

(RESEARCH ARTICLE)



## Inspiring action through social media

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International Journal of Science and Technology Research Archive, 2023, 2023, 05(01), 063–071

Publication history: Received on 03 July 2023; revised on 21 August 2023; accepted on 24 August 2023

Article DOI: <https://doi.org/10.53771/ijstra.2023.5.1.0076>

### Abstract

Social media provides the opportunity to reach many people and is a popular tool for creating social change. Many nonprofits and leaders of social movements use social media to gain support for their causes and engage allies. However, we know little about what type of content best engages potential followers. To better understand what a media user needs to post, one must consider the link between emotion and action and how this is impacted by emotion regulation when faced with issues of mass suffering. This study examined content that elicited emotions and action via the social media platform *Instagram*. We found promoting positive, emotionally charged images garnered a greater amount of social media activity than negatively, emotionally charged images. These findings suggest how social issue-driven organizations could better use social media to gain support for their causes.

**Keywords:** social media; social action; inspiring emotions; Cyberpsychology; Communication

### 1 Introduction

Adults spend an average of 11 hours per day listening to, viewing, or reading social media (Nielsen Company, 2022) providing a greater possibility for interaction between the creators and consumers of information with significant implications for organizations looking to create social change (Al-Mulla, et al., 2022; Jamil, et al., 2021; Kidd & McIntosh, 2016). Those engaged in social movements seek to use these opportunities for communication and mobilization on a global scale with social change networking sites expanding rapidly. According to Pew Research Center, around 72% of the public uses social media, an exponential increase from just 5% adoption in 2005 (Pew Research Center, 2021). With this growth in global communication, came a welcome surge of activism offline across social movements. For example, social movements, such as the Egyptian Revolution of 2011 and the Black Lives Matter protests of 2020, reveal why social media should no longer be seen as merely supplemental to offline activities (Kim, et al., 2014; Paek, et al., 2013).

Increased online use by social movements produces not only greater involvement of activists but more engagement with general citizens as well, demonstrating efficacy in increasing exposure to social causes, while simultaneously increasing voluntary engagement both on- and offline—central to the health of any social movement (Al-Mulla, et al., 2022; Kim, et al., 2014). These findings support the social diversification hypothesis that online behavior holds the potential to not only complement but reinforce offline behavior (Mano, 2014). However, the success of a social movement depends upon how well social media creators can not only mobilize their followers but expand their reach, making content messaging critical to a nonprofit's mission (Kim, et al., 2014; Paek, et al., 2013).

To expand a movement's reach and generate social engagement, social media content must spark emotions among its audience (Al-Mulla, et al., 2022; Steinert & Dennis, 2022). Research on motivation, ripple effects, and online marketing finds the public will only engage with personally and emotionally relevant messages (Fernando, et al., 2014; Paek, et al.,

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2013; Vences, et al., 2020). The extensive empirical link between emotion and action (Bieńkiewicz, et al., 2021; Goldberg, Preminger, & Malach, 2014; Ridderinkhof, 2017) supports priming audience emotions to prepare for action. Goal-based perspectives emphasize how emotions can be future-oriented, serving motivational functions instrumental for goal-directed decision-making and behavior (Pezzulo, et al., 2014).

One goal-based perspective, the *feeling-is-for-doing* approach, asserts that emotions compel individuals toward certain behaviors by prioritizing goals (Pezzulo, et al., 2014). While emotion theorists acknowledge people may experience a wide range of emotions with each emotion expressing idiosyncratic experiential content and associated goals; each emotion exists for behavioral guidance, with specific emotions showing particular dilemmas that require prioritization to determine behavior. For example, even similar emotions such as regret and disappointment differentially affect our behavior (Bault, et al., 2016). Not that the same emotion always activates the same behaviors across contexts, but they work to prioritize behaviors to facilitate actions in line with our concerns and close the gap between where we are and where we aim to be. In this way, we can conceptualize emotions as plans for intuitive decision-making, which generate inclinations for us to act in ways that serve our current yearnings (Hagman, et al., 2022; Umarji, et al., 2021).

In cases of creating social change, social media often targets the viewer's morality to have the individual emotionally connect with the injustice at hand. However, while our emotions may encourage us to want to act in a certain way, this does not mean that we always do. Research by Hagman, Lerner, and colleagues helps to bridge our understanding of how moral thinking and moral action interact, showing that people are more motivated to act on their moral intentions if they consider their behavior to be morally relevant, rather than focusing on the outcomes of their behavior. People are less likely to act morally if they estimate the results of their actions rather than focusing on their emotional reactions (Hagman, et al., 2022).

The question then arises, how does one go from emotionally considering a situation morally, to cognitively evaluating the effects of one's actions? To downplay the effect that emotions play on one's behavior, one needs to engage in emotion regulation. While the phrase emotion regulation encompasses all things a person does to influence the emotions they have, when they have these emotions, and how they experience and express these emotions, it will here denote the various methods an individual may use to either increase or reduce the intensity or duration of an emotional reaction (Lerner, et al., 2015).

Several emotion regulation strategies can serve certain functions during diverse events. Two factors: engagement and modality can distinguish these strategies. These factors are used to differentiate between processes that direct or avoid attention to the emotional experience and those that use behavioral or cognitive means (Lerner, et al., 2015). A combination of these factors would cause strategies that: (1) cognitively engage, such as rumination, reflection, and reappraisal; (2) cognitively disengage, such as distraction; (3) behaviorally engage, like social sharing; and (4) behaviorally disengage, as exemplified by expressive suppression (Brans, Koval, Verduyn, Lim, & Kuppens, 2013). In a series of studies, Brans and colleagues found that distraction occurred most frequently, followed by expressive suppression, with social sharing and reappraisal being used the least often (Graton and Mailliez, 2019).

With this in mind, it's compelling to consider why emotion regulation might occur where one would normally feel morally compelled to act. Despite the intuitive belief that we would respond more strongly when there are greater numbers of people in need of help, research has shown that when faced with mass suffering, we actually feel and show less compassion for victims (Gerber, et al., 2021). Many hypothesize this is because of personal motivations that drive us to regulate how much compassion we feel toward others (Förster and Kansk, 2022; Gerber, et al., 2021). For example, the arousal: cost-reward model of helping behavior that Kawamura describes, suggests that when people are confronted by situations where someone needs help, they experience aversive arousal, which motivates them to reduce this arousal (2020). When helping is not costly to the individual, this arousal reduces through prosocial behavior. Yet when helping comes at a personal cost, be it psychological or physical, people reduce their arousal by escaping their personal involvement in the situation. For example, research by Khalid and Dickert (2022), revealed that when helping is predicted to be materially costly, people actively avoid emotions that would normally drive them to help. People regularly expect, as shown in research, that situations of mass suffering cause overwhelming emotions and may avoid engaging to not experience these strong emotions. In these situations, engaging in emotion regulation processes may help preserve the person's state of being and protect the individual from having to think about the situation in a moral way.

While emotion regulation may take the form of avoidance of the situation and emotional experience, down-regulating one's emotions may simultaneously turn focus towards more rational considerations of the outcome of actions (Hagman, et al., 2022; Lerner, et al., 2015). Considerations about one's own personal impact in situations of mass suffering can lead to feelings of helplessness and hopelessness, as individuals appraise the situation as a problem too

big for them to help. When these determinations of pointlessness arise, a lack of motivation to act often justifies inaction while preserving one's moral character. In this way, emotion regulation allows the individual to maintain their self-definitions of having a strong moral identity. Selective activation and disengagement of one's control allows for amoral or immoral behavior while maintaining one's moral standards. This disengagement often occurs through moral justification and euphemistic labeling, where one's actions re-construct to reflect moral decisions, as well as through the diffusion of one's own responsibility to act (Khalid, 2022; Thornberg, 2020). Similarly, studies reveal that not only do people remain inactive during moral situations, but they're more likely to harm others when their behavior can be rationalized while not damaging their beliefs of themselves as moral individuals (Arutyunova and Alexandrov, 2016; Khalid, 2022).

These findings are especially concerning when one considers the large population size many social movements strive to assist. Many nonprofits and social movements deal with causes that involve mass suffering, such as homelessness, racial inequality, poverty, etc. Yet if the viewers' emotions must be engaged in order to make them act and engaging emotions in mass suffering causes people to regulate their emotions in such a way that they will not act, what are nonprofits and social movement leaders to do to advocate for their cause on social media?

Research on the effects of emotion regulation regarding mass suffering suggests moral inactivity occurs only under certain motivational conditions, such as when an individual expects their emotions to be overwhelming or helping to be too costly. Changing these conditions, by altering the way an issue is framed is likely to elicit a different range of emotions and may hold the power to change how members of society respond to multiple victims. To understand how conditions should be changed, one must first understand which emotions should be targeted to create the most activity on social media.

The focus must shift toward determining which emotions are most instrumental in influencing moral action, meaning behaviors that create social responsiveness to support others' needs and interests (Marti, 2013). Research on behavioral decision-making reveals that we must focus on the effects of specific emotions, not just those of differing valence (Bachkirov, 2015; Helion and Ochsner, 2018). Similarly, in order for us to predict future behavior, it's critical that we understand how these emotions are being experienced by the individual.

To better illustrate these points, it helps to consider research on guilt, accepted to be among the moral emotions, and how it links to pro-social interests and behaviors. Research by Kjell (2013) found differential effects of guilt and fear in social dilemmas, with fear reducing and guilt increasing cooperation in a prisoner-dilemma interaction. This research further shows the point that only certain emotions will elicit moral behavior (such as guilt), whereas others may actually work in opposition to morality because they motivate self-serving goals (Arvidson, 2018; De Choudhury, et al., 2016; Greijdanus, et al., 2020; Russo, et al., 2022).

Moral emotions are therefore extremely important in the understanding of people's adherence to their moral standards. Yet there is a range of different emotions that could be at play, including negatively valenced emotions of shame and guilt, as well as positively valenced emotions such as elevation or pride. Shame, guilt, and pride all represent self-conscious emotions that function to evaluate oneself and/or actions to provide immediate feedback on one's social and moral adequacy. When we act against our moral code, we experience shame or guilt, just as we're likely to experience pride when we do what we believe to be the right thing. These emotions arise simply from a consideration of how we might behave in a situation, impacting our later decisions to act in a certain way. But emotions are not all experienced in the same way and therefore serve different functions (Miceli, & Castelfranchi, 2018).

As Miceli and Castelfranchi (2018) point out, shame and guilt, although often used synonymously, can – and should – be distinguished by their focus on “self” versus behavior. While shame involves a negative evaluation of the global self, guilt is felt from negatively evaluating a specific behavior, which creates a very different emotional experience and thus dissimilar motivations and behaviors. We consider shame to be the more painful emotion of the two, as it involves one's whole self and not just a particular behavior. Thus, shame and guilt are not equally moral emotions, with each emotion leading to contrasting action tendencies. Because shame can be so damaging to the self, it promotes defensiveness, interpersonal separation, and distance. Guilt has been shown to promote constructive, proactive behaviors such as accepting responsibility and taking reparative action. Therefore, priming people towards feelings of guilt, rather than shame, may be more beneficial as guilt has been more effective in motivating moral behaviors.

Although dissimilar to these emotions in terms of valence, pride is also a self-conscious emotion with the power to influence morality. Researchers define pride as an emotion produced from appraisals that one causes a socially valued outcome (Bolló, et al., 2018; De Hooge and Van Osch, 2021). Pride therefore simultaneously increases self-worth while encouraging future behaviors that conform to societal values (Miceli and Castelfranchi, 2018). Unlike these self-

scrutinizing emotions, experiences of elevation occur when one witnesses others acting admirably and feels motivated to engage in these behaviors. When asked to recall humanity's 'better' nature, participants report feeling more motivated to help others and become better people (Piff, et al., 2015). These findings reveal that positive emotions, more than negatively valenced emotional experiences, may influence people to behave in moral ways.

Although a growing body of research exists on how specific emotions motivate moral behavior, additional comprehensive efforts to compare the effectiveness of these emotional experiences in eliciting moral motivations and actions on social media are needed. This knowledge may provide important information for organizations seeking to advance their social movements online. Understanding how to frame social media content that best engages one's online audience holds substantial implications for those looking to advocate for social justice and prevent amorality in the face of mass suffering. By better understanding how to frame these issues, we provide an opportunity for individuals to experience their emotions without feeling overwhelmed by them, relying on regulatory strategies to cope. Movement leaders could better communicate with their followers and effectively build global support through social media, leading to greater involvement of the public and heightened awareness of social justice issues. This study sought to identify which emotions led to the greatest amount of engagement on social media regarding homelessness.

Based on the existing body of research regarding morality and emotion regulation, we hypothesized that content that frames social issues in ways that elicit a greater number of positive emotions would receive a greater amount of social media activity than content that elicited a greater number of negative emotions.

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## 2 Material and methods

To test this hypothesis, we surveyed participants on their emotional reaction to content posted on Instagram by the organization Voices of Homeless. Participants were recruited through online communities and social networking sites, including Facebook, Instagram, and LinkedIn. We collected two months' worth of data (60 images posted daily on their Instagram account) and then surveyed 33 participants (18 -34 years old; 69.7% female; 39.4% POC) on the emotions they felt each post elicited. We then compared these responses to the number of likes and comments each post received to social media engagement.

*Procedure.* All participants completed a self-report survey through the online platform *Qualtrics*. This survey included a brief questionnaire pertaining to demographic information and an Instagram Emotionality survey developed from a version of the 10-item Positive and Negative Affect Schedule (PANAS). Instagram Emotionality survey comprised 60 questions with each question including one image and its attached caption taken from the *Voices of Homeless* Instagram account and a version of the 10-item PANAS. Participants rated the extent to which they experienced each out of 10 emotions on a 5-point Likert Scale ranging from "very slightly" to "extremely." Half of the presented emotion words were negatively valenced (e.g., upset, guilty, ashamed, irritable, afraid), while the other half were positively valenced (e.g., enthusiastic, inspired, proud, determined, strong).

We selected *Voices of Homeless* (VoH) because of its use of social media to advocate for change regarding individuals experiencing homelessness in the United States. At the time of data collection, VoH had approximately 250 followers on Instagram. This study observed 2 months' worth of data, totaling 60 images, posted to VoH's public Instagram account. We used this data to create a survey pairing an abbreviated version of the PANAS with the images and captions taken from Instagram.

We used the survey results to determine which 10 emotions received the most endorsements for each image using endorsement ratings of "quite a bit" and/or "extremely" from a 5-point Likert scale for each emotion on each image. Ratings of "very slightly, a little, or moderately" were not used in order to prevent wrongly assigning emotion to an image if participants had not rated that they strongly felt it.

We tallied the total number of likes and comments each image received on Instagram to create a measure of social media activity. We selected images that received the top 25% of activity and the bottom 25% of activity. Then, we compared endorsement of each emotion across images with the greatest 25% and lowest 25% of social media activity. Based on these results, we conducted a final analysis to determine the most highly endorsed emotion among the set of images that received the 25% greatest amount of social media activity. To do so, we compared the endorsement means of the five emotions endorsed most frequently within this top 25% set of images using a one-way ANOVA and post hoc comparisons using the Tukey HSD test.

### 3 Results

When we compared the amount of social media activity (likes and comments) received for images that received the top 25% of activity and the bottom 25% of activity, we found a significant difference between the top 25% ( $M = 41.47, SD = 5.66$ ) and bottom 25% ( $M = 16.07, SD = 3.7$ ) in terms of total activity received ( $t(28) = -14.57, p < 0.001$ , two-tailed; see Table 1).

**Table 1** Results of t-test and Descriptive Statistics for Specific Positive Emotions by Ranking

	Ranking						t	df
	Top 25%			Bottom 25%				
	M	SD	n	M	SD	n		
Strong	3.33	1.59	15	2.60	1.21	15	-1.46	28
Determined	3.93	1.22	15	3.67	1.35	15	-0.57	28
<b>Inspired</b>	<b>6.07</b>	<b>2.60</b>	<b>15</b>	<b>4.33</b>	<b>1.88</b>	<b>15</b>	<b>-2.09*</b>	<b>28</b>
<b>Enthusiastic</b>	<b>3.67</b>	<b>2.32</b>	<b>15</b>	<b>1.80</b>	<b>1.15</b>	<b>15</b>	<b>-2.79*</b>	<b>28</b>
Proud	3.60	3.00	15	1.80	1.86	15	-1.98	28

\*  $p < .05$

When we compared the endorsement ratings of the five positively valenced emotion words between the images that received the top 25% of activity and the bottom 25% of activity on Instagram (see Table 1) we found a significant difference between the top 25% and bottom 25% for the emotions of “inspired” and “enthusiastic.” For “inspired” (top 25% ( $M = 6.07, SD = 2.6$ ), bottom 25% ( $M = 4.33, SD = 1.88$ );  $t(28) = -2.09, p < .05$ , two-tailed), the magnitude of the differences in the means (mean difference =  $-1.73$ , 95% *CI*:  $-3.43$  to  $-0.04$ ) was small (eta squared =  $.14$ ). For “enthusiastic” (top 25% ( $M = 3.67, SD = 2.32$ ), bottom 25% ( $M = 1.8, SD = 1.15$ );  $t(28) = -2.79, p < .05$ , two-tailed), the magnitude of the differences in the means (mean difference =  $-1.87$ , 95% *CI*:  $-3.24$  to  $-0.5$ ) was small (eta squared =  $.23$ ). Analyses showed a trend towards significance between the top 25% ( $M = 3.6, SD = 3$ ) and bottom 25% ( $M = 1.8, SD = 1.86$ ) for “pride” ( $t(28) = -1.98, p = .058$ , two-tailed). These results suggest that images that received the top 25% of social media activity elicited a significantly greater amount of inspiration and enthusiasm than the images in the bottom 25%. Comparisons of their means showed greater endorsement of all positive emotions in the top 25% of images as compared to the bottom 25% of images.

When we compared the endorsement ratings of the five negatively valenced emotion words between the images that received the top 25% of activity and the bottom 25% of activity on Instagram (see Table 2) a significant difference was found for the emotion of “afraid” between the top 25% ( $M = .53, SD = .83$ ) and bottom 25% ( $M = 1.93, SD = 2.22$ ) of images ( $t(28) = 2.29, p < .05$ , two-tailed). The magnitude of the differences in the means (mean difference =  $1.4$ , 95% *CI*:  $0.11$  to  $2.69$ ) was small (eta squared =  $.16$ ). These results show that images in the bottom 25% of social media activity elicited a significantly greater amount of fear than the images in the top 25%. Inspection of the means for the negative emotion words also revealed that the bottom 25% of images received a greater number of endorsements for all the negative emotions when compared to the top 25% of images.

Our final analysis explored the impact different emotions had on the mean endorsement ratings for the images that had the greatest 25% of activity. The five emotions analyzed included strong, determined, inspired, enthusiastic, and proud as comparisons of their means to negatively valenced emotions showed a greater endorsement for all the positively valenced emotions in the images that received the top 25% of activity. As expected, we found a statistically significant difference at the  $p < .05$  level in mean endorsement ratings for the 5 emotions ( $F(4,70) = 3.67, p = .01$ ). Post-hoc comparisons using the Tukey HSD test showed that the mean score for “inspired” ( $M = 6.07, SD = 2.60$ ) differed significantly from all other emotions (strong:  $M = 3.33, SD = 1.59, p = .01$ ; enthusiastic:  $M = 3.67, SD = 2.32, p = .04$ ; proud:  $M = 3.6, SD = 3, p = .03$ ) except for “determined” ( $M = 3.93, SD = 1.22, p < .08$ ). These findings suggest that inspiring images led to the greatest social media activity.

**Table 2** Results of t-test and Descriptive Statistics for Specific Negative Emotions by Ranking

	Ranking						t	df
	Top 25%			Bottom 25%				
	M	SD	n	M	SD	n		
Ashamed	1.60	2.64	15	2.20	2.34	15	0.66	28
Irritable	2.07	2.76	15	2.93	2.49	15	0.90	28
Guilty	1.40	1.50	15	1.93	1.53	15	0.96	28
<b>Afraid</b>	<b>0.53</b>	<b>0.83</b>	<b>15</b>	<b>1.93</b>	<b>2.22</b>	<b>15</b>	<b>2.29*</b>	<b>28</b>
Upset	1.93	3.17	15	4.07	3.28	15	1.81	28

\* p &lt; .05

#### 4 Discussion

This study examined content posted to Instagram to evaluate emotions elicited by viewers based on likes and comments. These results provide support for our initial hypothesis that images eliciting a greater number of positive emotions would garner a greater amount of social media activity than those that elicited a greater number of negative emotions.

Although previous studies found certain negatively valenced emotions such as guilt and shame to be effective motivators for moral behavior, these studies did not observe these emotions within circumstances that involved issues of homelessness. It is possible that negative emotions did not motivate action in our study, because when experienced within the context of mass suffering, viewers used emotion regulation processes to distance themselves from the content, decreasing their online engagement. The content that elicited positively valenced emotions may not have motivated the viewers to regulate their emotional reactions and may have more effectively compelled viewers to act. Explanation of lack of action with negatively valenced images could be based on overwhelming feelings of compassion fatigue, a sense of helplessness, and mental exhaustion that prohibit actions towards the restoration of justice. Users' online behavior and perception of human suffering may not exactly reflect their offline personal experiences. Prior research showed discrepancies among users' online and offline characteristics in other domains (Ray, et al., 2022; Towner, et al., 2022).

This research provides approaches for organizations looking to boost awareness and activism with the possibility to reach large groups of people quickly and easily on a global scale. Analyses showed that eliciting the emotions of inspiration and enthusiasm from one's audience was the most effective means for social media users to gain online action, whereas fear was linked with a significantly lower amount of online activity. These findings are in line with previous research, which suggests that being a witness to others' admirable actions motivates us to engage in similar behaviors, while feelings of fear do not (Miceli, and Castelfranchi, 2018; Bachkirov, 2015) However, success of a social movement highly depends on how well media users mobilize their followers, making social media messaging critical.

One limitation of this study is the low sample size which puts into question whether these results represent a more general population. Women respond more frequently to emotional content than men, especially when the content pertains to negative and darker emotions (Deng et al., 2016; Sun, Mao, & Yin., 2020). Further research is sorely needed to determine if women respond to inspirational content over negatively charged emotional content.

It can also be important to determine if activity on social media varies by other demographics including age and race. While we know that 90% of Instagram users are under the age of 35 and 56% of users are women, we don't know if the individuals who actually liked and commented on these posts are typical of the Instagram population. Last, future studies using different online platforms are needed to investigate the generalizability of these results to other forms of social media.

Finding that inspirational images lead to more online engagement than other emotionally charged images reveals opportunities for social movements and nonprofit organizations seeking to meet their missions. As we focused this research on one NFP organization, *Voices of Homeless*, that seeks to help people experiencing homelessness; we need further research to determine if inspiring content can lead to more engagement for other pressing social issues. Organizations with missions to help individuals experiencing homelessness could explore the use of inspirational posts

on Instagram to not only engage their current advocates and activists but also to potentially build a stronger and larger community to meet their missions of ending homelessness for all.

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## 5 Conclusion

Promoting positive, emotionally charged images led to a greater amount of social media engagement than negatively, emotionally charged images. Findings reveal how issue-driven organizations could use their social media channels to engage with and increase support for social justice causes.

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### Compliance with ethical standards

#### *Disclosure of conflict of interest*

No conflict of interest to be disclosed.

#### *Statement of ethical approval*

The study was approved as exempted.

#### *Statement of informed consent*

Institutional review board exempted this study given our use of public information.

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