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Pride: The Emotional Foundation of Social Rank Attainment

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Abstract

Pride is a self-conscious emotion, comprised of two distinct facets known as authentic and hubristic pride, and associated with a cross-culturally recognized nonverbal expression. Authentic pride involves feelings of accomplishment and confidence and promotes prosocial behaviors, whereas hubristic pride involves feelings of arrogance and conceit and promotes antisociality. Each facet of pride, we argue, contributes to a distinct means of attaining social rank: Authentic pride seems to promote prestige—a rank based on earned respect—whereas hubristic pride seems to promote dominance—a rank based on aggression and coercion. Both prestige and dominance are effective routes to power and influence in human groups, so both facets of pride are likely to be functional adaptations. Overall, the reviewed research suggests that pride is likely to be a human universal, critical for social relationships and rank attainment across human societies.

Contents

INTRODUCTION

For many of us, thoughts of pride lead immediately to thoughts of hubris and sin. Throughout much of Western history, pride has been held in an almost uniformly negative regard. In what is perhaps the most famous authoritative word on the topic, the Bible explains that "pride goes before destruction, a haughty spirit before a fall" (16:18). This view was widespread among early Christian thinkers: Both Augustine and Aquinas saw pride as the most fundamental of all sins (O'Donnell 2006, Pope 2002); sixth-century Pope Gregory described pride as "the queen of sin," "the beginning of all sin," and "the root of all evil" (Baasten 1986); and in *The Divine Comedy*, Dante Alighieri portrayed it as the deadliest of the seven deadly sins. This intense disdain was not limited to those from the Judeo-Christian tradition; to Buddhists, pride remains one of the "ten fetters" that shackles an individual to *samsara*, an endless cycle of suffering (Akira 1990). Similarly, Chinese philosopher Lao Tzu wrote in the Tao Te Ching (circa sixth century BCE) that "those who glorify themselves have no merit, those who are proud of themselves do not last" (24:3).

For those who take religious ideology as prescriptive, this consistent set of sentiments leads to the question of whether pride might be an emotion we can, and should, do without. Would humans be better—kinder, more moral, and less selfish and vain—if we did not experience pride? In fact, we argue the contrary: Pride is one of the most central emotions shaping human social behavior and group dynamics, and it is essential for human success. Pride is, in short, the emotion that motivates people to do what it takes to get ahead and attain social status.

Psychological scientists consider pride a self-conscious emotion, meaning that, along with emotions like shame and guilt, its experience requires self-evaluation and thus the capacity for self-awareness (i.e., an executive "I" self who does the evaluating) and self-representations (i.e., the "me" self that is evaluated) (Buss 2001, James 1890). Individuals experience self-conscious emotions only when they become aware that they have lived up to, surpassed, or failed to live up to their actual or ideal self-representations. In contrast, events that do not activate self-evaluative processes may generate other emotions, like happiness or fear, but not self-conscious ones (Tracy & Robins 2004a). A person may feel great joy or excitement after winning the lottery or an athletic event, but only the latter occasion, which presumably promotes a positive self-evaluation, would

Self-conscious emotions: emotional experiences elicited by an evaluation of oneself (e.g., pride, guilt, shame)

also elicit pride—unless the individual credits themselves for picking the winning lottery number. Consistent with this account, animals who lack the capacity for self-awareness do not appear to experience self-conscious emotions, whereas animals who show the most minimal evidence of a complex self—mirror self-recognition—display emotional behaviors that can be interpreted as nonhuman versions of pride, shame, and embarrassment (Hart & Karmel 1996, Hayes & Hayes 1951, Russon & Galdikas 1993, Yerkes & Yerkes 1929; see Tracy 2016 for a review).

Self-conscious emotions play an important role in motivating and regulating people's thoughts, feelings, and behaviors. They drive people to work hard in achievement and task domains (Stipek 1995, Weiner 1985) and to behave in moral, socially appropriate ways in their social interactions and intimate relationships (Baumeister et al. 1994, Leith & Baumeister 1998, Retzinger 1987). From an evolutionary perspective, these outcomes are the functional output of these emotions, and because of this output these emotions can be considered adaptations that evolved to facilitate optimal responding to recurrent events in humans' ancestral environment. Viewing emotions from an evolutionary perspective means understanding that each distinct emotion is different from all others because it evolved to serve a distinct function, one that may or may not be relevant to humans' capacity to survive and reproduce today but which necessarily was relevant during the period in which the emotion emerged in the species. In this view, to understand why an emotion exists, one must understand what its function is (or was in the ancestral environment). This means examining: (*a*) what recurrent evolutionarily significant situation (or appraised situation) elicits the emotion; (*b*) what the emotion does—that is, what effects it has on the organism; and (*c*) how the eliciting situation and emotional output are connected, or, more specifically, how (*b*) functions to solve (*a*).

Self-conscious emotions are thought to have evolved in species with complex self-representations and self-awareness to coordinate and motivate behaviors essential to social dynamics, in other words, to promote behaviors that increase the stability of social hierarchies and affirm status roles. This occurs both interpersonally and intra-psychically; self-conscious emotions inform other group members about an individual's shifting status while simultaneously informing the emotion-experiencing individual about this change and causing them to behave in ways that best cope with, or take advantage of, their changing status. In the case of pride, its associated behavioral, physiological, cognitive, and affective experience functions to promote the attainment and maintenance of social rank.

Social hierarchy: a social structure wherein individuals occupy different social ranks that determine their relative influence, deference, attention, and access to resources

WHAT IS PRIDE?

A Tale of Two Prides

While most early scholars emphasized the dangers of pride, several told a different story. In the *Nichomachean Ethics*, Aristotle (4.3) admired the "proud man" and saw virtue in claiming what one deserved. Like Nietzsche (2000), he despised individuals too humble to recognize their own worth, calling them "little-souled." These scholars condemned both undue humility and undue or excessive pride, leading to an important distinction. Pride is virtuous when it is aligned with one's merits. Claiming pride beyond what is deserved has long been viewed as vanity; this is the sinful pride decried by Christian scholars. This distinction appears in many sources, and it seems to capture an essential bifurcation.

Psychological scientists built upon these early accounts to postulate two distinct components of the emotion (Lewis 2000, Tangney et al. 1989, Tracy & Robins 2004a); several lines of empirical work now support this account (Tracy & Robins 2007c). First, when asked to think about and list words relevant to pride, research participants consistently generate two very different categories of concepts, which empirically form two separate clusters of semantic meaning. The first cluster,

which has been labeled authentic pride, includes words such as "accomplished" and "confident" and fits with a prosocial, achievement-oriented, earned pride conceptualization. The second cluster, labeled hubristic pride, includes words such as "arrogant" and "conceited," and fits with a more self-aggrandizing, egotistical, and undeserved conceptualization (Tracy & Robins 2007c). A similar two-cluster pattern was found to emerge from semantic conceptualizations made by university students in mainland China, who generated pride words indigenously in Chinese (Shi et al. 2015). This cross-cultural replication suggests that the tendency to make a distinction between authentic and hubristic pride is not likely to be an artifact of Western culture, but rather it may reflect pride's universal structure.

The second set of findings supporting a dual-faceted structure of pride comes from studies asking participants to rate their subjective feelings during an actual pride experience, or the feelings that describe their general dispositional tendency to feel pride (i.e., trait pride). Across studies, factor analyses of these ratings consistently reveal two relatively independent factors, which closely parallel the two semantic clusters. Subsequent analyses have demonstrated that the two factors are not artifacts of a tendency to group together good versus bad, activated versus deactivated, or trait versus state words (Tracy & Robins 2007c). These factor analytic findings have also been replicated in mainland China and South Korea, using both indigenously derived pride-related words (in Chinese and Korean) and translated versions of English words representing authentic and hubristic pride in the United States (Shi et al. 2015).

The two pride facets are different not only in their content but also in their nomologic networks; they are associated with markedly different personality profiles. Authentic pride is positively related to the socially desirable and psychologically adaptive Big Five traits of extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience. Hubristic pride, in contrast, is negatively related to the two prosocial traits of agreeableness and conscientiousness (Tracy & Robins 2007c). These distinctions were also replicated in a Chinese sample (Shi et al. 2015). People who tend to feel authentic pride also tend to have high self-esteem, at both an explicit and implicit level, whereas those who tend toward hubristic pride are more likely to have low implicit and explicit self-esteem and to be prone to shame, along with vulnerable or dysfunctional (as well as grandiose) forms of narcissism (Tracy & Robins 2007c, Tracy et al. 2009a). Authentic pride is also positively associated with narcissism, but only with the grandiose, generally more psychologically adaptive, form, consistent with the suggestion that the distinction between the two prides maps onto the distinction between genuine self-esteem and narcissism (Paulhus et al. 2004, Tracy et al. 2011a). Together, these findings suggest that authentic pride is the prosocial, achievement-oriented facet of the emotion, whereas hubristic pride is the more antisocial and aggressive facet, which is related to narcissistic self-aggrandizement and may, in part, be a defensive response to underlying feelings of shame (Tracy & Robins 2003).

Indeed, individuals high in dispositional authentic pride tend to be low in depression, trait anxiety, social phobia, aggression, hostility, and rejection sensitivity; high in relationship satisfaction, dyadic adjustment, and social support; and securely attached to their relationship partners. In contrast, individuals high in dispositional hubristic pride are more likely to experience chronic anxiety and hostility, to engage in a range of antisocial misbehaviors (e.g., drug use, petty crimes), and to be low in dyadic adjustment and social support. Not surprisingly, given these divergent profiles, the pride facets are located in different places on the interpersonal circumplex (i.e., the independent dimensions of agency and communion; Kiesler 1983). Although individuals high in agency are prone to experiencing both facets of pride, and both facets are positively related to an approach orientation, as evidenced by high scores on measures of the behavioral activation system and low scores on the behavioral inhibition system (Carver et al. 2010), individuals high in

Authentic pride:
the prosocial, achievement-oriented facet of pride captured by feelings like accomplishment and confidence and associated with heightened psychological well-being

Hubristic pride: the antisocial, aggressive facet of pride captured by feelings like arrogance and conceit and associated with poor psychological well-being

communion are prone only to authentic pride; hubristic pride shows a negative relationship with communal traits (Cheng et al. 2010).

It is important to note that although hubristic pride maps closely onto narcissism, and authentic pride onto self-esteem, both facets are distinct from these larger personality constructs (Tracy et al. 2009a). Even after controlling for self-esteem, authentic pride is positively related to authenticity, dyadic adjustment, and relationship satisfaction and negatively related to rejection sensitivity, Machiavellianism, aggression, trait anxiety, and depression. Similarly, after controlling for narcissism, hubristic pride is negatively related to implicit self-esteem and authenticity and positively related to rejection sensitivity, trait anxiety, Machiavellianism, aggression, and misbehavior. Hubristic pride also predicts several constructs that are theoretically related to narcissism but that tend not to show predicted correlations with standard measures of narcissism (e.g., the Narcissistic Personality Inventory) (Raskin & Terry 1988): low implicit self-esteem, dyadic maladjustment, and low perceived social support. Hubristic pride is also associated with a tendency to engage in strategic dishonesty—i.e., to lie to get ahead—in situations where one's genuine skills and competencies are unlikely to lead to high social status. This association, too, holds when controlling for shared variance with narcissism as well as with psychopathy and Machiavellianism (Mercadante & Tracy 2022a).

Several studies suggest that the two pride facets are elicited by distinct cognitive appraisals. As noted above, pride occurs when individuals appraise a positive event as relevant to their identity and their goals for their identity. In addition to these appraisals, certain attributions are required: Pride-eliciting events must be attributed to the self (i.e., internally caused) (Ellsworth & Smith 1988, Lewis 2000, Roseman 1991, Tracy & Robins 2004a, Weiner 1985). Authentic and hubristic pride may be further distinguished by additional attributions: Authentic pride is more likely to result from attributions to internal but unstable, specific, and controllable causes, such as effort (e.g., "I won because I practiced"), whereas hubristic pride is more likely to result from attributions to internal but stable, global, and uncontrollable causes, such as ability (e.g., "I won because I'm great") (Tracy & Robins 2007c). Studies in China largely replicate these patterns. Based on content coding of Chinese participants' pride descriptions, those who experience hubristic pride tend to attribute their successes to internal and stable abilities and not to unstable behaviors.

These findings suggest that the effort/ability attribution distinction may be an important factor in determining whether an individual experiences authentic or hubristic pride in response to a given success. However, one set of studies failed to replicate these distinct relations (Holbrook et al. 2014). Furthermore, factors beyond attributions, such as stable individual differences in personality, also clearly play a role in the distinction between the facets. For example, when examining how an observer judges which form of pride a target is likely to be experiencing, studies found that although perceptions of a proud target's attributions influenced these judgments, perceptions of the target's arrogance were also relevant (Tracy & Prehn 2012). Arrogance was inferred both from the kinds of attributions targets made (i.e., attributions to ability were perceived as more arrogant than attributions to effort) and from the way in which targets made them (i.e., whether the target seemed to be bragging). At least in determining which kind of pride others are experiencing, then, perceived arrogance versus modesty may be as important as presumed cognitive appraisal elicitors.

Synthesizing much of the research on the divergent correlates of the two facets of pride, Dickens & Robins (2022) conducted a comprehensive meta-analysis that supported the robustness of the associations described here. They further found that people high in trait authentic pride tend to experience less social anxiety, social phobia, and loneliness, whereas those high in trait hubristic pride tend to experience more of these psychologically maladaptive tendencies. Other recent studies have further augmented this core distinction; Schumann & Walton (2022) found that people expect to feel greater authentic than hubristic pride in response to forgiving someone

who committed a transgression, but greater hubristic than authentic pride in response to exacting revenge upon the transgressor. Other studies have found that the distinction is relevant to consumption: Hubristic, but not authentic, pride leads people to seek attention-grabbing products (Ahn et al. 2021). However, this effect emerges only for products that would be used in public, suggesting that a hubris-driven desire for luxury goods reflects a need for social approval. Other studies found that authentic pride leads people to make luxury purchases as a way of rewarding themselves for hard-earned accomplishments, yet they feel hubristic pride while using these products (McFerran et al. 2014). Furthermore, observers tend to assume that luxury good purchases are motivated by hubristic, not authentic, pride.

In other recent work from our own lab, we found that the two pride facets have divergent relations with another of Dante's deadly sins: greed. Individuals high in dispositional greed experience a boost in both authentic and hubristic pride in response to new acquisitions, but, very shortly after making these purchases, their feelings of authentic pride fade (Mercadante & Tracy 2022b). This pattern was replicated across several studies, including two that used a longitudinal approach to track changes in feelings over time after a new purchase. Interestingly, corresponding rises and falls in other positive emotions—including hubristic pride—were not observed among greedy individuals, and the pattern found for authentic pride held when controlling for shared variance with generalized positive affect. These results suggest that the short-lived nature of the authentic pride felt specifically from new acquisitions may be what motivates greedy people to repeatedly seek to acquire; they may do so to attain that brief affective burst again and again. Given that authentic pride is the form of pride most strongly related to self-esteem, greed-driven acquisitiveness may be a self-esteem regulation mechanism among these individuals. In fact, this pattern was particularly pronounced among greedy individuals with low self-esteem, suggesting that they may be especially dependent on the bursts of authentic pride new acquisitions bring.

The Pride Nonverbal Expression

Historically, at least one camp of affective scientists has used the presence of a facial expression as a gold-standard criterion to determine whether a particular emotion is likely to be evolved or basic (e.g., Ekman 1992, Ekman & Cordaro 2011; see Tracy & Randles 2011 for a review). Although pride was not included in the pantheon of emotions originally thought to meet this criterion, based on seminal cross-cultural studies (e.g., Ekman et al. 1969, 1987; Izard 1971), more recent work provides strong evidence for a cross-cultural, reliably recognized pride expression (see **Figure 1**). The prototypical pride expression includes the body (i.e., expanded posture, head tilted slightly back, arms akimbo or raised above the head with hands in fists) as well as the face (i.e., small smile), and it is reliably recognized and distinguished from similar emotions (e.g., happiness, excitement) (Tracy & Robins 2004b, 2007b). A handful of labs have documented reliable recognition of the pride expression, with recognition rates in educated North American samples ranging from around 80% to 90%, comparable to rates found for other well-studied emotion expressions (e.g., anger, sadness) (Beck et al. 2010; Brosi et al. 2016; Cordaro et al. 2020; Tracy & Robins 2004b, 2007b; see Witkower & Tracy 2019a for a review). Furthermore, like those other expressions, pride can be recognized quickly and efficiently from a single snapshot image (Tracy & Robins 2008a), suggesting that recognition is an automatic cognitive process. Further supporting this conclusion, adolescents with autism spectrum disorders reliably recognize pride expressions as accurately and quickly as do typically developing individuals of the same age (Tracy et al. 2011b).

Importantly, the pride expression is reliably recognized not only by North American and European adults, but also by North American children as young as 4 years old (Tracy et al. 2005) and by adults from a variety of countries and cultural contexts, including individuals living in

Pride expression:
a cross-culturally recognized emotion expression that includes expanded posture, head tilted slightly back, arms akimbo or raised above the head, and a small smile

Figure 1

Prototypical pride expressions, with arms raised (*left*) and arms akimbo (*right*). Both displays are reliably recognized at high rates in educated Western samples and by members of isolated small-scale traditional societies. Figure adapted from Tracy & Robins (2007b).

highly isolated, largely preliterate, traditional small-scale societies in Burkina Faso and Fiji who had almost no exposure to Western cultural knowledge (Tracy & Robins 2008b, Tracy et al. 2013). These findings suggest that the pride expression is likely to be a human universal, as it passes the maximally divergent populations test (Norenzayan & Heine 2005): It is reliably recognized by individuals who hail from divergent cultural backgrounds and are geographically separated. In other words, the Burkinabe and Fijians who demonstrated reliable pride recognition are unlikely to have learned about the expression through cross-cultural learning (e.g., North American media).

Nonetheless, it is noteworthy that the pride expression differs from other highly recognizable emotion expressions, in that recognition requires visible bodily and head components as well as facial muscle movements (Tracy & Robins 2004b). This distinction, which also characterizes the shame expression (Izard 1971, Keltner 1995, Tracy et al. 2009b), may be indicative of the distinctive evolutionary origins of these two self-conscious emotion expressions; they may be homologous with nonhuman dominance and submission displays, which involve similar movements (see Tracy 2016, Tracy & Randles 2011). However, one study found that pride can be recognized at fairly high rates from the face and head alone (i.e., without visibly expanded posture) if shown as a dynamic display—that is, via a video showing movement (Nelson & Russell 2011). This finding suggests that although static images of pride expressions require visible expanded posture to be accurately recognized, the observation of a head moving to tilt upward obviates the need for postural expansion. In everyday interpersonal interactions, in other words, pride displays are likely to be recognized even when bodily movements beyond the head are not visible.

In addition to being widely and reliably recognized, the pride expression is also reliably displayed in predicted situations by individuals likely to be experiencing pride. Children as young as 3 years old show components of the expression following success at a task or game (Belsky et al. 1997, Lewis et al. 1992, Stipek et al. 1992), high school students hold a more erect posture after performing well on a class exam (Weisfeld & Beresford 1982), and adult athletes participating in the Olympic Games judo competition display the full expression after winning a match (Tracy & Matsumoto 2008). Importantly, this last finding was observed among athletes from 30 different nations and held across all cultural dimensions examined. It was also replicated in a separate

Dominance: social rank acquisition and maintenance strategy involving the use of intimidation or threat to induce fear in others and obtain deference

sample of blind athletes from 20 countries participating in the Paralympic Games. In what is perhaps the strongest evidence for universality, pride was also displayed following success by a congenitally blind subsample of these individuals—people who could not have learned to display pride through visual modeling (Tracy & Matsumoto 2008). Together, these findings suggest that the pride expression may be an innate behavioral response to success. If it were not a human universal, it is unlikely that the expression would be recognized so consistently and robustly by individuals who could not have learned it through cross-cultural transmission or be reliably and spontaneously displayed in pride-eliciting situations by individuals who have never seen others show the expression.

In addition to its recognizable bodily expression, pride may also be associated with a distinct vocal burst, which listeners agree conveys achievement (Sauter & Scott 2007). Observed recognition rates for the achievement burst are slightly lower than those typically found for visual pride displays, but higher than those found for vocal bursts intended to convey contentment, relief, and pleasure. In general, research on vocal expressions of emotion remains somewhat young, so further work is needed to determine whether pride can be reliably conveyed through this medium.

More broadly, the evidence for a universal nonverbal display of pride raises the question of why humans might have evolved to display pride and recognize it in others. In answering this question, a growing body of research suggests that the pride expression functions to facilitate the attainment of social rank by signaling an individual's increased deservedness of high status to others. Across species, adaptive benefits accrue to those who effectively send and receive signals of high status through readily identifiable nonverbal displays; such individuals are likely to receive social influence and attention (Cashdan 1998, Cheng et al. 2013, Foulsham et al. 2010), a greater allocation of potentially scarce resources (Brown & Maurer 1986), higher-quality mates (Apicella et al. 2007, von Rueden & Jaeggi 2016, von Rueden et al. 2011), and deference (Holland et al. 2017, Sell et al. 2014). Conversely, an ability to recognize high rank in others can help avoid potentially costly agonistic encounters (Ellyson & Dovidio 1985, Lieberz et al. 2017, Stirrat et al. 2012) and facilitate social learning opportunities (Birch et al. 2010, Chudek et al. 2012, Martens et al. 2012, Over et al. 2013) and power maneuvering (Muller & Mazur 1997, Todorov et al. 2005). In the context of these environmental pressures, it is likely that humans would evolve to communicate their deservedness of high rank to others through a reliably and efficiently recognized nonverbal display.

As noted above, numerous studies have documented spontaneous pride displays among children and adults across cultures immediately following success—a situation likely to boost their status, especially if widely advertised via an automatically recognized, distinct nonverbal display (Belsky et al. 1997, Lewis et al. 1992, Stipek et al. 1992, Strayer & Strayer 1976, Tracy & Matsumoto 2008, Weisfeld & Beresford 1982). Other studies have found that artificially posing the expression—most notably, the expansive body posture involved—increases confidence and a tendency to take action, suggesting that the embodiment of pride may generate status-related thoughts and motives (Cuddy et al. 2018). Behaviors consistent with the pride expression also have been observed in the dominance displays shown by certain nonhuman primates in moments when they are exerting or seeking status. For example, both after defeating a rival and prior to an agonistic encounter, high-ranking chimpanzees show inflated bluff displays, which include behaviors such as arms raised and body expanded (de Waal 1989, Martens et al. 2010).

More direct evidence for a causal link between pride displays and rank attainment comes from the finding that observers who view people displaying pride automatically perceive those people as high status (Shariff & Tracy 2009). Pride displays are more strongly implicitly associated with high-status concepts than are displays of low-status emotions, displays of other high-status emotions (e.g., happiness, anger), and emotions not theoretically relevant to status (e.g., disgust, fear).

Furthermore, the status signal sent by pride displays is powerful enough to override contradictory status cues in the environment, such as clothing suggesting low status (Shariff et al. 2012). In all of these studies, high status was most strongly communicated from pride displays when automatic, or implicit, responses were measured; when explicit judgments were assessed instead, similar but weaker effects emerged (Shariff et al. 2012, Tracy et al. 2013). The automaticity of this status signal is consistent with evolutionary accounts: If the pride expression evolved as a prelinguistic, preconscious form of communication, its perception would be expected to occur through low-level cognitive processes that can elicit adaptive behavioral responses without conscious reflection (Bargh & Pietromonaco 1982).

Nonetheless, stronger evidence for the evolution of the pride expression as a status signal comes from studies demonstrating that the tendency to automatically perceive these displays as high status generalizes across diverse populations. Individuals living in a highly isolated, traditional small-scale society on a remote island in Fiji were found to show the same automatic responses to pride displays as did North American undergraduates (Tracy et al. 2013). Interestingly, the Fijian villagers who participated in this research hold a set of cultural practices and norms that largely suppress displays of status or pride, so the observation that these individuals nonetheless perceive pride displays as high status at an implicit level supports the suggestion that pride is likely to be a universal signal of high status.

A Neuroscientific Approach to Pride

Studies have begun to investigate the neural correlates of pride experiences. Findings suggest that feelings of pride are associated with the activation of numerous brain regions, including multiple regions of the medial prefrontal cortex (mPFC), precuneus, posterior cingulate cortex (PCC), caudate, septum, orbital frontal cortex (OFC), right posterior superior temporal sulcus (pSTS), and superior temporal gyrus (STG). These regions are thought to be responsible for mental activities such as self-referential thinking, reward processing, memory retrieval, social cognition, and affective processing (Gilead et al. 2016; Hu et al. 2019; Hong et al. 2019; Kong et al. 2018; Müller-Pinzler et al. 2015; Roth et al. 2014; Stolz et al. 2020; Takahashi et al. 2004, 2008; Zahn et al. 2009, 2014).

One fMRI study also found greater activation in the right pSTS and left temporal pole—two brain regions thought to be involved in theory of mind—when participants imagined themselves in pride-eliciting compared to neutral scenarios (Takahashi et al. 2008). Although theory of mind may be an important cognitive prerequisite for pride (as self-evaluations require the understanding that others can evaluate the self), these researchers had expected to find greater mPFC activation, given previous findings of mPFC activity during negative self-conscious emotional experiences as well as research linking the mPFC to self-referential thought (e.g., Fossati et al. 2003, Kircher et al. 2002, Takahashi et al. 2004). However, another study found that pride was associated with greater activation of the mPFC compared to guilt, joy, and anger (Gilead et al. 2016); yet another found greater activation of the posterior medial cortex, another region linked with self-referential thinking, following a pride versus compassion induction (Simon-Thomas et al. 2012). In contrast, compassion activated the midbrain periaqueductal gray (PAG), a region associated with parental nurturing behaviors.

In other work, one study compared the distinct resting-state neural activity associations for individuals dispositionally prone to hubristic versus authentic pride (Kong et al. 2018). Results showed distinct neural substrates, providing the first evidence for a neurological distinction between the two facets of pride. In particular, authentic pride was positively associated with fluctuations in the bilateral STG, consistent with the findings of Takahashi and colleagues (2008).

Hubristic pride, in contrast, was positively associated with fluctuations in the left OFC and negatively with fluctuations in the PCC. Given the associations between hubristic pride and psychological dysfunction, the positive association between hubristic pride and OFC resting-state activity is consistent with previous work showing an association between resting-state OFC activation and low well-being and depression (Hou et al. 2012, Kong et al. 2015, Liu et al. 2014, Xu et al. 2014). Furthermore, the PCC is associated with self-referential processing, so decreased spontaneous activation of the PCC among those high in hubristic pride may indicate abnormal self-referential processing among these individuals.

Prior to the widespread use of fMRI technology in affective science, neuroscientists in this area more typically examined the physiological and hormonal output of distinct emotions (e.g., Gross & Levenson 1995). One study in this vein compared the physiological experience of pride (elicited via positive feedback) to guilt and to a neutral emotion condition (Fourie et al. 2011). Pride-condition participants exhibited moderate increases in skin conductance and heart rate variability; this response was described as indicative of a pleasurable state akin to "being in the zone." Pleasantly arousing physiology is also associated with positive reinforcement, supporting the notion that pride experiences feel good at a bodily as well as a cognitive level, and thus may promote an orientation toward future behaviors similar to those that elicited the experience. Importantly, though, pride is not as strongly arousing as negative emotions (i.e., anger and shame; Herrald & Tomaka 2002), suggesting a more moderate impact on behavioral action compared to emotions that function to trigger immediate and potentially life-saving behavioral responses.

The Early-Life Development of Pride

Like other self-conscious emotions, pride is first experienced around age 3, later in the course of development than more basic emotions like fear and joy (which emerge in infancy) (e.g., Campos et al. 1983, Garcia et al. 2015, Lewis et al. 1992, Stipek et al. 1992). This conclusion is based on studies that present young children with a challenging task and compare their behavioral and verbal responses after success versus failure or after success under easy versus difficult conditions. Behavioral components of the pride expression and verbal indicators of pride tend to be displayed by the age of 2.5–3 years, but not earlier, and not in response to failure or easily obtained success.

The capacity to understand pride emerges somewhat later than its experience; children are unable to accurately label their own feelings of pride after a success until about age 5 (Garcia et al. 2015). The earliest emerging understanding is the ability to recognize the pride expression in others, which first appears around age 4 (Tracy et al. 2005). The ability to understand the situations in which a person might feel pride seems to develop later, as 7-year-olds have difficulty correctly attributing pride to individuals whose success is due to internal (e.g., effort/ability) but not external (e.g., luck) factors (e.g., Graham & Weiner 1986, Harris et al. 1987). By age 9 or 10, however, children grant pride only to individuals who are the cause of their own success (Kornilaki & Chloverakis 2004).

Turning to the distinction between authentic and hubristic pride, one study used a cross-sectional approach to delineate a portrait of normative developmental shifts in experiences of both pride facets across the life span (Orth et al. 2010). Authentic pride increased fairly continuously from adolescence to old age, in a trend paralleling overall well-being. In contrast, hubristic pride peaked in adolescence and young adulthood, declined throughout adulthood until about age 65, and was stable in old age. These findings suggest that pride follows the maturity principle of personality development (e.g., Roberts et al. 2008), wherein maturing social roles are thought to facilitate the experience and expression of socially and intra-psychically adaptive emotions and traits. Other work examining the development of the two pride facets found that children aged 7–14 with autism spectrum disorders showed similar levels of proneness to both authentic and

hubristic pride as neurotypical children of the same ages (Davidson et al. 2018), suggesting that individual differences in the two facets develop similarly in both populations.

FROM PRIDE TO SOCIAL RANK

How Does the Pride Experience Facilitate Rank Attainment?

Pride feelings are pleasurable and thus reinforcing; there is no other emotion that makes individuals feel not only good but also good about themselves. Through socialization, children come to experience pride in response to praise for socially valued achievements, first from their parents and later from teachers and peers. Eventually, individuals experience pride in response to these accomplishments even without others' evaluations. The reinforcing properties of pride, in turn, motivate individuals to seek future achievements; so, without the need for external evaluations, individuals strive to develop an identity that coheres with social norms. Those who are successful in this pursuit are, in turn, rewarded with social approval, acceptance, and increased social status (Sznycer et al. 2017, Tracy & Robins 2004a).

This account of pride is supported by several empirical findings. Ross et al. (2005) found that pride can facilitate memory for pride-eliciting events and make these events seem temporally more recent. These cognitive changes likely help motivate behaviors oriented toward ensuring that similar events occur in the future. Williams & DeSteno (2008) found that individuals manipulated to experience pride in response to task success are more likely to persevere at subsequent similar tasks. Similarly, Herrald & Tomaka (2002) found that participants manipulated to experience pride showed improved task performance both during and immediately following the pride experience, and Verbeke et al. (2004) found that salespeople who reported a high likelihood of experiencing pride in response to work success showed a higher level of job performance, exerted more effort at work, and reported greater motivation toward productivity and success.

In addition to motivating achievement through its reinforcement properties, pride may also promote status-increasing behaviors through its informational properties. According to the affect-as-information hypothesis (Schwarz & Clore 1983), emotional feelings function, in part, to inform individuals of changes in their environment, allowing them to respond knowingly and flexibly to significant events. From this perspective, pride may function to inform individuals that they merit increased status and acceptance. According to Leary et al. (1995), self-esteem functions as a social barometer, or "sociometer," informing individuals of their social status and motivating them to behave in ways that maintain their status and others' acceptance and that avoid group rejection. Pride may be the affective mechanism that feeds into the sociometer and boosts self-esteem. Supporting this expectation, studies from our lab found that long-distance runners who achieved greater training success over the course of a month felt greater pride in response, suggesting that pride is a barometer of achievement; furthermore, runners who did not perform as well felt less pride and reported stronger intentions to change their training habits over the subsequent month in order to improve (Weidman et al. 2016). A similar pattern emerged for undergraduate students in a psychology class; pride in response to exam performance gauged performance, and those who felt low pride in response to a poor performance reported stronger intentions to change their study habits for the next exam. Most importantly, these students' pride-driven plans to study differently predicted improved grades (Weidman et al. 2016). The observed indirect effect of low pride on exam score improvement among previously poor-performing students could not be attributed to prior exam score, indicating that pride's impact on achievement goes beyond that of simply knowing about one's past performance.

One question that arises from this account is how this functional process plays out for hubristic pride, which is positively related to low—rather than high—self-esteem, and which is less closely

tied to the attainment of specific achievements (Tracy & Robins 2007c). The answer may be found within a growing body of work suggesting that the two facets of pride separately evolved to facilitate the attainment of high rank in two distinct forms of status hierarchies (Cheng et al. 2010, Tracy 2016, Tracy et al. 2020).

Prestige: social rank acquisition and maintenance strategy involving the demonstration of knowledge and skills; others defer to prestigious individuals to obtain social and learning opportunities

Evolutionary Foundations of Rank Attainment: Dominance and Prestige

Although affiliative and cooperative interactions form the main fabric of human social relationships, group living necessarily entails conflict over divergent goals and competition over scarce resources. The formation of social hierarchies, organizational structures observed across many species, presents a solution to these conflicts. Although the bases on which humans form hierarchies and allocate rank are diverse, hierarchies are fundamentally social structures in which high-ranking individuals reliably receive greater influence, deference, attention, and valued resources than low-ranking others (Homans 1950, 1961; Magee & Galinsky 2008; Mazur 1973, 1985; Strodtbeck 1951; Zitek & Tiedens 2012). By affording high-ranking individuals privileged influence and access to valued resources such as mates and food, mutually accepted hierarchical relationships minimize costly agonistic conflicts, establish order, and facilitate coordination and cooperation among individuals in groups (Bales 1950, Berger et al. 1980). A substantial body of evidence indicates that stable social hierarchies, in which subordinates defer to rather than dispute their high-ranking counterparts, generally result in better group coordination and performance as well as more satisfying relationships (e.g., de Kwaadsteniet & van Dijk 2010, Halevy et al. 2011, Ronay et al. 2012, Tiedens & Fragale 2003, Tiedens et al. 2007).

How do individuals attain high rank? A growing body of research suggests that humans reliably use two distinct suites of behaviors underpinned by distinct psychological systems, each of which evolved to subserve a different selection pressure. This two-strategy account of social rank was initially proposed by Henrich & Gil-White (2001; see also Cheng & Tracy 2014; Cheng et al. 2010, 2013), who argued that hierarchical differences in human groups are the result of both (*a*) coerced deference to dominant others who induce fear by virtue of their ability to inflict physical or psychological harm (i.e., dominance) and (*b*) freely conferred deference to prestigious others who possess valued skills and abilities that can be copied or otherwise learned by subordinates (i.e., prestige).

Dominance entails intimidation and coercion and is thought to be homologous with hierarchical systems in nonhuman primates that result from agonistic contests (Chase et al. 2002, Rowell 1974). In humans, dominance is observed in dyadic social relationships based on threat of force, such as between police and citizen, bully and victim, or boss and employee. In general, dominant individuals instill fear in subordinates through threats that are typically more psychological than physical. Subordinates respond by complying in order to safeguard their well-being and resources. Prestige, in contrast, refers to influence that is willingly granted to individuals who are respected for their skills, success, or knowledge. Subordinates seek out the opinions and company of prestigious others in order to imitate and learn from them (see the sidebar titled Over-Imitation in Children). Prestigious individuals, in turn, are conferred influence and higher rank that rest on genuine persuasion and voluntary deference rather than forced compliance. Prestige-based rank is thought to be unique to humans because it relies on cultural learning, which is less developed or nonexistent in other species (Boyd & Richerson 1985, Laland & Galef 2009). In humans, learning from skilled group members is a low-cost way of acquiring fitness-maximizing knowledge, so the emergence of cultural learning in early human history likely generated selection pressures to preferentially identify, attend to, and copy knowledge from highly skilled others. These selection pressures would favor a psychological machinery capable of differentiating and ranking

OVER-IMITATION IN CHILDREN

Young children have been shown to over-imitate adults when they seek to accomplish a goal. This phenomenon was first demonstrated by Horner & Whiten (2005), who presented children (aged 3–4) and chimpanzees with a puzzle box containing a treat and performed both causally relevant and irrelevant actions when demonstrating how to open the box. Although chimpanzees ignored the apparently irrelevant actions of the demonstrator when opening the box themselves, children imitated all the actions performed. Furthermore, this over-imitation tendency occurs more frequently in 5-year-olds when the adult demonstrator holds the status of a teacher (McGuigan 2013), suggesting that perceived knowledgeability influences over-imitation. This unique human tendency is thought to promote the learning of opaque cultural knowledge, which is particularly relevant to human cultural evolutionary processes.

individuals along the dimension of skill, such that the highest-quality cultural models with the greatest expertise are elevated to the top of the prestige hierarchy (Cheng & Tracy 2014).

Consistent with this theoretical framework, dominance and prestige are associated with distinct personality traits, competencies, emotional tendencies, and behaviors. Prestigious individuals tend to be well-liked, conscientious, humble, agreeable, and high in self-esteem. They seek social approval, as demonstrated by their high need for affiliation and fear of negative evaluation (Cheng et al. 2010, Maner & Case 2016). In contrast, dominant individuals are typically disliked. They tend to be aggressive, disagreeable, arrogant, manipulative, and high in all dark-triad traits (i.e., Machiavellianism, narcissism, and psychopathy) (Buttermore 2006; Case & Maner 2017; Cheng et al. 2010, 2013; Semenya & Honey 2015; Weidman et al. 2018). Among individuals on collegiate varsity teams, those considered prestigious show high levels of academic and athletic achievement, as well as social, intellectual, and advice-giving abilities; these skills tend to be unrelated to dominance (Cheng et al. 2010). Similarly, in a small-scale Amazonian society, prestigious group members demonstrate skills and expertise surrounding hunting, food production, and the procurement of allies (Reyes-Garcia et al. 2008, 2009; von Rueden et al. 2008).

Despite the stark contrast between the personalities and behaviors documented among dominant and prestigious individuals, both strategies facilitate the acquisition of status across cultures, based on lab studies and field observations. In one lab study, small groups of previously unacquainted university students granted social influence to individuals in their groups who were judged by the rest of the group as prestigious and to those who were judged as dominant (Cheng et al. 2013). Both prestigious and dominant group members had greater decision-making power and received greater visual attention from others, compared to individuals low in either form of social rank. Notably, dominant leaders rose to power in these groups despite the fact that their peers also reported disliking them; in fact, group members' fear of dominants mediated the relation between dominance and social rank, suggesting that subordinates' fear was what gave dominants their power. Furthermore, these relations held across peer and outside-observer ratings of influence as well as in a more objective, behavioral measure of influence: decision-making power over a group task. Brand & Mesoudi (2019) replicated these findings in a study of naturalistic groups such as sports clubs, chess clubs, and volunteer groups. Across all the groups they examined, peer ratings of dominance and prestige independently predicted influence over the group. Similarly, in a study of the Chabu, an Ethiopian population of egalitarian former hunter-gatherers, Garfield & Hagen (2020) found that peer ratings of both dominance and prestige independently predicted status.

Although both dominance- and prestige-based strategies can be wielded to acquire status, maintaining status is a distinct challenge. For dominants, high status is often obtained against

the will of the group, so maintaining rank is likely to be more difficult for these individuals than it is for prestigious leaders. Redhead and colleagues (2019) addressed this issue in a 16-week longitudinal study of undergraduates working together in small groups. Although both peer-rated dominance and prestige predicted status early on, by the end of the study dominance was unrelated to status within the group, whereas the association between prestige and status increased over time.

What might cause followers to show less deference toward dominant leaders over time? One possibility is that dominant leaders engage in selfish behaviors that are costly to group members and overall group performance; realizing this, followers may defect. Supporting this account, dominant leaders show a willingness to sacrifice group goals in order to maintain their own authority, especially if they believe their leadership is unstable (Maner & Mead 2010). More specifically, in experiments that threatened a dominant leader's high-status position, he or she responded by withholding important information from group members, excluding skilled others from the group, and physically separating group members to reduce their ability to communicate with one another and to inhibit social bonding (Case & Maner 2014, Maner & Mead 2010). These practices were directed largely toward the most skilled subordinates (i.e., those most likely to threaten the dominant's status), and they may be a way of preventing leveling tactics used by group members to remove power from dominant leaders (Boehm 1993, Gintis et al. 2015, Lukaszewski et al. 2016).

Importantly, none of these practices were observed among prestigious leaders. This distinction is consistent with the expectation that prestigious leaders maintain high status by ensuring that they are respected by group members; damaging group cohesion and performance would undermine those goals. However, prestigious leaders also at times make decisions that do not maximize group outcomes. Though they tend not to intentionally hurt group members' performance or relationships, prestigious leaders' desire to please group members and remain well liked can make them prioritize popular choices over those that are best for the group (Case et al. 2018). Interestingly, this tendency is seen only when prestigious leaders make public decisions; in private, and thus not at risk of social disapproval, they are willing to go against group sentiment to do what is best (Case et al. 2021).

Do the Two Facets of Pride Function to Promote Distinct Forms of Rank Attainment?

From an evolutionary perspective, competition for prestige would likely favor individuals who demonstrate knowledge and a willingness to share it without arrogating their authority or lashing out; aggressive interpersonal behaviors would in some sense raise the price subordinates must pay to attain the valued knowledge. Authentic pride thus may have evolved to facilitate the attainment of prestige by promoting a focus on one's effort and accomplishments (i.e., making internal, unstable, controllable attributions for success) and fostering a sense of humility rather than arrogance. The findings that state and trait authentic pride are associated with prosocial behavior, agreeableness, conscientiousness, humility, and voluntary moral action (Hart & Matsuba 2007, Tracy & Robins 2007a, Tracy et al. 2009a, Verbeke et al. 2004, Weidman et al. 2018) are consistent with this account.

In addition, several studies suggest that authentic pride, specifically, is what motivates people to attain the socially valued achievements that can lead to prestige. In the studies described above demonstrating that low levels of pride inform long-distance runners and undergraduate students about their current performance, and motivate them to shift their behaviors as needed to improve, the form of pride was authentic (Weidman et al. 2016). Hubristic pride was not related to any observed adaptive changes or plans to change achievement-oriented behaviors.

However, hubristic pride may facilitate the attainment of dominance, rather than prestige, by motivating individuals to behave in an aggressive and intimidating manner, and providing them with a sense of grandiosity and entitlement that allows them to take power rather than earn it, while feeling little empathy for those who get in the way (Ashton-James & Tracy 2013, Tracy et al. 2009a). Supporting this account, Soldà et al. (2021) found that overconfidence—a trait associated with hubristic pride—led study participants who were paired with teammates to prioritize their own acquisition of greater portions of a prize relative to their partners, even when doing so caused the pair to receive a smaller prize overall.

Recent studies from our own lab found that individuals high in trait hubristic pride become willing to lie about their performance on an anagram-solving task when doing so could help them attain higher status (Mercandante & Tracy 2022a); this tendency, too, was restricted to the hubristic form of pride. Yet individuals high in hubristic pride did not lie to show off or impress others, even when they were presented with those opportunities. Instead, they lied only when they faced a direct threat to their status, in the form of being paired with a partner who had just outperformed them. This finding is consistent with the expectation that hubristic pride functions to promote high status and is part of what allows dominant leaders to behave in an antisocial manner when they feel that their status is threatened. Nonetheless, these studies do not provide direct evidence for an association between hubristic pride and dominance per se. Other studies, however, suggest that behaving unethically and immorally is associated with peer perceptions of dominance, and, furthermore, that prestigious individuals are viewed by peers as particularly prone to engaging in ethical and moral behaviors (Cheng et al. 2010). It therefore seems likely that the kind of reputation attained by hubristically proud individuals who engage in a strategy of lying or cheating for status acquisition is, ultimately, one of dominance.

Several other studies also provide support for a link between hubristic pride and dominance. Students prone to hubristic pride demonstrate creativity in lab tasks only if they are extrinsically motivated—that is, if they believe their creativity might help them attain some other goal, like improved social standing—or if they are made to feel angry (Damian & Robins 2012, 2013). In the latter research, participants recalled a time they had felt either happy or angry, then completed a behavioral measure of creativity. Among those who were made to feel happy, trait authentic pride predicted creativity but those prone to hubristic pride became less creative, suggesting that when things are going well, these individuals bask in their successes rather than putting in more effort. In contrast, when hubristically proud participants were angry, they worked harder. Similarly, dominant leaders tend to seek accomplishments not for the sake of contributing valued resources to their group, or helping others, but to prove that they are stronger, better, or more powerful (Case & Maner 2014).

Other studies provide more direct evidence for distinct associations between each pride facet and each status strategy. First, individuals prone to authentic pride rate themselves as highly prestigious, whereas those prone to hubristic pride rate themselves as more dominant (Cheng et al. 2010). Second, this pattern was replicated using peer ratings of dominance and prestige provided by varsity athletes judging their teammates' use of each strategy. Individuals high in authentic pride were viewed as prestigious (but not dominant) by their teammates, whereas those high in hubristic pride were viewed as dominant (but not prestigious) by teammates. Follow-up analyses showed that these effects could not be attributed to shared variance in positive affect, indicating that although prestigious individuals are generally happy, likeable, and agreeable (Cheng et al. 2010), the emotion that accounts for their ability to attain high status is not their general positivity but their specific authentic pride.

More recently, we examined the associations between pride and social rank longitudinally (Witkower et al. 2022b). Over 1,500 undergraduates reported their dispositional authentic and
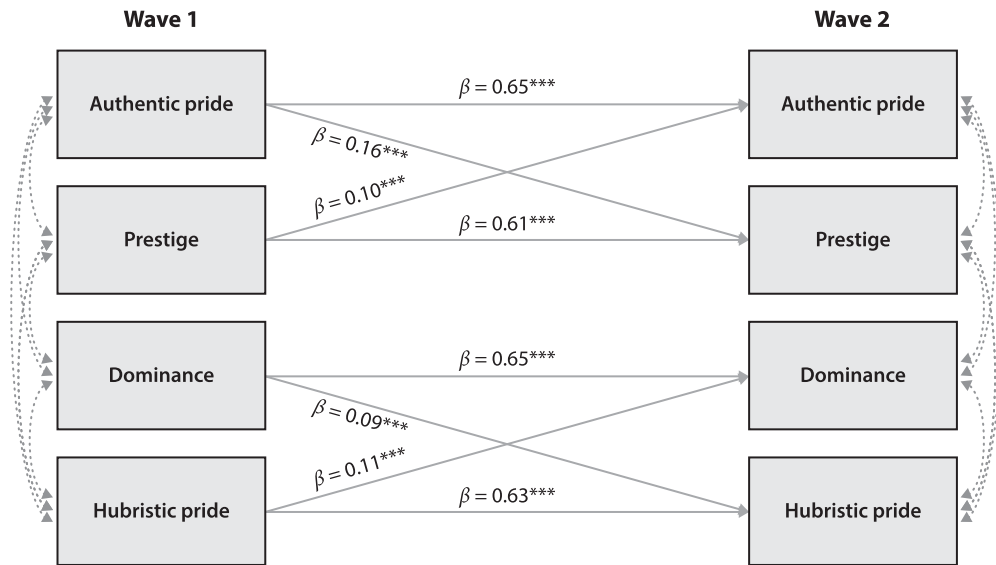
Figure 2

Cross-lagged longitudinal path analysis of the longitudinal relationships between authentic pride, hubristic pride, prestige, and dominance. Asterisks indicate $p < .001$. Figure adapted from Witkower et al. (2022b).

hubristic pride and their self-perceived dominance and prestige in the Fall semester of an academic year. They then reported these same traits again 4 to 6 months later, in the Spring semester. Using cross-lagged structural equation modeling, we found that those who reported high levels of authentic pride in the Fall increased in prestige by Spring, and those high in hubristic pride in the Fall increased in dominance by Spring. Furthermore, those who began the year high in prestige showed increases in dispositional authentic pride by Spring, and those who began high in dominance showed increases in hubristic pride. Importantly, authentic pride did not predict future gains in dominance, nor did hubristic pride predict gains in prestige; likewise, dominance did not predict gains in authentic pride, nor did prestige predict gains in hubristic pride (see **Figure 2**). These results suggest that the two facets of pride and the two rank attainment strategies are likely to be bidirectional causes and consequences of one another.

How Does the Pride Expression Facilitate the Attainment of Dominance and/or Prestige?

Given the evidence reviewed above suggesting that the pride expression cross-culturally signals increased status (Tracy et al. 2013), is spontaneously displayed after status-enhancing events (e.g., Tracy & Matsumoto 2008), and functions cross-culturally as an automatic status signal (Shariff & Tracy 2009, Shariff et al. 2012, Tracy et al. 2013), it seems likely that this expression evolved to communicate an individual's increasing social rank to others (Fessler 1999, Steckler & Tracy 2014, Witkower et al. 2020a). However, the studies demonstrating this association did not examine which form of status the expression was signaling—that is, whether observers perceived pride displayers as prestigious or dominant, or both (e.g., Shariff & Tracy 2009, Shariff et al. 2012); recall that the same pride expression is perceived as conveying both authentic and hubristic pride (Tracy & Robins 2007b). Other research, however, suggests that the pride expression is likely to be more strongly associated with prestige than with dominance.

In a first piece of evidence for this distinction, several studies have shown that the pride expression triggers automatic associations with concepts related to the possession of knowledge and expertise (Birch et al. 2010, Martens 2014). Furthermore, observers reliably use pride displays to determine which group members have knowledge or expertise that should be copied. Financially motivated participants were found to copy answers to difficult trivia questions provided by peers displaying pride significantly more often than they copied the answers of peers displaying happy, neutral, or shame expressions (Martens & Tracy 2013). Although copying is not a clear-cut indication of prestige, it is unlikely that these participants would copy the answers of pride displayers with whom they had never directly interacted if the expression conveyed dominance, given that individuals defer to dominants only if they feel threatened by them.

More directly addressing this question, several studies have tested the extent to which each of the critical behaviors associated with the pride expression are judged by observers as conveying prestige and dominance (Witkower et al. 2020b). Across targets varying in gender and ethnicity, and posing a range of nonverbal expressions, displays that portrayed expansive posture, a slight smile, and an upward head tilt—all critical components of the pride expression—were judged as highly prestigious but not particularly dominant. Further supporting this result, Witkower et al. (2020b) coded the nonverbal behaviors spontaneously displayed by participants working together on a group task and found that the prestigious group members (based on peer judgments) tended to display an upward head tilt, slight smile, and expansiveness. In contrast, dominant group members displayed expansiveness but no smile or upward head tilt. Furthermore, displaying these behaviors was associated with the attainment of social rank in the group—suggesting that showing pride is part of what leads to status—and this effect was mediated by perceptions of prestige but not of dominance.

These findings, suggesting that the pride expression communicates high status of the prestige variety, raise the question of how dominance is communicated nonverbally. Addressing this issue, Witkower et al. (2020b) asked participants to judge the perceived dominance of targets showing nonverbal displays that were systematically manipulated to convey different levels of three behavioral dimensions: expansiveness (expansive versus neutral), smiling (smile versus no smile), and head angle (tilted upward, level, or downward). Whereas the display featuring the combination of behaviors associated with pride was most reliably identified as prestige, the display featuring expansiveness but otherwise opposite behaviors to pride—i.e., no smile and downward rather than upward head tilt—led to the highest perceptions of dominance (see **Figure 3**). Subsequent research found that this same display is reliably identified as conveying dominance by individuals across cultures, including the Mayagna, a population of villagers living in a small-scale traditional society in Nicaragua (Witkower et al. 2022a). These individuals have had minimal contact with North American culture, making it unlikely that they would have learned about a dominance display through cross-cultural transmission. In fact, even the most isolated members of this community—people who were unable to recognize famous American actors or politicians or the President of Nicaragua—showed high levels of recognition for the dominance display and reliably distinguished it from prestige. In a related study, Canadian toddlers as young as 3 years old also reliably recognized the dominance display. Together, these findings suggest that an understanding of dominance and its nonverbal communication is likely to be an early-emerging and universal feature of the human mind (Witkower et al. 2022a).

CONCLUSION: OPEN QUESTIONS AND FUTURE DIRECTIONS

In this article, we have reviewed research on pride, the self-conscious emotion that is perhaps most responsible for human achievement, rank attainment, and status maneuvering. Unlike many other

Figure 3

Nonverbal display of dominance. This display is reliably recognized at high rates in Western adult and child samples and by members of isolated small-scale traditional societies (see Witkower et al. 2020b, 2022a).

emotions, pride can be fully understood only by taking into account its dual-faceted nature and the many distinctions between authentic pride, the more prosocial facet of the emotion, and hubristic pride, the more antisocial facet. The two facets may have separately evolved as distinct adaptations for facilitating the attainment of two distinct forms of social rank. Although the existing research provides a broad portrait of what pride is, and why and how humans experience it and show it to others, there remain several important open questions for future research.

Perhaps most notable is the current lack of studies directly demonstrating a causal relationship between authentic and hubristic pride on the one hand and prestige and dominance on the other. Studies are therefore needed to manipulate each facet of pride, distinctively, prior to a rank competition, and then test whether elicited emotions influence which rank strategy participants adopt. Another important open question regards the precise nature of hubristic pride. Despite evidence that participants report feeling arrogance and conceit during hubristic pride experiences (Tracy & Robins 2007c), one team of researchers has suggested that these reports are in fact indicative of individuals' negative self-judgments, such that hubristic pride is not a distinct subjective emotional state but rather a negative self-judgment in response to the sense that one's pride is unwarranted or excessive (Holbrook et al. 2014). It is not clear how studies might tease apart these possibilities, but such work is clearly needed. Relatedly, studies are needed to further examine whether hubristic pride is associated with a distinct nonverbal expression (see the sidebar titled Dynamic Expressions of Authentic and Hubristic Pride). Given that the pride display is reliably recognized as prestige and not as dominance across cultures (Witkower et al. 2020b, 2022a), it is possible that there exists a display of hubristic pride that shares components of the dominance display, providing a useful starting point for future research.

Another important direction for future research is to test whether the distinction between the two facets of pride might account for some of the cultural differences in views of pride. Although pride tends to be highly valued and sought out in many Western individualistic cultures (i.e., Australia, the Netherlands, the United States), it is viewed more negatively, and even as undesirable, in several more collectivistic cultures (i.e., China, Spain, Taiwan; Eid & Diener 2001, Mosquera et al. 2000). One possible explanation for this difference is that in collectivistic

DYNAMIC EXPRESSIONS OF AUTHENTIC AND HUBRISTIC PRIDE

Although authentic and hubristic pride are identified from the same static nonverbal expression (Tracy & Robins 2007b), the two facets may be distinctively communicated from dynamic (i.e., moving) nonverbal expressions (Lange & Crusius 2015; Nelson & Russell 2014, 2015). These dynamic expressions were uncovered by asking trained actors to display an expression that they felt communicated each facet of pride. Dynamic authentic pride expressions share several features with the static pride expression, including an upward head tilt, expanded posture, and a slight smile, whereas dynamic hubristic pride expressions included features such as expanded posture, direct gaze, and pursed but smiling lips or an asymmetric smile (Lange & Crusius 2015, Nelson & Russell 2014). These studies suggest that dynamic movements may help observers distinguish expressions of authentic and hubristic pride. Furthermore, the fact that actors were capable of creating displays to communicate each facet suggests that lay people possess some internal knowledge of how authentic and hubristic pride are expressed nonverbally.

cultures, the predominant conceptualization of pride is tilted more toward the hubristic facet, whereas in individualistic cultures that value the individual over the group, the predominant conceptualization is tilted toward the authentic facet. Studies are also needed to determine how frequently individuals feel each facet of pride and whether these tendencies vary across cultures.

Finally, an important and as yet largely overlooked area of inquiry is whether the effects found for pride at the individual level emerge at the group level. For example, is there a distinction between group-level authentic and hubristic pride? Feelings of pride in one's group may motivate similar behaviors as occur at the individual level, potentially leading to group-based dominance and prestige. Group-level authentic pride—such as patriotism—may promote group behaviors that lead to prestige, such as national achievements. In contrast, group-level hubristic pride might lead to feelings of group superiority, as is often the case with nationalism, which in turn might cause these groups to seek to dominate over others and justify attempts to do so.

In summary, although much work remains to be done, research conducted over the past couple decades has provided a comprehensive picture of pride and its importance for human social life. It is our hope that this body of research will provide a foundation for future efforts exploring this emotion as well as critically related states and outcomes such as self-esteem, narcissism, social rank, dominance, prestige, and achievement.

SUMMARY POINTS

1. Pride is a self-conscious emotion that occurs when individuals attribute a successful outcome to the self (i.e., their own efforts, abilities, choices, etc.) and serves the function of promoting the attainment and maintenance of social rank.

2. Pride has two distinct facets, authentic and hubristic, which are associated with distinct patterns of subjective experience (i.e., feelings of confidence versus arrogance), personality traits, psychopathology, and social behaviors. This distinction between the two facets and their corresponding associations have been documented in several cultural contexts.

3. Both facets of pride are communicated with a distinct nonverbal expression comprised of expanded posture, head tilted slightly back, arms akimbo or raised above the head, and a small smile. This expression is reliably displayed by individuals across cultures, including the congenitally blind, and is recognized as pride across cultures and populations

(e.g., young children, individuals with autism spectrum disorders), suggesting that the expression is a human universal.

4. Pride expressions are spontaneously displayed following status-increasing events like success, and they are reliably and automatically associated with perceptions of high status by observers across cultures.

5. Pride experiences are associated with the activation of brain areas associated with self-referential thinking, reward processing, memory retrieval, social cognition, and affective processing. Emerging evidence suggests distinct neural substrates for authentic and hubristic pride.

6. Children show evidence of experiencing pride around 2.5–3 years of age, which is slightly later in development than the emergence of basic emotions like fear and joy. The ability to recognize pride from its expression emerges slightly later, around age 4.

7. Humans attain and maintain social rank through prestige and dominance strategies, which have been documented across cultures. These strategies show bidirectional relationships with authentic and hubristic pride, such that authentic pride motivates prestige behaviors and hubristic pride motivates dominance behaviors, and the acquisition of prestige- or dominance-based status predicts increased experiences of authentic or hubristic pride, respectively.

8. The prototypical pride expression communicates prestige to observers. Dominance is communicated from a display that includes a similarly expanded posture but no smile, head tilted slightly down instead of upward, and eye gaze directed forward.

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There are two distinct forms of humility, appreciative and self-abasing; appreciative (but not self-abasing) humility is elicited by personal success and associated with prestige.

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Errata

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