American Psychologist

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Online First Publication, May 11, 2026. https://dx.doi.org/10.1037/amp0001729

American Psychologist

ISSN: 0003-066X
https://doi.org/10.1037/amp0001729

Collective Emotion Regulation

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Collective emotional responses represent responses of multiple people to an emotional situation. Such responses are ubiquitous in many contexts, such as conflicts, crises, and celebrations. However, a closer look at processes of collective emotions leads to an observation: Collective emotions often co-occurs with attempts to influence the emotions of the group. We refer to these attempts as collective emotion regulation, where members of groups aim to change collective emotions. In this article, we first define collective emotion and propose a model of collective emotion generation. We then define collective emotion regulation and distinguish it from related concepts such as interpersonal emotion regulation. We propose a process model to describe the unfolding of collective emotion regulation that helps organize a variety of behaviors previously discussed in other literatures. We further show how the concept can help explain collective behavior and design interventions aimed at regulating collective emotions. Finally, we discuss open empirical questions and future directions.

Public Significance Statement
Emotional responses in groups often seem spontaneous and unregulated, yet group members regularly attempt to shape these emotions. This article introduced the concept of collective emotion regulation, when group members attempt to change group emotions. We identified key strategies targeting situational, network, and cognitive processes. Understanding these regulatory processes helps explain how collective emotions evolve over time and how they can be managed more effectively.

Keywords: emotions, emotion regulation, collective psychology, networks

One of the most archetypical aspects of collectives—groups of people who share an identity, a belief, or a goal—is that they tend to be highly emotional (Canetti, 1962; Durkheim, 1912; Le Bon, 1896). In fact, it is hard to imagine collectives gathering together without thinking of them expressing some degree of emotion, from pride in collective celebrations (Sullivan, 2014), panic or despair in crises, and anger in conflicts and social movements (Halperin, 2016; van Zomeren et al., 2012). Not only are collectives perceived to be emotional entities, but the notion of a collective's emotionality is argued to often also lead to a loss of control (Baumeister et al., 2015), which, as astutely described by philosophers and early social scientists, leads to unexpected and sometimes destructive outcomes (Canetti, 1962).

The long lineage of theories and popular representations of collectives' emotionality and loss of control makes it somewhat hard to think about regulation of collectives' emotions. Emotion regulation is defined as an attempt to change emotions in light of a certain goal (Gross, 2015). At the individual level, the growing field of affective science has been spending as much time and effort thinking about emotion-regulation processes as on emotion generation. However, research and theories on emotions of crowds have primarily tried to capture the processes that make crowds emotional, leaving the question of when and how crowds regulate their own emotions largely unexamined (with a few exceptions, see Goldenberg, 2023; Pescosolido, 2002).

A closer look at processes of collective emotions provides, however, an interesting observation. Collective emotions are

Kristin Naragon-Gainey served as action editor.
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Amit Goldenberg and Yajun Cao share first authorship. The authors thank James Gross for his valuable feedback in the preparation of the article.
Amit Goldenberg played an equal role in conceptualization and writing–review and editing. Yajun Cao played an equal role in conceptualization and writing–original draft.
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not just passive responses to emotional situations but often rather a result of effortful attempts to either increase or decrease the emotions, as often seen in emotion regulation. Sometimes these are leaders of the groups who try to change the collective emotions (Pescosolido, 2002; Wang & Seibert, 2015). At other times, regulation seems to emerge in a more bottom-up way, driven by actions of a few group members. Take, for example, a case of collective panic that emerges in an investor forum right after the price of a cryptocurrency starts to drop. Panic is looming, as expected, but some investors are not ready to sell their coin, or maybe even cannot sell it. These investors are determined to convince their friends that what seems to be a total disaster is in fact just a blip in a long, bright future of value increases. What may seem like a crisis, they claim, is actually an opportunity. These actions may dramatically reduce the degree of panic happening in the forum and maybe even impact the price of the currency itself.

Similar examples can be brought up in almost any case in which emotions occur at the collective level. Stronger expressions of negative emotions in intergroup conflicts are sometimes quenched by leaders or group members who are interested in reaching an agreement without turning to violence (Halperin, 2016; Mills et al., 2025). A collective excitement from a new opportunity is often tempered to allow for more rational considerations. Anywhere you look, collective emotions are accompanied by an attempt to be changed by some people in the group. In many cases, what seems at first glimpse to be highly spontaneous effervescence, to use Durkheim's terminology (Durkheim, 1912), is actually a regulated process. Think of religious ceremonies where collective ecstasy is taking place. The truth is that these seemingly unregulated processes are actually tightly controlled ceremonies occurring in highly strict environments, with very clear rules and regulations. The collective emotional response is not an uncontrolled response that emerged spontaneously but rather an organized attempt to amplify emotions but also to limit them to a specific situation. Collective emotion regulation, we argue, is common and accompanies many of what we consider as collective emotional responses.

The ubiquity of collective emotion regulation, and its likely effect on the intensity of emotional response, necessitates thinking about these regulatory processes in a more systematic way. We believe that systematic thinking about collective emotion regulation will not only contribute to the understanding of the phenomenon but also improve researchers', group members', and leaders' ability to influence collective emotions when they are unhelpful or destructive. We further wish to claim that many of the emotional issues in our world, such as experiences of depression, loneliness, or burnout, could be better addressed as a collective emotion-regulation problem rather than an individual one.

In the current article, we start by defining collective emotions. We then propose a model of collective emotion generation and present different components of the way collective emotions are generated. Turning to collective emotion regulation, we first define collective emotion regulation and differentiate it from other related constructs. We then propose a process model of collective emotion regulation, in which we organize different attempts to regulate collective emotions into groups. Finally, we discuss implications and future directions.

Defining Collective Emotions

When people experience emotions together in a collective, they often change each other's emotions in nonlinear ways. While each individual emotional reaction can be observed as a separate occurrence, unique information can be gathered by taking a macroperspective of the collective as a whole. A good analogy is that of forest fires. One can evaluate a forest fire at the level of the tree, its pace and progress, and how it is impacted by the moistness and type of lumber. A second, and perhaps more useful, analysis of a forest fire would occur at the level of the forest: how much the fire is spreading, whether it is increasing or decreasing in intensity, and how it is impacted by variables such as the density of the forest and the wind. While the two levels can both be examined and provide useful information, to predict the intensity and spread of a forest fire, and to devise a plan to fight it, it is important to examine it both at the tree and forest levels.

In the same way, emotions can be both examined at the level of the individual and at the level of collective, a phenomenon often called collective emotion. Collective emotions represent a response of multiple people to a certain emotion-eliciting situation (Barsade & Gibson, 2012; Bar-Tal et al., 2007; Garcia, 2012; Goldenberg, 2024; Goldenberg, Garcia, Halperin, & Gross, 2020; Madden et al., 2012; Menges & Kilduff, 2015). The notion of collective emotions, whose origins can be

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traced to Hegelian philosophy and early social scientists such as Le Bon and Durkheim (Durkheim, 1912; Le Bon, 1896; Taylor, 1975), suggests that emotional interactions lead to the emergence of a macrolevel phenomenon that requires unique attention, just like a forest fire. Theorists debate about the necessary conditions required for a collective emotion to occur (Goldenberg, Garcia, Halperin, & Gross, 2020; Huebner, 2011; Menges & Kilduff, 2015; Thonhauser, 2022), but all agree that one necessary condition is emotional interactions between group members. These emotional interactions are often accompanied by a shared identity or goal and a sense that "we" are experiencing this collective emotion (Thonhauser, 2022).

Collective emotions are measured by the expression of emotion by some members of a collective at a given time point. These expressions can be evaluated on a few dimensions, inspired by emotion estimation at the individual level, but with added dimensions that reflect the complexity of collective emotional response. At the individual level, emotions are often measured in a two-dimensional space of valence (good for me, bad for me) and arousal (degree of activation from low to high; see Russell, 1980). Very little research has been done so far to evaluate the dimensions in which collective emotions are evaluated, and therefore a formal model is nonexistent. When thinking of a measure of collective emotion, it seems that it can also be examined by the average valence and arousal of its individual members. However, the model has to include two additional factors that estimate emotions at the macrolevel. The first is volume, which represents the number of active members at a given time point. Collective emotion can include a small portion of the collective or a large portion (Goldenberg, Garcia, Halperin, & Gross, 2020), just like the size of a forest fire can be determined by the number of burning trees. Volume can be estimated by the number of active members at a certain time frame who are expressing their emotions.

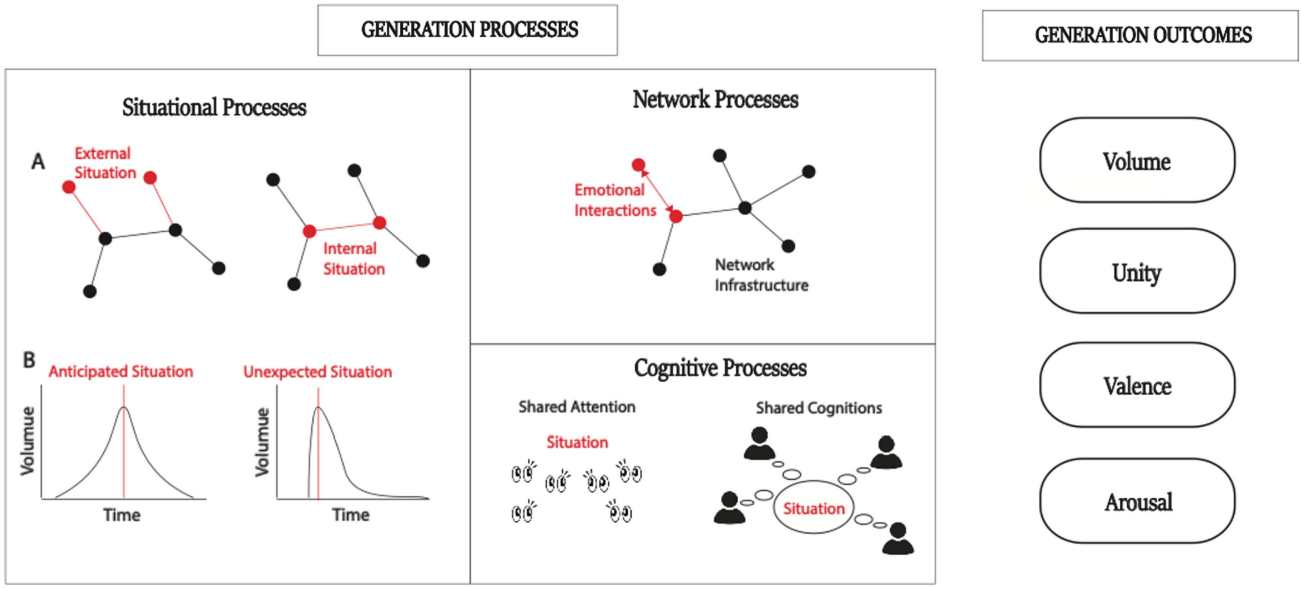
The second collective variable is unity, estimated by the similarity of emotional responses among active members. Collective emotion may be comprised of converging emotions but may also include a wide variety of responses, some positive and some negative. The notion of unity is also a way to capture the fact that collective emotions may be comprised of different types of emotions experienced by group members at the same time. Certain emotional stimuli may lead a collective to feel an array of different emotions, as some people feel negative emotions like anger, while others feel hope and happiness. Other emotional situations can lead to higher unity, with more of the group feeling the same way. Unity may play an important role in predicting whether a certain collective emotion leads to action. For example, it is likely that low entropy of discrete emotions regarding a social movement within a certain population will be a good predictor of its size. The degree of unity of the system may also impact other variables like volume, with the idea that more unity often leads to stronger emotions.

The centrality of new variables such as volume and unity in determining the nature of collective emotion emphasizes the difference in the dynamics that drive individual and collective emotion. One important expression of this difference is how emotions at the individual and collective levels unfold over time (Garcia, 2012; Goldenberg, 2024; Goldenberg, Garcia, Halperin, & Gross, 2020). Unlike individual emotional reactions, which are often short lived and expressed in bursts of activation that last a few minutes, collective emotions involve the spreading activation of multiple people. The process of collective emotion generation is much slower, lasting days or even months, depending on the shape of the collective and people's ability to communicate. Collective emotions may also be less sensitive to habituation, as different portions of the network may experience the same emotional reaction at different times. So far, however, very little empirical research has examined the temporal dynamics of collective emotional responses, making the question of how collectives generate emotions mostly an open question.

A Process Model of Collective Emotion Generation

To understand how collective emotions develop over time, we suggest a simplified model of the processes that contribute to the emergence of these emotions. The current model presented here is inspired by the modal model of emotion generation, which originally described the unfolding of individual emotions (Gross, 2015). This model has already been expanded to describe individuals' emotions in group-related situations (Goldenberg et al., 2016), but the focus has thus far been on individuals' emotions (also called group-based emotions; Mackie et al., 2004). In this article, the model has been adapted to describe the unique macrovariables that are most relevant to the unfolding of collective emotions.

Figure 1
Processes of Collective Emotion Generation



Note. On the left are three families of processes driving collective emotion generation. Situational processes describe any situation impacting the generation of collective emotion, whether it is external to the collective, internal to the collective (A), anticipated, or unexpected (B). Network processes represent both the emotional interactions between people and the network infrastructure in which they interact. Cognitive processes represent both attentional processes and any shared cognitions that people have. On the right are the different outcomes of collective emotion generation: volume (the number of people emotionally activated), unity (the similarity of people's emotional responses), valence (positivity or negativity), and arousal (the average degree of activation in emotional expressions). See the online article for the color version of this figure.

We broadly divide the factors that contribute to the generation of collective emotion into three families. The first family involves the nature of the situation impacting the collective emotion, whether it is external or internal to the collective, anticipated or unexpected. The second family involves aspects related to the network infrastructure in which the collective operates. This includes the interactions happening within the network as well as the shape of the network. Finally, the third family relates to the cognitive processes impacting the emotional dynamics, which include collective attention and shared reality (Figure 1).

A few important comments should be made about the model before diving into the specific details. First, all of the components of the model pertain to evaluating emotions beyond the individual level, without providing a detailed description of how emotions actually unfold at the individual level. Second, we do not wish to make strong claims as to what components of the model influence each other, as it is obvious that in a dynamic process such as a collective emotional response, each aspect of the model impacts the others. For example, emotional interactions seem to be highly dependent on the infrastructure in which they emerge, but interactions can also shape the infrastructure, as strong emotional interactions lead to stronger ties between networks. Finally, we chose to describe the unfolding of collective emotions in a way that would make it particularly easy to discuss collective emotion regulation. We realize that other collective emotion models that are not utilized for this purpose may omit some details and add others.

Situational Processes

What differentiates an emotional response from other affective phenomena such as mood and sentiment is the fact that it is triggered by a specific situation (Gross, 1998b, 2015). At the individual level, emotion-eliciting situations can be external (a scary person in a dark alley) or internal (thinking about the possibility of a scary person in a dark alley). Similarly, collective emotion may be driven by external situations affecting the collective, such as an attack on a country by a foreign enemy (Figure 1A). In terms of internal situations, these often develop when emotional interactions emerge between people in the group and expand to the whole group (Figure 1B). For example, recent research on work team exemplified how many team conflicts actually originate from a confrontation between two people, which could later escalate and further spread within the group (Shah et al., 2021).

The example of situations that expand in size provided above also emphasizes one of the most unique aspects of collective emotions, which is the fact that they can be elicited by situations initially experienced only by a subset of the

collective. One way to think about a collective is as a distributed sensing entity, in which every person within the collective is an afferent neuron—nerve cells that transmit sensory information from the body—that may lead to the elicitation of a collective emotion. In some cases, emotional events start from the periphery and are experienced by just one or two members of the collective and then spread to much larger portions of the group (De Domenico & Altmann, 2020). Take, for example, a case of police brutality with just a few witnesses. At the initial stage, only a small group of people are reacting to the situation, but as they share their experiences with others, their experiences spread within the collective through emotional interactions, leading to an increase in the volume of the collective emotional response (Alvarez et al., 2015; Doré et al., 2015). Take, for example, the response to the Ferguson unrest, the event that led to the elicitation of the Black Lives Matter movement. The unrest was triggered by the shooting of Michael Brown by Ferguson police officer Darren Wilson. In response to the shooting, volume of social media activity has dramatically increased over time, starting from peaks of 100 tweets per 10 min in the first few days and reaching to more than 5,000 tweets per 10 min a week after the incident. However, the expressions of strong emotions by some collective members do not always lead to the elicitation of strong collective emotions. In some cases, the emotional experience of a subset of the group does not spread or is sometimes even rejected by the collective (Goldenberg et al., 2014), leading the collective emotions to quickly die out. These dynamics will be described in more detail when discussing emotional interactions.

A collective emotion-eliciting situation may be anticipated by the collective, which may also shape the collective emotions. Research by Crane and Sornette (2008) examined emotional reactions to either anticipated emotional events, like the release of a new Harry Potter movie, or unexpected events like a tsunami. They showed that decay in social media volume was much steeper following an unexpected event compared with an anticipated one (Figure 1B). This finding may be driven by increased unity in the more anticipated event, as people have more time to share their emotions and for contagion to take place. Further studies should examine emotional dynamics within these processes to establish the relationship between the type of situation and unity and volume.

Network Processes

After the initial elicitation of emotions, collective emotions continue to evolve through ongoing interactions among individuals within the group. These interactions are embedded in social networks. It is therefore important to both examine the communication between nodes in the network and how they are impacted and change the network structure in which they operate.

Emotional Interactions

The term *interactions* is meant to capture any emotional exchange between people in the collective. Interactions can be evaluated from two points of view: the producer and the recipient of the emotion. From the producer's point of view, emotional interactions are often examined under the construct of emotional sharing, suggesting that people have an inherent need to share emotional reactions in social situations (Darwin, 1872; Niedenthal & Brauer, 2012; Rimé et al., 1991, 1998). This idea was first examined empirically by Bernard Rimé, who found in numerous studies and experiments that when people are induced to feel a strong emotional experience, they have a strong desire to share it. The consequence of this idea for the emergence of collective emotions is that reactions to situations that elicit strong emotional responses, even in the periphery of the network, are likely to be shared by multiple people, which leads to exposure of people who have not been previously exposed to the original situation and to sharply increase in the volume of emotional expressions. The inherent tendency to share emotions makes the spread of emotion a very common phenomenon.

The process of emotional sharing can also be examined from the point of view of the recipient of the emotion. When exposed to an emotional expression shared by another person, a recipient is likely to adopt the shared emotion and experience it as well, a process often called emotion contagion (Goldenberg & Gross, 2020; Hatfield et al., 1994; Parkinson, 2011). Emotion contagion can be expressed in either as the activation of people who were not emotional at all (Alvarez et al., 2015; Goldenberg, Garcia, Halperin, & Gross, 2020) or by increased similarity between the person who is expressing the emotion and the recipient (Barsade, 2000; Kramer et al., 2014). Exposure to others' emotions can often lead to convergence of collective emotions over time (i.e., an increase in unity; Garcia & Rimé, 2019).

Emotion contagion can already be seen in infancy (Hutman & Dapretto, 2009; Waters et al., 2017), implying that emotional interactions can emerge through relatively automatic processes without mature knowledge of emotions. But individuals' motivation may be highly important to whether contagion occurs or not (Wolf et al., 2023), and collective emotions do not necessarily lead to an increase in similarity (Goldenberg, Garcia, Halperin, Zaki, et al., 2020). Furthermore, emotional dynamics can actually lead to an increase in the variance of emotions. For example, subgroups may have different goals or different interpretations of emotional events, which could lead to segmentation in emotional reactions and further polarization rather than convergence (Goldenberg et al., 2014; Goldenberg, Garcia, Halperin, Zaki, et al., 2020). Therefore, although the notion of contagion is robust, it is definitely not a necessity and very much depends on the motivation of the people involved (Wolf et al., 2023).

Network Infrastructure

The term infrastructure is meant to capture either the shape of the social network or the physical space in which emotional interactions take place. The idea behind this construct is that emotional interactions depend on the infrastructure in which they take place (Galesic et al., 2023). Generally speaking, it is assumed that emotions spread through complex contagion (Goldenberg & Gross, 2020; Pinus et al., 2025), which means that people need to be exposed to multiple others before they adopt a certain emotion (Centola, 2010; Guilbeault & Centola, 2021). Research suggests that complex contagion spreads faster on clustered networks (Centola, 2010), and therefore it is assumed that the increase in the volume of collective emotion, which is akin to the rate at which emotions spread within the network, is faster in clustered networks. However, contagion also seems to depend on the type of emotion being transferred. For example, research examining emotional contagion on social media suggests that content containing negative emotions tends to spread through weaker ties compared with content containing positive emotions (Fan et al., 2016; Schöne et al., 2023). On the other hand, positive emotions are more likely to spread in more clustered networks. It is possible, however, that negatively valenced content differs in other dimensions from positive content, which requires more careful lab studies.

An important aspect of the relationship between collective emotion generation and infrastructure is that the infrastructure is not static and may also change as a result of emotional dynamics, a process often called collective adaptation (Galesic et al., 2023). One great example of adaptation is an article by Romero et al. (2019) that examined changes in network structure within an investment firm as a function of emotional shocks, in this case, a drop in relevant stocks. Analysis of the network structure as a result of these shocks revealed what the authors call a process of turtling: People turn to interact with others with whom they have close ties. Therefore, a consequence of these emotional shocks is that networks then become more clustered. To complement these findings, other research suggests that networks are not only shaped as a result of emotional shocks but also because people prefer to affiliate with others who express strong emotions (Goldenberg et al., 2023), leading to these emotional clusters even before emotional shocks have occurred. The dynamic nature of social infrastructure makes it a central component in the elicitation of collective emotions.

Cognitive Processes

Human systems are driven not only by what happens in the world but also by how people perceive, attend to, and represent the world. In the context of collective emotions, the generation and regulation of these emotions are driven not only by emotional interactions but also by processes such as attention and shared cognition, which are impacted by existing emotional dynamics and also shape these dynamics in important ways.

Collective Attention

Emotional processes take hold of individuals' attention so that their processing of the emotion-eliciting situation becomes quicker. However, attention has a few added features when considered as part of a collective emotion process, often called collective attention (Lorenz-Spreen et al., 2019; Wu & Huberman, 2007). The first important aspect is that attention is contagious, and the probability of attending to a certain target is proportionally related to the number of other people also attending to that target. This was first discovered in a classic experiment by Stanley Milgram in which pedestrians came across a group of people of different sizes looking up at an office building window. The probability of them stopping and looking up increased with the size of the crowd looking up (Jorjafki et al., 2018; Milgram et al., 1969). The consequence of this idea for collective emotion generation is that in response to an emotional situation, collective attention is immediately turned to the situation and spreads within the group, thus contributing to the elicitation of unity in emotional responses and to the volume of people who may be experiencing these emotions.

The second important aspect of attention that seems to be crucially important in collective emotion generation is that people not only attend to the emotion-eliciting situation but also preferentially attend to other people expressing emotion. Given a certain collective response with varying intensities, attention will be diverted more toward emotional members of the collective. The most important consequence of this tendency is that increased attention to strong emotion leads to the fact that people tend to overrepresent stronger emotional reactions in their aggregation of emotional information, which in turn leads people to assume that collective emotion is stronger than it actually is. The first study to examine the phenomenon was done by Goldenberg et al. (2021), who asked people to estimate the average emotion of the crowd expressing different degrees of emotions. Using eye tracking, researchers showed that people tended to spend more time on emotional faces in the crowd, suggesting an attentional bias, which then led them to represent the average crowd emotion as more intense than it actually was. This crowd emotion–amplification effect was then replicated in cases wherein people were exposed to multiple faces sequentially (Goldenberg et al., 2022; Gorges et al., 2026) and even to sequences of texts on social media feeds (Schöne et al., 2026). These findings are related to the general sense that people tend to estimate collective emotions as more emotional than they actually are, even without any exposure to these emotions (Lau et al., 2018). Amplification obviously depends on the people in one's social environment. If a person is only exposed to other collective

members who are expressing very low emotions, they may represent the collective emotions as lower than they actually are.

Shared Cognitions

Emotional exchange between people is highly dependent on mutual knowledge of the appropriate signals and cues that allow the exchange of these emotions. The term *shared cognitions* captures what is happening in people's minds when sharing emotions with other people. This includes any thinking processes that allow people to exchange their emotions, such as language (J. C. Jackson et al., 2019), cultural signals (De Leersnyder, 2017; Mesquita, 2022; Tsai, 2007), identities (Tajfel, 1982; Turner, 2010), emotional norms (Eid & Diener, 2001), collective appraisals (Vlasceanu et al., 2018), and representation of what other people feel (Goldenberg et al., 2021; Smith & Mackie, 2016). Shared cognition is likely associated with the unity and volume of collective emotional responses, such that increase in shared reality is contributing to the similarity of emotional responses, quicker spread, and therefore higher volume.

One central aspect of shared cognition that seems to be especially important for collective emotions is appraisals, which are interpretations of specific situations in light of one's beliefs and attributes of the world (Ellsworth & Scherer, 2003; Scherer, 1999). At the individual level, appraisals are thought to be the cognitive process that leads to the elicitation of certain emotions in some people compared with others. The same is true for collective emotions. For example, collectives that hold a shared belief that they are under threat will react with greater fear to situations that are mildly threatening compared with collectives that do not believe that they are under threat (Bar-Tal et al., 2007). This means that in threatening situations, more attention will be drawn to the threat, emotional interactions will lead to quicker spread of emotions, and infrastructure may be modified to facilitate these better interactions. The notion of shared appraisals as drivers of collective emotions is especially useful when thinking about emotion regulation, as a central way to change the collective emotion is by modifying the interpretation of situations, a process that is explored under cognitive change.

Shared cognition involves not only collective interpretation of reality but also people's representation of what others feel (Smith & Mackie, 2016). As discussed in the Collective Attention section, people tend to attend more to strong emotional expressions in the group (Goldenberg et al., 2021, 2022), which in turn leads to an amplified representation of collective emotion (Brady et al., 2023; Goldenberg et al., 2023; Goldenberg & Willer, 2023; Robertson et al., 2024). These amplified representations of collective emotions lead to a variety of outcomes including an increase in people's own emotions (Goldenberg, 2024; Goldenberg & Willer, 2023) as well as seeking social ties that seem to express stronger emotions (Goldenberg et al., 2023).

Defining Collective Emotion Regulation

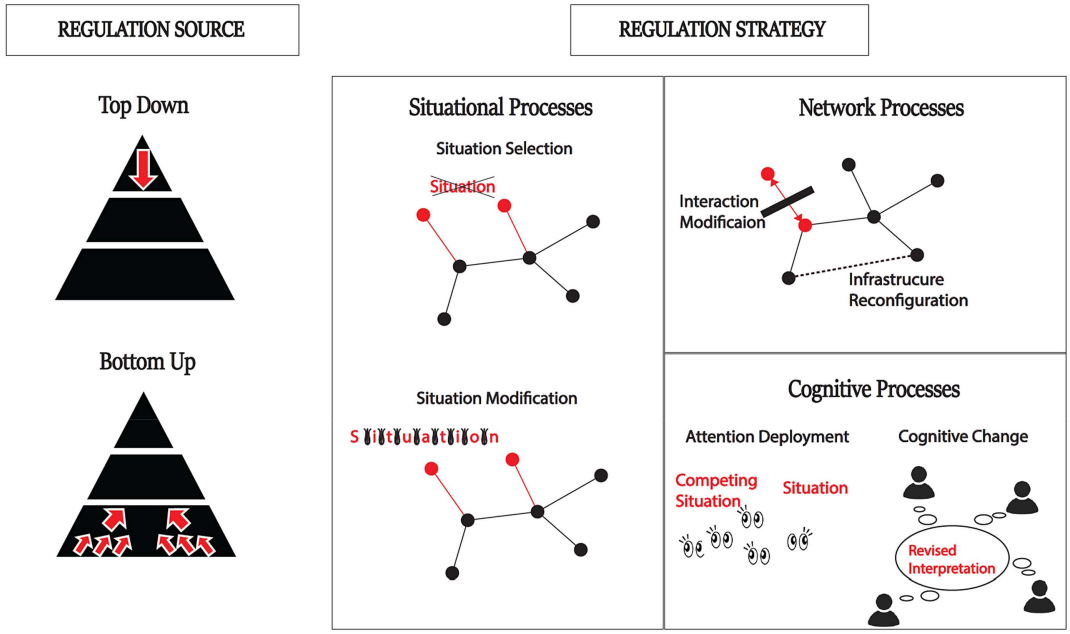
The term *emotion regulation* refers to attempts to impact the emotional trajectory by changing the emotion type or its intensity (Gross, 2015). As previously suggested, much of the research on emotion regulation has focused on individual processes, where people regulate either their own emotions or the emotions of another person (see further discussion below). Here, we extend the focus to collective emotion regulation, which is defined as a process in which a subset of the group engages in behavior that has the goal of changing the collective emotional response. Although it is natural to think of collective emotion regulation as an intragroup process, in which people attempt to control the emotions of their own group, there is no reason to assume that collective emotion regulation could not also originate from outgroup members as an intergroup process. However, these intergroup processes are beyond the scope of the current article.

Individual emotion regulation and collective emotion regulation are both processes designed to change the trajectory of an emotional response. However, the mechanisms that drive individual emotion regulation are all operating within the individual, in people's minds. Collective emotion regulation, on the other hand, is principally based on the interaction between multiple individuals, and so much of the regulatory processes emerge as a result of these interactions. While some parallels can be found between the strategies operated at the two levels, their implementation is quite different, as will be explained in the following sections.

One especially obvious dimension in which the two differ is time. As discussed in the Process Model of Collective Emotion Generation section, the temporal dynamics of a collective emotion seem to extend as a result of the fact that these emotions spread between people. A similar comment can be made on collective emotion regulation. Because emotion regulation involves multiple people regulating the group, who may or may not resist these regulatory efforts, the temporal dimensions of collective emotion regulation are much longer. In some ways, this makes the investigation of collective emotion regulation easier, as researchers can have more time to trace these processes as they unfold.

A second aspect that makes collective emotion regulation unique is that it depends on group structures such as shape and hierarchy. For example, regulation can be activated both as a top-down process (when a high-powered person, such as a leader, is interested in changing the collective emotion) or a bottom-up process—when low-powered group members are interested in modifying the collective emotion (see Figure 2). An example of a top-down collective emotion regulation is a public leader who wants to reduce anxiety in response to an upcoming financial crisis. The leader can give a speech and

Figure 2
Summary of the Ideas Related to Collective Emotion Regulation



Note. Regulation may be generated either by a leader of the group (top down) or by group members (bottom up). Collective emotion regulation is applied through three regulation strategies: situational processes (divided into situation selection and modification), network processes (interaction modification and infrastructure reconfiguration), and cognitive processes (attention deployment and cognitive change). See the online article for the color version of this figure.

appear confident to impact others' anxiety. They can also reframe the current anxiety as a misperception of the market and as an opportunity for higher profits. An example of a bottom-up regulation can be seen when a certain community tries to regulate collective emotions after a sudden loss of a leader. In these regulation attempts, reframing efforts are naturally emerging from multiple members of the community (who provide their own interpretation of the situation such "as this is meant to be," "this is a time to stick together," or "this is an opportunity for a change") and then converge to some useful narratives (Schwartzstein & Sunderam, 2022) and bring in more people who adopt the process of reframing (Pinus et al., 2025), which leads to the reduction of collective emotion. The distinction between top-down and bottom-up approaches is fluid, as successful group regulators may rise in status and power (Pescosolido, 2002), but it is helpful to explain different types of regulatory processes.

One challenge in conceptualizing the term emotion regulation, which will translate to the notion of collective emotion regulation, is differentiating emotional generation from emotion regulation (Gross et al., 2011). How do we know if a shift in emotion is a result of a change in the actual emotional reaction, a natural change as a result of time, or due to regulation? Are there even emotional reactions that are pure—that involve no regulatory processes? Emotion-regulation theorists have considered this central issue and have primarily resolved it by defining emotion regulation as involving an activation of a goal to change the emotional trajectory (Gross, 2015; Gross et al., 2011). Providing evidence for the existence of a goal with the current empirical tools is challenging (Suri et al., 2018). Researchers therefore mostly manipulate the occurrence of the goal and examine regulation in cases wherein participants are instructed to regulate.

Similar to individual-level regulation, what differentiates collective emotion from collective emotion regulation is the goal to change a certain emotion, but in this case, the goal is activated via one or many group members. The distinction between collective emotion and collective emotion regulation via goals has many of the theoretical weaknesses of that approach at the individual level: It is often impossible to access people's goals. Furthermore, in collective systems, different people may have different goals for the collective emotions. Finally, in some cases, people have goals to impact the collective emotion without even being aware of such a goal. It is worth mentioning that we do not require awareness of one's motivation as a necessary component for the existence of collective emotion regulation, because many psychological processes, including individual emotion regulation, may arise outside of people's awareness. Limiting psychological processes to awareness means eliminating a large portion of these processes.

We argue that despite the apparent difficulty, distinguishing processes of emotion generation and regulation is helpful. First, identifying the existence of regulation can help predict the intensity of collective emotions over time. Second, identifying regulation may help us learn what processes seem to be particularly successful in changing the collective emotion. Third, identifying regulation can help identify targets within the group that could be empowered to improve regulation when it is needed. We therefore believe that the distinction between emotion and emotion regulation is a useful one.

To further crystallize what we consider to be collective emotion regulation or not, we present two edge cases that would assist in outlining the phenomenon. The first edge case is one wherein a group member regulates their own emotions with no intention of impacting others, but this has the unexpected outcome of reducing others' emotions in a process of emotion-regulation contagion (Pinus et al., 2025). Although such emotion-regulation contagion can dramatically reduce collective emotion, we do not consider it to be under the definition of collective emotion regulation because there is no goal to impact the collective emotion.

The second edge case is one wherein only one single person is attempting to regulate the emotions of a collective. Think of a single person attempting to calm down an uncontrolled, outraged mob. We do consider that case as a case of collective emotion regulation because it satisfies the basic definition specified above, which is that there is an attempt to influence a collective emotion. We think that defining collective emotion regulation as involving more than one person would remove many cases in which a leader of a country is trying to regulate the collective emotion. We do agree, however, that cases wherein multiple people are trying to regulate the collective represent a unique form of regulation that can only be captured using the concept of collective emotion regulation.

The second edge case, where a single person is engaging in collective emotion regulation, also emphasizes the fact that collective emotion regulation may sometimes seem similar to interpersonal emotion regulation, wherein one person attempts to change the emotions of another single person (Battaglini et al., 2023; Côté, 2005; Levenson & Gottman, 1983; Williams et al., 2018; Zaki, 2020). This is especially true when collectives are small and comprised a few people or even a dyad. The ability to distinguish between interpersonal emotion regulation and collective emotion regulation seems to be crucial, as one potential objection to the idea of collective emotion regulation is that it is unnecessary and should be completely subsumed in the interpersonal emotion-regulation domain. We therefore wish to offer a few arguments that would justify separating the two.

We see a few important differences between interpersonal and collective emotion regulation that require them to be treated as different concepts. First, unlike interpersonal emotion regulation, which is conceptualized as targeting one person, collective emotion regulation is often targeted at many people, which may dramatically change the nature of regulation. Think, for example, of a collective emotion regulation generated via collective ritual designed to reduce anxiety before a major group competition (see further discussion below). It would be very hard to explain such an attempt using interpersonal terminology, as multiple people are joining forces to regulate the group's emotion rather than a single person. The collective ritual example points to the second difference between interpersonal emotion regulation and collective emotion regulation, which is that collective emotion regulation often involves not only many targets but also many regulators who are attempting to impact the collective emotion. The ritual is designed to reduce everyone's emotion and cannot really be divided into one-on-one interactions. The fact that in collective emotion regulation there are both multiple targets and regulators makes it really hard to fully explain using interpersonal emotion regulation. Despite the obvious differentiation between interpersonal and collective emotion regulation in some cases, there are other cases wherein interpersonal and collective emotion regulation are hard to differentiate and may converge. This is often the case wherein the collective at hand is made out of smaller groups or even dyads (Brown et al., 2022; Butler & Randall, 2013), and it is not clear whether the attempt to regulate is of just another person or the collective unit as a whole. We conclude that in smaller groups, interpersonal and collective emotions may merge in many ways and can be interpreted as either one or the other.

A Process Model of Collective Emotion Regulation

Emotion regulation can be achieved using a variety of different strategies. In the past decades, researchers have attempted to map and cluster these strategies so that they could be compared in terms of frequency and efficiency in contributing to overall emotionality and well-being. One common framework for thinking about families of emotion-regulation strategies is the process model of emotion regulation (Goldenberg et al., 2016; Gross, 1998b, 2015). The process model divides emotion-regulation strategies based on different stages of emotion generation. Our process model of collective emotion regulation takes the same approach as the process model of individual emotion regulation but focuses on slightly different strategies than the individual-level model.

We broadly divide emotion-regulation attempts into three strategy families. The first family involves changing the situation impacting the collective emotion. This includes impacting what the collective is exposed to and how they are exposed to the situation: together or separately, offline or online, as part of an organized event or free form. The second family involves strategies that relate to the network infrastructure in which the collective operates. This involves either impacting the communication between nodes or changing the shape of the network. Finally, the third strategy involves impacting cognitive processes contributing to regulation. This

includes impacting attention or changing the shared reality and representation of the situation. The idea is that none of these strategies are implemented independently but rather that executing one strategy impacts many other aspects of the way collective emotions are expressed. For simplification purposes, our process model assumes a regulator or regulators who are applying a certain strategy to a collective (Figure 2). This can be a top-down process (driven by a high-powered individual) or a bottom-up process (driven by low-powered members of the group) as discussed above. In the following subsections, a general description of the strategies and how they are applied to the collective is provided.

Situational Strategies

The basic idea of situational strategies is that the nature of emotional situations strongly influences the elicitation of a collective emotion. Therefore, changing the way the situation is experienced by the group can affect the unfolding of collective emotion. Because the situation is the main driver of the emotional response, modifying it can impact not only the response but also other aspects of the model, including the network infrastructure, interactions, and even how the situation is represented by the collective. One form of situational strategy involves choosing a different situation altogether for the collective (situation selection) or modifying a situation in a way that changes the context in which the collective experiences the emotion. For example, imagine a leader anticipating a collective reaction to the upcoming funeral of a person important to the group, such as a leader or a cultural figure. Situation selection would involve ensuring that the collective is not exposed to the funeral at all, which would likely reduce the emotional impact.

A second form of situational strategy involves modifying the emotional situation or how it is experienced by the public. Returning to the ceremony example, situation modification can be achieved by moving the ceremony from being broadcast live to being shown as a recording (Kaveladze et al., 2022; Luo et al., 2020) or by holding it in a more distant location, thereby modifying the public's emotional response. In turn, imagine a case in which the leader wants to increase the collective emotional response. Instead of minimizing the funeral, the leader decides that it will be conducted as a large ceremony designed for collective mourning. Such a ceremony may increase unity and the intensity of emotions within the collective. Rituals, which are organized sequences of behavior that tend to be structured in rigid, formal, and repetitive ways designed to generate a specific collective response (Hobson et al., 2018; Konvalinka et al., 2011; Norton, 2025), are a great example of situation modification implementation. They are a common tool used by societies to regulate recurring and expected emotional experiences. Sometimes rituals are designed to amplify certain emotions, as in the case of a memorial ceremony for a beloved leader. In other cases, rituals are designed to reduce emotions, for example, in preparation ceremonies conducted by sports teams before big matches or end-of-week ceremonies in large law firms to reduce tension before the weekend at home.

Network Strategies

The notion of network strategies is based on the idea that collective emotions are generated as a result of emotional communication that occurs within a certain network infrastructure. Network strategies of emotion regulation involve either modifying the emotional interactions occurring among people in the collective or changing the infrastructure in which these emotions take place altogether to impact the collective emotions.

Interaction Modification

Perhaps the most obvious way to change collective emotions involves trying to impact emotional interactions. This family of strategies is often applied when leaders or group members decide to express or conceal certain emotions in the hope that it will impact others' emotions. One prominent type of response modulation is suppression, which involves reducing the expression of emotions. At the individual level, suppression is considered a highly costly strategy that requires a lot of energy but does not necessarily lead to a reduction in underlying emotions (Gross & John, 2003; Yu et al., 2023). At the collective level, however, suppression may be a highly impactful strategy because suppressing one's emotions impacts how others interpret emotional situations and therefore how they react themselves (Manstead & Fischer, 2001; Parkinson, 2011). Leaders often employ intentional modulation of emotional expression, sometimes called surface acting, as a way to manipulate the team's emotions (Ashkanasy & Humphrey, 2011; Humphrey, 2012; Kanyangara et al., 2007).

Collective emotion regulation can be achieved not only by suppressing existing emotions but also by expressing other emotions (Doré et al., 2015; Garcia & Rimé, 2019). A great example is a study by Garcia and Rimé (2019), which examined how collective emotions unfolded on Twitter after the Paris terrorist attacks in November 2015. Analysis of the emotions in the tweets following the event revealed a strong negative emotional expression in response to the terror attack, which was quickly followed by a sharp increase in positive emotions and the use of solidarity-related language expressed by a different set of users. One way to interpret these findings is that, in response to the negative emotional situation, collective regulatory processes were activated, leading group members to express positive emotions of hope and solidarity. Similar descriptions of communities dealing with trauma by expressing strong positive emotions have been documented in other fields, using terms such as collective healing (Saul, 2022;

Schultz et al., 2016) and collective compassion (Madden et al., 2012). These processes need to be systematically examined in light of the idea of collective emotion regulation.

Reducing or changing the expression of emotions may impact the collective emotion via emotion contagion (Barsade et al., 2018; Goldenberg & Gross, 2020; Hatfield et al., 1994; Parkinson, 2011). Group members see another group member's expression and change how they feel about a situation. Contagion is thought to occur as a result of two types of processes: mimicry and social appraisals. Mimicry involves the activation of an emotional process through exposure to an emotional expression (Hess & Blairy, 2001). Mimicry is considered to be more of an automatic process; however, research suggests that it is also impacted by motivational considerations such as group membership and context (Hess & Fischer, 2013, 2014). The second process through which emotion expressions spread within a group is called social appraisal, which refers to the way people use others' emotional expressions as additional evidence when making sense of reality and deciding how to respond (Manstead & Fischer, 2001). Suppression in other group members' emotions can therefore spread through these two mechanisms.

Infrastructure Reconfiguration

Emotional dynamics between group members are highly dependent on the infrastructure in which emotions occur, whether in physical space or online. Reconfiguring that infrastructure may therefore affect the intensity of collective emotion. One way in which emotion regulation can be implemented through infrastructure reconfiguration is by modifying the strength of connections or changing the network structure. Imagine a leader who identifies a high level of anxiety before an organizational deadline within a particular cluster of the network. Mixing people in the network to introduce the perspectives of less-anxious individuals may decrease the intensity of collective emotion. In some cases, reducing clustering in the network can lead to the exact opposite outcome and increase collective emotion. Research suggests that positive emotions spread within stronger ties, while negative emotions spread faster through weaker ties (Fan et al., 2016; Schöne et al., 2023). Therefore, stronger negative emotions are more likely to spread in random networks. Reducing the clustering of the network, especially in digital interactions, can thus contribute to a wider spread of anxiety rather than its reduction.

Reconfiguration of the infrastructure does not have to involve changing the whole network structure but can also involve seeding highly emotional or highly regulated individuals within a certain network, with the assumption that their behavior will spread within the collective, an idea that is often examined under the title of network interventions (Alexander et al., 2022; Valente, 2012). Imagine adding to a certain network a group of highly regulated individuals. Given the fact that emotion regulation may spread (Oveis et al., 2020; Pinus et al., 2025), this may dramatically impact collective emotion-regulation efforts. Seeding has been an extremely effective strategy in network intervention, but it has not been used so far in the context of emotion and well-being.

Cognitive Strategies

One of the most powerful insights in emotion-regulation research is that the unfolding of emotions can be modified by merely shifting cognitive processes of attention and representation. The same can be said for emotion regulation at the collective level. Collectives are constantly shifting their attention and representation of the world in ways that impact how they react emotionally to situations. Modifying these processes thus impacts collective emotional reactions.

Attentional Deployment

Attention deployment involves changing one's attention to or away from a certain emotional stimulus to modify the subsequent emotional response (Sheppes & Gross, 2011; Sheppes & Meiran, 2007). As discussed in the Process Model of Collective Emotion Generation section, one of the unique characteristics of attention is the fact that it is contagious, and the probability of attending to a certain target is proportionally related to the number of other people also attending to that target (Jorjafki et al., 2018; Milgram et al., 1969). The contagious aspect of attention is often used by leaders who wish to shift the collective emotional reaction from a certain emotion-eliciting situation to another. For instance, leaders in multinational teams were found to manage the anxiety induced by language barriers by directing individual attention from the language differences to the individual commonalities and thereby shifting the collective attention to the shared goals (Tenzer & Pudelko, 2015). In the internet era, this can be done not only by finding a single target of attention but also by flooding the collective system with multiple emotion-eliciting situations, some real and some fake (Lewandowsky & van der Linden, 2021; Pennycook & Rand, 2021), with the idea that these stimuli will shift the collective attention from one place to another, thus distracting the collective from the original emotion-eliciting situation from which leaders were looking to avoid.

The second important aspect of attention that seems to be crucially important in collective emotion regulation is that people tend to attend more to emotional others in the group (Goldenberg et al., 2021, 2025; Schöne et al., 2026). The consequence of this idea for collective emotion regulation is that attentional bias can be used to impact collective emotions. If leaders or group members want to increase collective emotions, they can make emotional group members even more salient so that the perception of the collective emotion increases. This will not only lead to emotion contagion but

also to misrepresentation of the emotional norm, which will further increase collective emotions (Goldenberg & Willer, 2023). The same can be said about reducing collective emotion, such that diverting collective attention away from highly emotional members can be a useful way to reduce collective emotion.

Cognitive Change

The generation of collective emotion is dependent on shared cognition, which includes language, culture, norms, identity, memories, narratives, and appraisals. While many aspects of shared cognition are stable and hard to change, such as identity, norms, and culture, collective narratives and shared appraisals of situations are constantly updated as a result of social interactions (Galesic et al., 2023; Vlasceanu et al., 2018). Therefore, one way to regulate collective emotion is by suggesting alternative narratives or interpretations of situations in a way that changes their emotional meaning, a process often called reappraisal (Gross, 1998a, 1998b). Collective reappraisal can be initiated by leaders, who try to reframe an existing situation when addressing the public, or in a bottom-up process, where multiple group members suggest new interpretations of an emotional event and these spread through social interactions through emotion-regulation contagion (Pinus et al., 2025), in some cases until they become the central interpretation of the situation, part of the collective narrative, and even the collective memory (Coman et al., 2016; Vlasceanu et al., 2018).

To exemplify how collective reappraisal operates, think about a group going through some reputational threat, caused by the fact that some of its group members did something immoral to members of a rival group. To maintain their moral image, and reduce collective emotions of guilt, group members then develop interpretations of the situations that reduce the immoral responsibility of the group (Bar-Tal, 2007; Branscombe & Doosje, 2004). Examples of these interpretations can be that the other group has actually initiated the act, that there was no choice, or that the act was not that immoral compared with other alternatives. These interpretations contribute to the reduction of collective guilt as they are adopted by members of the group through interactions. Over time, they become part of the collective representation of the event in a way that makes it easier to regulate future similar situations (Bar-Tal, 2013; Bar-Tal et al., 2007).

What makes reappraisal unique and important at the collective level are two important factors. The first is that, just like the other strategies, reappraisal can spread between group members, leading people to adopt interpretations of situations provided by others. A recent experiment examined the occurrence of emotion-regulation contagion and provided initial evidence that it existed. Researchers "treated" a portion of a group with reappraisal training, where they learned how to use reappraisal to change emotions, and then had groups of treated and untreated participants react to a series of emotion-eliciting stimuli (Pinus et al., 2025). The emotional ratings and texts produced by the nontreated suggested a reduction in emotion and an increase in reappraisal language as the proportion of treated participants increased within the group. Thinking about this idea more broadly suggests that the fact that some group members are reappraising is likely going to spread within the group and shape the collective emotional response.

A second factor that makes collective reappraisal unique is the diversity of reappraisals of an event in the collective. Indeed, different interpretations of an emotional situation are in constant competition among different people in the group, and they are adopted in light of how good they are at explaining reality in light of previous knowledge (Schwartzstein & Sunderam, 2022). A formal model of the process was recently suggested by Schwartzstein and Sunderam (2022), who use Bayesian models to represent the updating process of one's own interpretation in light of others. The result of this process is the convergence toward one or more interpretations that modify its emotional meaning. To exemplify this idea, let us go back to the users of a crypto forum who are reacting to highly negative news about their currency, for example, that one of its initiators is charged with fraud on another currency. This news leads to a lot of anxiety, which is highly risky to the investors as it could dramatically reduce the value of the coin. The investors in the forum are then trying to interpret the news in a way that reduces the anxiety. One person may minimize the role of that person in the current currency. Another says that the same investigation was initiated regarding the current currency but led to nothing. These interpretations are then adopted by different group members who converge onto a few especially convincing interpretations. Over time, these interpretations can become part of the official narrative of the collective and a central part of the collective memory.

Open Questions and Future Directions

In the current article, we argued that many collective emotional situations that may seem like uncontrolled emotional responses to situations such as conflicts, financial crises, or celebrations may also be impacted by some regulatory forces that influence the intensity of emotional responses. In fact, we suggest that collectives have developed many systems and mechanisms to control the elicitation of emotions at the collective level. Rituals and ceremonies, emotional norms, certain agreed-upon regulatory institutions, and practices are all mechanisms developed by humans to regulate collective emotions. What seems to be a completely erratic and uncontrolled process is in fact driven by highly controlled mechanisms.

We suggested a process model in which certain strategy families (situational strategy, network strategies, cognitive strategies) are applied to collective systems, thus shaping the generation of collective emotion. This process allows us to map different types of regulation and begin to compare their utility in

changing negative emotions. In the current section, we briefly discuss a few natural future directions for the current research that follow from the notion of collective emotion regulation. The first is providing an example of how the framework of collective emotion regulation can be applied to impact groups' behavior, focusing on groups that are under constant stress like sports teams and first-responder teams. The second is thinking about some of the longer term consequences of emotion regulation, both to social hierarchies and to the norms within the group. The third is discussing differences between monitoring the quality of individual and collective emotion regulation and their impact on regulation effectiveness. The fourth is taking a broader look and discussing how certain ecologies impact collective emotion regulation.

Applying the Collective Emotion-Regulation Model in the Field

To fully appreciate the contribution of the process model of collective emotion regulation, it is important to examine how its different components can be applied to map and explain real group behavior. Here we briefly showcase one useful context in which we believe insights from collective emotion regulation can be applied: groups that regularly operate in high-pressure situations. These include competitive sports teams (Tamminen et al., 2016), first-responder teams like medics and rescue teams (Bray et al., 2025; Karimi et al., 2014; Rico et al., 2025), and even teams responsible for expeditions in uncharted areas like space teams (Salas et al., 2015). These teams need to function well under constant stress, and their ability to regulate emotions seems to be closely tied to their performance (Barsade & Gibson, 2012; Kelly & Barsade, 2001). Therefore, thinking about collective emotion regulation is highly important to manage teams in these contexts.

Starting with emotional situations, some teams facing high stress, such as sports teams, can predict when emotion-eliciting situations may occur. One very useful way to modify situations is by implementing rituals that help groups better prepare for the situation and enter the event in the right emotional mindset. Many such teams already implement rituals in their routines (Bonk et al., 2019). For example, sports teams have a variety of pregame rituals, from group huddles and prayers to synchronized performances (Murray et al., 2005), that help the team share positive emotions as a group as a way to mitigate the elicitation of negative emotions. One great example of such a traditional performance is the Haka ceremony, a synchronized cheering sequence performed by the New Zealand national team before any official match (S. J. Jackson & Hokowhitu, 2002). These collective rituals help control the players' emotional experience and increase unity and pride.

Transitioning into network strategies, groups use a variety of strategies to modify the social network and emotional communication to control collective emotion. For example, many sports teams have very tight norms of physical touch after any success or failure, designed to provide players with constant social support (Kraus et al., 2010). Teams also often organize common team spaces in ways that maximize communication and support. Locker rooms are often arranged with long benches seated in a circle so that players can communicate with each other. Many teams also mix senior and junior athletes in their seating arrangements to make sure that more regulated players can support those who are just starting. All of these design features are made to maximize emotional support.

Combined with these structural strategies, high-pressure teams develop all sorts of cognitive strategies to manage their emotions, from building ethos and narratives to designing collective symbols that help people maintain unity and support (Hartmann et al., 2021, 2025; Klein et al., 2010). For example, one important yet challenging aspect of first responder teams is building a shared narrative of the meaning of intense setbacks, which frequently occur in their missions, to help the team better manage their emotions in subsequent missions. While each responder may initially interpret a setback differently, their individual appraisals can evolve and improve through the exchange of perspectives within the team. Many teams therefore hold structured debriefing sessions to share perspectives and jointly develop collective reappraisals that become part of the team's shared narrative (Allen et al., 2018). In this way, they may be able to reduce their negative emotions to maximize performance in the next mission. In the long run, products of such collective reappraising processes can crystallize into norms and beliefs shared by team members, enabling the team to adopt helpful default interpretations after negative scenarios occur. Research in psychological safety provides a good example of how teams in high-uncertainty environments can benefit from their default interpretation of risks and failures. In psychologically safe teams, errors and mistakes are collectively appraised as not a threat to one's competence, and thus members share the belief that if they make a mistake, it will not be held against them (Edmondson, 1999). Together, these tactics to change collective-level cognition in the short and long run can be a very useful form of collective emotion regulation.

These examples describe just the tip of the iceberg when it comes to how collective emotion regulation is currently applied in the world, but hopefully these short descriptions can help researchers in different domains form thoughts on how emotion regulation can be expanded and developed in different contexts.

Longer Term Consequences of Collective Emotion Regulation

Attempts at collective emotion regulation may have impacts on other aspects of the collective beyond the immediate emotional outcomes. These more distant effects deserve further investigation. The first outcome is the changes in the social

hierarchy of the collective. Group members who successfully regulate others' emotional states could benefit from a boost in their status in the group (Pescosolido, 2002). For instance, team members were more likely to become emergent leaders of the team when they were more capable of improving the team's emotions (Cheshin et al., 2025; Sirén et al., 2020). Meanwhile, attempts to regulate others' emotions might also backfire when the regulation does not meet the group members' expectations or goals. For example, a leader who immediately redirects employees' attention to work following a company scandal might reduce short-term distress but may also be perceived as dismissive if employees expect transparency and accountability. Such misaligned regulation attempts could damage the leader's reputation and status. Future research should examine how and when different collective emotion-regulation strategies shape power and status within groups.

The second distal outcome involves shared cognitions that take longer to evolve such as emotional norms and culture. When some members of a group repeatedly regulate a certain collective emotion, this helps other group members form beliefs regarding the appropriate and desired collective emotions. For instance, if many group members are suppressing their expression to an emotional situation, this may increase other group members' motivation to suppress so that they do not violate the emotional norm. Norms of suppression are often observed at a broader level when comparing emotion expression standards across cultures and societies (Ashforth & Kreiner, 2002; De Leersnyder, 2017; Tsai, 2007).

In the long run, repeated patterns of regulation may also shape injunctive norms in the collective. Group members are likely to develop shared beliefs about what emotion-regulation strategy is appropriate and how they should respond to emotional events as a collective. These shared beliefs about the appropriateness of regulation in a group could gradually crystallize into a component of the broader group culture, which we term emotion-regulation culture. Emotion-regulation culture can guide future regulatory efforts by signaling which regulation strategies are valued or sanctioned. For instance, in service organizations, employees are often educated to suppress genuine emotions and display positive affect toward customers, reinforcing the idea that surface acting is the culturally appropriate form of regulation. Such norms of surface acting may constrain or facilitate future attempts at collective emotion regulation in their organizations under other emotional events. Future research should investigate the emergence, reinforcement, and consequences of emotion-regulation norms in collectives.

The Monitoring Process and Challenges in Collective Emotion Regulation

Successful emotion-regulation processes often involve monitoring regulation success and adjusting strategies. The basic idea is that emotion regulation involves cyclical processes wherein people evaluate the utility of an emotion-regulation strategy after implementing it, update subsequent regulatory actions based on that valuation, and reevaluate in iterative cycles (Gross, 2015). Specifically, these cycles involve evaluating whether regulatory efforts move the target emotion toward a desired threshold, maintaining strategies that appear effective, revising those that do not, and disengaging once the regulatory goal is met.

The valuation system that monitors the success of emotion-regulation strategy cannot exist without information about whether the target emotion has changed. In self-regulation, information is comparatively straightforward because people have privileged access to their own internal feelings and bodily cues. In collective emotion regulation, however, the target of regulation—other people's emotions—is largely outside the regulator and not directly accessible. As a result, monitoring in collective emotion regulation requires the regulators to construct an inferred estimate of the collective's emotional state. However, inference of another person's emotions often suffers from a variety of biases and barriers, mostly in the direction of overestimating emotions (Barrett et al., 2019; Brady et al., 2023; Genzer et al., 2025; Goel et al., 2024). Moreover, emotion inference is even more difficult when the perceiver is aggregating the emotions of multiple people in the collective (Goldenberg et al., 2021, 2025). These monitoring challenges imply that the adjustment of collective emotion-regulation effort might be inaccurate.

A second set of challenges concerns updating regulation strategies when monitoring suggests that the current approach is not producing the desired emotional change. People typically have richer experiential knowledge of what works for their own emotions than what works for others' emotions, especially in heterogeneous collectives. Even when regulators correctly detect that the collective's emotion is not changing as intended, they may lack a repertoire of alternative strategies for regulating the collective. In the absence of such knowledge, regulators may default to strategies that work for themselves, overgeneralizing from self to others. This mismatch is particularly likely when group members differ in backgrounds, emotional norms, or appraisals of the situation, such that the same strategy may soothe the regulators themselves while alienating others. For example, during the COVID-19 pandemic, political leaders' efforts to shape public emotional responses to health-related uncertainty illustrate how collective emotion regulation can be effective for some segments of a population while leaving others emotionally unchanged or even more distressed (Olagoke et al., 2020). Therefore, regulators' breadth of knowledge of multiple strategies and when they are likely to be effective may be especially consequential for adaptive switching and fine-tuning during collective emotion regulation.

Monitoring challenges can lead to backlash against the collective emotion-regulation attempts. Early signs of backlash may be subtle, so weak monitoring can lead regulators to persist

with an ineffective or inappropriate tactic until undesirable outcomes become unmistakable. In such cases, the regulator's actions may intensify the very emotion they aim to reduce or produce secondary emotions that alter group dynamics in unintended ways. Consider a context in which sadness and reverence are normatively appropriate, such as a funeral: An attempt to reduce negative emotion through humor could be appraised as disrespectful, producing discomfort or moral outrage rather than relief. Persisting with such attempts after an inappropriate read of the crowd may only exacerbate the issue. Together, future research should empirically examine the association between the monitoring process and collective emotion-regulation success.

Collective Emotion Regulation as Determined by Different Ecologies

In her recent book, *The Ecology of Human Behavior*, ant researcher Deborah Gordon examined how different environments impact collective behavior. This was done via the comparison of two different types of ants, harvester ants that live in a highly dry and low-resource environment and turtle ants that live in a resource-rich but rapidly changing environment of a jungle. Sharing her rich experience of observing these ants, Gordon argues that ecologies highly impact the regulatory behavior of ant colonies so that they are better adapted to the environment. Ants that operate in a scarce resource environment develop stricter mechanisms to control the ways in which foraging ants are sent to find food, whereas ants that operate in a rich resource environment need to spend effort in controlling when foraging ants leave the nest.

We take a similar approach when thinking of collective emotion regulation. We suggest that collectives' ability to regulate their emotions highly depends on the ecology in which the collective is operating. Collectives operating in a highly emotional environment develop multiple mechanisms to assist the collective in emotion regulation on a regular basis, while other groups, where the experience of strong emotions is less common, spend less attention on developing regulatory mechanisms. Take, for example, two countries, similar in terms of natural resources and climate. One of those countries, however, is involved in an intractable and violent conflict with its neighbors, while the other is not. The conflict of the first country makes it extremely vulnerable to strong emotional experiences that may be unhelpful. The country may develop many mechanisms to regulate these emotions, such as strong narratives and framings regarding the justification for the conflict, strict norms regarding emotional expressions, and many ceremonies that help the collective to regulate these emotions. The other country, on the other hand, may not need these strategies to maintain stability and therefore will have fewer of those strategies. Thinking about different regulatory strategies as they develop from different ecologies can help us differentiate groups in terms of their regulation style, depending on their environment.

Conclusion

To conclude, the goal of the current project was to introduce the idea of collective emotion regulation and to show how it can be implemented in explaining collective behavior in a variety of contexts. We hope that this will be the beginning of a burgeoning domain of interest to both researchers interested in collective behavior and affective scientists interested in emotion and emotion regulation.

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Received July 22, 2025
Revision received February 20, 2026
Accepted February 28, 2026 ■