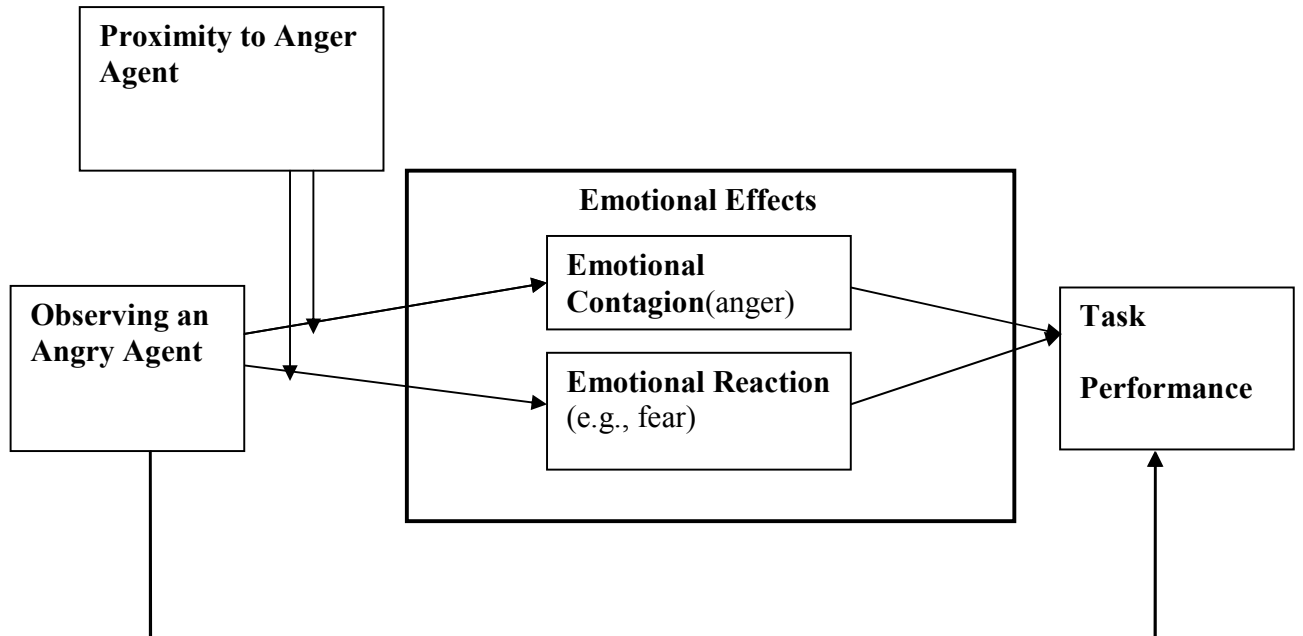


Figure 3

The Cognitive Route: Cognitive Effects of Observing an Angry Agent

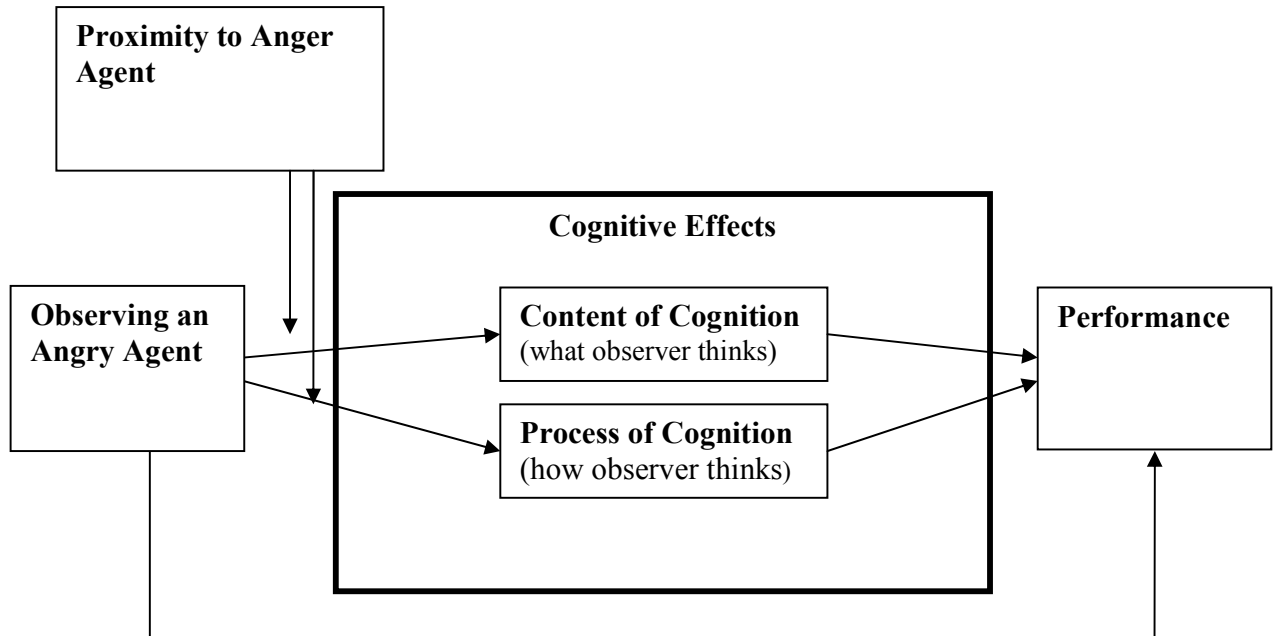


Figure 4

The Full Model Effects of Observing an Anger Agent on Observers.

