How affect shapes status: distinct emotional experiences and expressions facilitate social hierarchy navigation

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All human societies are organized hierarchically, and individuals who occupy positions of high social rank typically acquire fitness advantages over lower ranking group members. Here, we argue that certain emotions function, at least in part, to help individuals successfully navigate these hierarchies. We review evidence suggesting that nine distinct emotions — *pride, shame, anger, fear, sadness, disgust, contempt, envy, and admiration* — influence social rank outcomes in important ways; most notably subjective experiences of these emotions motivate adaptive status-relevant behavior, and nonverbal expressions associated with these emotions send adaptive messages to others which facilitate expressers' attainment and maintenance of social rank. In sum, the reviewed emotions are thought to have intrapersonal and interpersonal consequences relevant to the navigation of social hierarchies.

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Introduction

Social hierarchies are a universal feature of human societies, with high-ranking individuals receiving greater access to desirable resources and power than low-ranking individuals [1,2]. Typically, these hierarchies are predicated on the use of aggression and coercion to elicit forced deference through fear (i.e. a *dominance* hierarchy), or the demonstration of knowledge and expertise, resulting in earned respect (i.e. a *prestige* hierarchy) [1,2]. Numerous researchers have argued that certain emotions evolved, at least in part, to help individuals successfully navigate these hierarchies [3•,4,5,6•,7]. Consistent with these accounts, we review research suggesting that several distinct emotions — *pride, shame, anger, fear, sadness, disgust, contempt, envy, and admiration* — influence social rank outcomes. Specifically, the subjective feelings and

action tendencies associated with distinct emotions often drive people to behave in ways that facilitate their navigation of the social hierarchy, and nonverbal expressions of emotion have interpersonal consequences that similarly facilitate the attainment or maintenance of social rank, both for expressers and conspecifics who observe their displays [3•,4,5,6•,7–13].

Subjective experiences of emotion motivate adaptive status-relevant behavior

Pride

Pride experiences, which occur in response to success in a valued domain [14–16], often motivate status-seeking behaviors [17,18•]. Studies have documented two distinct facets of pride, known as authentic pride—characterized by feelings of confidence and genuine accomplishment—and hubristic pride, characterized by arrogance and egotism [16]. Authentic pride can motivate achievement and perseverance [18•], which is likely to promote prestige [17]. In contrast, hubristic pride has been associated with a range of anti-social yet potentially adaptive dispositions and behaviors, like narcissism and a tendency to lie, cheat, or behave aggressively for status gains, which likely facilitates the attainment of dominance [6,16,19–21]. The two forms of pride may therefore function to promote the attainment of high rank in either a prestige or dominance hierarchy.

Shame

Shame experiences, characterized by negative feelings about a stable, global self, typically occur in response to failure or transgressions in achievement or social contexts [22,23]. Shame is often accompanied by regret and depression [24], and may function to alert experiencers that their rank is declining [25]. In response, shame experiencers often engage in avoidant or appeasement behaviors, which can help reduce negative reactions from others, preventing additional status losses [7,26•].

Anger

Anger experiences, characterized by approach-oriented aggressive behavior [27,28], can occur in response to feeling that one's social rank is unjustifiably low and an increase is merited [29]. When experienced by individuals who can afford the costs associated with aggression (i.e. stronger or wealthier group members), anger can facilitate the acquisition of resources and dominance by motivating successful agonistic rank competition [2,4,12].

Fear

Fear experiences occur in response to possible threats, and prepare individuals to respond adaptively, typically with avoidance behaviors [30]. Fear thus promotes heightened monitoring of social situations, which can mean the avoidance of and deference towards threatening dominant individuals [5,31]. In the domain of social hierarchy, then, fear may help low-ranking group members respond adaptively to higher ranking individuals, so as to maintain group membership (and safety).

Sadness

Sadness experiences, characterized by fatigue and depression, often emerge after a status loss [32,33]. Sadness motivates individuals to avoid expending energy while they recover from whatever loss was incurred, and this can be functional by virtue of preventing wasted resources in the pursuit of unattainable goals [7,10]. Sadness may therefore be adaptive in the domain of social hierarchy by helping low-ranking individuals save energy and resources needed for future status acquisition attempts and avoid losing additional rank by engaging in competitions they are unlikely to win.

Disgust and contempt

Disgust and contempt are moral emotions that occur in response to observing others violate group norms [34]. Disgust likely originally evolved to protect individuals from exposure to noxious odors or rotten food, but has been co-opted to serve a more social function, involving the regulation of one's own and others' behavior to cohere with group norms [35]. Contempt experiences occur when individuals judge others as failing to uphold group duties or social order, or as low in competence [27,34]. Both of these emotional experiences may therefore function to help individuals identify — so as to avoid — group members who are violating group norms. This avoidance may ensure that disgust and contempt experiencers do not suffer the same degree of ostracism and decreases in social rank that norm violators face [36]. In addition, these emotions may serve a reinforcement function; feeling disgust toward another's transgressive behavior may encourage experiencers to avoid committing similar transgressions themselves.

Envy

Envy is a negative emotional response to another group member's relatively higher status, which motivates status-seeking behaviors aimed at minimizing the disparity between the experiencer's and the elicitor's social rank [37]. Two psychologically distinct forms of envy motivate distinct strategies toward rank attainment. Specifically, malicious envy motivates individuals to try to reduce the social rank of the elicitor, whereas benign envy motivates individuals to try to raise their own social rank [38•]. Both forms of envy therefore function to help low-ranking individuals minimize rank disparities between themselves and higher rank others.

Admiration

Admiration experiences are elicited when other group members are perceived as competent, prestigious, or achieving [39]. These feelings can, in turn, motivate a low-ranking member of a prestige hierarchy to affiliate with and copy the behavior of a more prestigious group member (i.e. the target of their admiration) [2,7,39]. Admiration can therefore increase individuals' willingness to learn valuable skills from more competent others, which may eventually facilitate a rise in social rank. It also fosters followership in a prestige hierarchy; others' admiration is a critical emotional mechanism underlying prestigious individuals' ability to attract and retain followers who willingly defer to them.

Nonverbal expressions of emotion facilitate the attainment and maintenance of status

Pride

Pride expressions are reliably recognized and distinguished from similar emotion expressions, including happiness, across cultures [40]. These displays are also spontaneously displayed after success in a valuable domain by individuals across cultures, including the congenitally blind, suggesting that pride displays are likely to be an evolved behavioral response to success [41]. Pride displays yield automatic perceptions of high rank that generalize across cultures [42•], and observers selectively choose to copy and learn from pride displayers [43•]. Given this association between pride displays and social learning, it is likely that these displays communicate prestige rather than dominance. Supporting this expectation, other studies have found that pride displays are reliably perceived as prestigious but not dominant [44•,45]. This is somewhat surprising given that the pride expression communicates both authentic and hubristic pride [46], but may be explained by research suggesting that dominance is associated with a somewhat different nonverbal display, which does not include a smile [44•]. Pride expressions thus function to communicate a deserved increase in social rank within a prestige hierarchy, and likely result in followership from group members.

Shame

Shame expressions are reliably recognized across several cultures [40,47,48], and are spontaneously displayed in response to failure in a valued domain [41]. These displays have been documented in young children and the congenitally blind [41,49], suggesting that shame displays may be a universal human response to failure. Although shame displays send an automatically perceived message of low social rank [50], they are nonetheless functional for the displayer, as they can appease other group members after a social transgression [51,52]. Transgressors who display shame thus benefit by reducing their likelihood of punishment and negative social appraisals [26•]. Although displaying shame may

cost these individuals status, appeasing a formidable opponent is often worth that expense, as this can save valuable resources that would likely be lost from agonistic conflict [5]. Shame displays may also benefit observers by facilitating their identification of committed group members and followers — those who demonstrate atonement for a transgression [5,52]. In sum, shame displays play a critical role in hierarchy navigation, allowing lower-ranking group members to maintain group inclusion and avoid the potential social costs of transgressions.

Anger

Anger expressions are reliably recognized across cultures [11], and communicate threat by signaling one's willingness to engage in aggressive behavior [4,29]. This message can lead to the conferral of dominance from observers [3•,12,53].

Fear

Fear expressions are reliably recognized across cultures [11], and are perceived as a low-rank distress cue, communicating the fearful person's need for help or resources and often triggering approach-orientated prosocial behavior from observers [3•,53,54]. Furthermore, fear — a common response to a physical threat [53] — may suggest that the experiencer is intimidated, and therefore willing to defer, making agonistic conflict unnecessary. This can ease social rank maneuvering of dominant individuals by allowing them to avoid costly agonistic encounters.

Sadness

Sadness expressions are reliably recognized across several cultures [11,40,47], and generate perceptions of low rank [3•]. Tears enhance the communication of sadness [55] and also impair vision, which, by self-handicapping, may demonstrate that the expresser is not currently a threat. Thus, sadness expressions may function to elicit sympathy from onlookers and deter them from aggressing towards the displayer.

Disgust and contempt

Disgust and contempt expressions are reliably recognized across cultures [11,40,56]. These displays communicate condemnation of a person or act [57•,58], and thus signal to a transgressor that he or she has committed a norm violation and is now perceived as lower in rank. These expressions may also inform transgressors that the expresser intends to ostracize or punish them, which can motivate transgressors to change their behavior so as to prevent rank loss or exclusion [27,47,59]. Contempt displays may also benefit expressers by communicating their belief that the target is beneath them, and thus informing other onlookers that the expresser is relatively high in rank or competence [58].

Envy and admiration

Envy and admiration are not reliably associated with distinct nonverbal expressions [38•,60], making it likely that the interpersonal consequences of these emotions occur only through other interpersonal behaviors motivated by their experience.

Conclusion

A number of distinct emotions function, at least in part, to help individuals navigate social hierarchies. The evidence reviewed here suggests that a broad array of emotions influence social rank by (a) preparing individuals to respond adaptively to the environment so as to best attain and maintain social rank, and (b) communicating social information to others that does the same.

Conflict of interest statement

Nothing declared.

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