SECTION VI

SOCIAL ASPECTS

Groups and Collectives

CHAPTER 22

Regulating Collective Emotions

AMIT GOLDENBERG

When we think of emotion and emotion regulation, we typically think of them as processes occurring at the individual level. Even when emotions are experienced by multiple people who interact with one another, analysis is typically centered around individual-level processes. Recently, however, there is a growing realization that there is unique value in examining emotions not only at the individual, micro level, but also at the collective, macro level. These macro-level emotions are often called collective emotions (Goldenberg et al., 2020a), and they represent the aggregation of emotions of a certain collective in response to a specific situation as it unfolds over time. Research on collective emotions has received increased attention in the past few years as part of a broader realization that macro psychological processes, such as collective memory (Vlasceanu et al., 2018), collective attention (Shteynberg, 2015), and collective intelligence (Woolley et al., 2010), can capture unique aspects of social behavior and therefore deserve specific attention. Thus far, however, growing research on collective emotion has focused on emotion generation, paying almost no attention to whether and to what extent collective emotions can be regulated. The current chapter represents an attempt to explore the concept of collective emotion regulation. In light of the lack of existing empirical research on this topic, I have four goals in this paper: First, to define collective emotion regulation. Second, to define the notion of emotion regulation. Third, to review some of the strategies in which collective emotion can be regulated. Fourth, to discuss important future directions for research on collective emotion regulation.

What Is Collective Emotion?

I define *collective emotion* as a macro-level emotional response to a specific situation by multiple individuals who are interacting with one another. The most important aspect of this definition is that collective emotion is a macro-level phenomenon that is evaluated

when aggregating emotions of the collective as a whole. I wish to sidestep the rich philosophical debate of whether groups can or cannot have conscious experiences, such as emotions (Huebner, 2011), and merely say that measuring the emotions of a collective can provide unique information and improve prediction of its behavior. More specifically, there are situations in which collective emotion patterns cannot be captured by looking at individual-level emotions. For example, in some cases collective emotional intensity is increasing, while the emotional intensity of most individuals within that collective is decreasing (see Figure 22.1). This is caused by the fact that the rate of decay in individuals' emotions is counterbalanced by the rate of new activated individuals who are expressing their emotions. This example supports the claim that examining emotions at the collective level deserves specific attention.

The definition I propose to collective emotion also includes two necessary (but not sufficient) conditions for collective emotion. The first is that collective emotion is a response to a specific situation. This distinction is intended to differentiate collective emotions from other, longer-term, collective affective phenomena, such as mood or a

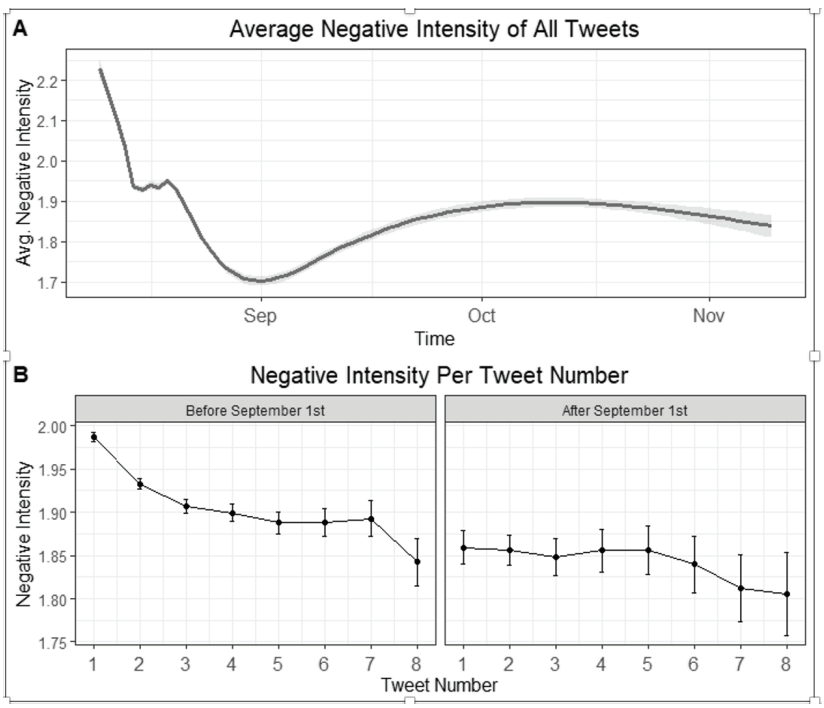

FIGURE 22.1. Emotions expressed in ~500K tweets in response to the Ferguson unrest (Goldenberg et al., 2020a). Negative intensity of tweets is evaluated using SentiStrength. Panel A shows mean emotional intensity of all tweets as a function of time. The pattern shows a reduction in negative intensity during August, and then an increase in collective emotional intensity from September 1 to the middle of October. Panel B shows negative intensity as a function of tweet number per individual, and data are divided into tweets before and after September 1. As seen in both Panel B graphs, users' eighth tweet in response to the incident was less negative than their first tweet, suggesting an emotional relaxation at the individual level. These graphs point to the fact that emotional patterns are temporally extended at the collective level compared to the individual level.

climate (de Rivera, 1992; Dodds et al., 2011). The second necessary condition is that collective emotion arises as a result of interactions between individuals. Interactions lead to changes in people's emotions via either processes of contagion or polarization, which contribute to some of the emerging properties that cannot be captured at the individual level (Goldenberg et al., 2020a). Emotional interactions also facilitate a sense of togetherness and a realization that the experienced emotion is "our emotion," which contributes to an increase in emotional intensity, a feature that is central to some of the classical work on this topic (Durkheim, 1912; Le Bon, 1896). It is important to note that many collective emotion researchers consider collective emotion to be driven only by emotional interactions leading to emotional convergence (Thonhauser, 2022; von Scheve & Ismer, 2013). In contrast, I argue that we can conceptualize a collective emotion that takes the form of two or more subgroups reacting differently to a situation or even become polarized over time (Goldenberg et al., 2020a).

What Is Collective Emotion Regulation?

Imagine an internet forum dedicated to stock discussions. After a disappointing earnings report by a specific company, its stock crashes, leading to a strong sense of anxiety in the investor community on the forum. At this point, many investors who hold the stock are motivated to calm down the community and mitigate the reduction in price. Therefore, following the reporting, various interpretations of the situation are suggested in an attempt to regulate the collective emotion. Some of these interpretations are rejected, but one interpretation that explains the disappointing report as a result of a potentially profitable investment that would later yield more profits, receives traction. As time goes by, more users adopt this interpretation, which contributes to a strong reduction in the anxiety expressed within the forum, and the stock price goes back to normal.

The above example represents a hypothetical scenario in which collective anxiety is regulated, in this case using cognitive reappraisal. I define collective emotion regulation as a process in which a subset of the group engages in behavior that has the goal of impacting the collective emotional response. The most important component of this definition is the fact that regulation is driven by a goal to impact the collective emotion (Gross, 2015). This does not mean that individuals have to be aware of their goal. The notion of a goal is merely a definitional tool designed to differentiate between emotion generation and regulation. Collective emotion regulation can be activated either in a top-down process, by a leader of the group who wishes to impact the collective emotional response, and it can also emerge as a bottom-up process, when an aggregated force of multiple people shares the same goal and are able to execute it by interacting with one another and with other group members.

Collective emotion regulation may seem similar to extrinsic or interpersonal emotion regulation, in which one individual regulates another individual's emotion (Niven et al., 2011; Zaki & Williams, 2013). While the two may be similar in some cases, especially ones in which the collective is a dyad (Brown et al., 2022), the fact that both the regulating agents and the target of regulation can comprise more than one person impacts regulation in important ways. For example, collective emotion regulation may be initiated by more than one person. This may lead to convergence both among regulators, as well as impact those who are being regulated (Páez & Rimé, 2014; von Scheve & Ismer, 2013). Such considerations are completely absent from traditional work on extrinsic regulation.

Strategies for Collective Emotion Regulation

People regulate individual emotions using a variety of strategies, but what are some of the strategies used for collective emotion regulation? The goal of the current section is to use the well-established process model of emotion regulation (Gross, 1998b, 2015) as a unifying framework to examine strategies for collective emotion regulation. Given that there is no research explicitly focused on the subject, I hope to form connections between the process model and other existing literatures of collective behavior, with the goal that such connections would generate more research in the future. As regulation may occur both as a top-down and bottom-up process, I hope to provide examples for both types in each strategy.

The first family of emotion regulation strategies involves changing emotions by targeting the emotion-eliciting situation. This is done by either choosing a certain situation as the target for collective emotion (situation selection) or changing the existing situation in a way that may lead to changes in the emotions associated with that situation (situation modification). One well-documented way of situation modification that is designed to impact a collective emotion is rituals. Groups develop rituals in order to both up-regulate or down-regulate collective emotion (Hobson et al., 2018). For example, rituals relating to death and mourning are often designed to enhance social support to reduce sadness (Norton & Gino, 2014). Rituals can both emerge naturally as a bottom-up process or may be orchestrated by a group leader who wishes to regulate the collective emotion. A second well-documented way in which collectives act to change certain situation is via collective action (van Zomeren et al., 2004, 2012). One central driver of collective action is emotions, often negative emotions, such as anger or outrage toward an inequity or a misjustice. Collectives then strive to impact the emotion-eliciting situation by acting on it. Although collective action does not necessarily emerge with the direct goal of changing collective emotion, it is strongly driven by emotions, and tends to impact the collective emotion in important ways.

The second family of emotion regulation strategies involves changing emotions by modifying attention to the emotional stimuli. Attention is not only an individual property but is also shared by multiple individuals (Shteynberg, 2015). Similar to collective emotion, shared attention is contagious (Milgram et al., 1969) and is associated with a "sense of *us*," that *we* are attending together to a certain target, which in turn leads to enhanced cognitive processing and to an increase in collective emotion (Shteynberg et al., 2014). We can conceive of collective emotion regulation occurring either by enhancing shared attention toward a situation that is likely to increase emotion, or by diverting attention away from a target to reduce such emotional response. This can be done by a collective leader trying to regulate a collective emotion (Griffiths, 1997), or merely as an emergent property occurring by bottom-up increased attention toward, or away from, a certain emotional stimulus.

The third family of emotion regulation strategies is called cognitive change, which involves changing how one thinks about the emotional situation or the emotion itself in a way that impacts the subsequent emotional response (Uusberg et al., 2019). As shown in the example above—which represents a case of regulation via reappraisal—bottom-up collective reappraisal is likely to involve a situation in which multiple reappraisals are offered and are then selected and consolidated to become part of the way that the collective interprets the situation (Schwartzstein & Sunderam, 2022). It is unclear yet, however, how and in what way this process emerges, and what are the reappraisals that are more likely to be selected by the collective. Reappraisal is often initiated by top-down

processes in which a leader or a prominent figure addresses and provides reappraisal with the goal of changing the collective emotion (Pescosolido, 2002).

The last family of emotion regulation strategies is called response modulation, and involves changing emotions by intervening on the actual emotional response. At the collective level, response modulations often occur when a member or members of the group change their own emotional response to a situation in a way that impacts the responses of other group members. Importantly, how individuals change their own responses may occur using a variety of strategies, but the main point is that the outcome of such regulation then impacts the individual's emotional expressions, which then impacts others in the collective in a way that changes their emotions. Recent empirical studies provide initial evidence for the occurrence of collective emotion regulation as a result of response modulation.

In a recent study, White participants read a guilt-inducing article about a segregated prom in upstate New York, in which White and Black students were asked to party in separate locations (Goldenberg et al., 2014). Participants were led to believe that other White readers of the article either felt a lot of guilt or no guilt. Results suggested that participants expressed stronger guilt when learning that others did not feel guilty in response to the article compared to when learning that others did feel guilty. Furthermore, higher levels of expressed guilt were mediated by participants' desire to change their emotions with the hope of impacting others' emotions. Later studies show that the tendency to amplify one's emotion indeed contributes to emotion contagion and a future increase of the collective emotion (Goldenberg et al., 2020b). Similar processes, in this case of attempts to down-regulate emotion via response modulation, were also documented in the context of parents' emotional responses to children's misbehavior (Goldenberg et al., 2017). Although these processes are examples of bottom-up processes, it is easy to imagine response modulation occurring as a top-down process. Imagine a leader who is keeping a positive emotion in response to a challenging situation with the hope of maintaining a positive collective emotion. Or on the flip side, maintaining a still face in response to adversity to reduce negative emotions (Eberly & Fong, 2013; Sy et al., 2005; Wang & Seibert, 2015).

Discussion: Overarching Questions for Research on Collective Emotion Regulation

The current chapter introduces the concept of collective emotion regulation. In the few remaining paragraphs, I hope to introduce three overarching questions that I think should be the first to be addressed in future research on collective emotion regulation.

The first question is *How* is collective emotion best regulated? Research at the individual level has paid increased attention to the question of what strategies seems to be more helpful in changing emotions (Gross, 2015). Similar questions can be asked for collective emotion regulation. For example, research on individual emotion regulation suggests that in many cases, using reappraisal seems to be more helpful in changing emotions than response modulations. Is the same true for collective emotion regulation? Response modulation is considered an ineffective strategy at the individual level, but could be an effective strategy to change collectives. Future research should further examine this question.

The second question is *How much effort* is needed to regulate a collective emotion? In other words, what is the relationship between the number of people regulating

the collective and the change in collective emotion? We can imagine a linear association between the number of regulators and outcomes—the relationship can also be exponential, such that any increase in the people regulating a collective leads to an exponential change in the collective emotion. This exponential process may be caused by the fact that regulators influence one another, which increases their impact on other group members. These relationships may obviously depend on many aspects, such as the strategies used for regulation, and the specific attributes of the group.

The third and final question is *When* are collective emotions best regulated? At the individual level, earlier intervention in the emotional process seems to be more helpful in leading to emotional change (Gross, 1998a). This is also likely to be true in collective emotion regulation. Earlier onsets of collective emotion include more variance between individuals that can be likely utilized for better regulation—however, there may be other opportunities for optimal intervention. Future research should examine these questions. My hope is that these questions and others would contribute to the increase in interest in collective emotion and collective emotion regulation and to the emergence of a new field of research in affective science.

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