

## CHAPTER 17

# Pride

### *The Fundamental Emotion of Success, Power, and Status*

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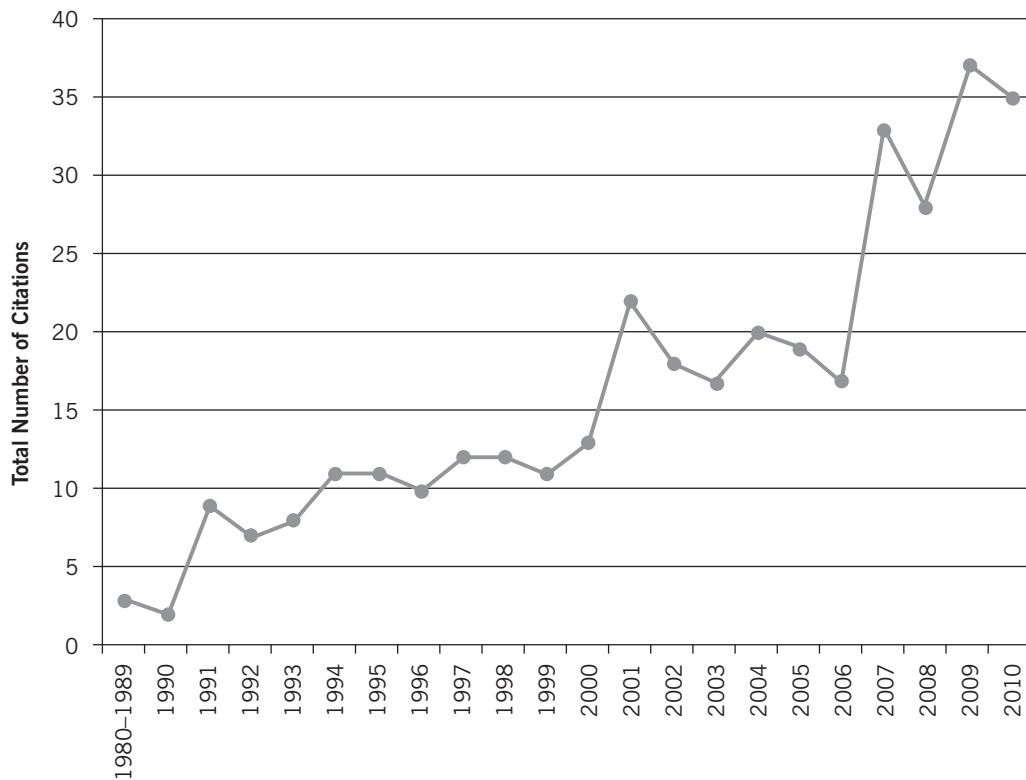
When explaining the need for a “positive psychology” movement, Mihalyi Csikszentmihalyi, one of the field’s founders, drew on his experiences as a child during World War II:

I noticed with surprise how many of the adults I had known as successful and self-confident became helpless and dispirited . . . yet there were a few who kept their integrity and purpose despite the surrounding chaos. . . . What sources of strength were these people drawing on? (Seligman & Csikszentmihalyi, 2000, p. 6).

Apparently, Csikszentmihalyi was inspired by the everyday feelings of success, confidence, and self-purpose that shaped the lives of the adults surrounding him. His observation of these emotions, and the ability of certain individuals to maintain them in the face of intensely traumatic external events, motivated him to promote a new subfield of psychological science. Thus, it is somewhat ironic that the very feelings that led Csikszentmihalyi to found the field, feelings that correspond closely to *pride*, have, to date, received considerably less attention from

positive psychologists than emotions such as happiness, compassion, and gratitude—positive emotions that not only feel good, but also appear to be *good for us* and those around us. Unlike those emotions, pride is not a purely “positive” emotion, in the sense of having an unambiguous positive impact on psychological well-being, mental health, and relationships. In fact, a growing body of research indicates that pride comprises two distinct facets, one of which has deleterious effects on well-being, mental health, and interpersonal functioning. However, if we define “positive emotions” as those that are positively valenced and pleasurable to experience, then pride certainly merits inclusion in the category.

Furthermore, despite an absence of research by positive psychologists, pride has received a great deal of psychological research attention in recent years. Based on a PsycINFO search for articles with keywords *pride* or *proud*, there have been three distinct periods of research on pride since 1980 (see Figure 17.1). Prior to 1990, psychologists paid little attention to pride, producing an average of only 2.9 pride-related papers



**FIGURE 17.1.** History of psychological research on pride, 1980–2010, based on a PsycINFO keyword search.

per year. The 1990s saw interest rise, with an average of 9.3 pride papers per year, likely fostered by the emergence of self-conscious emotion research more broadly—exemplified by Tangney and Fischer’s (1995) comprehensive volume on the topic. However, most self-conscious emotion research in the 1990s focused on the negatively valenced emotions of guilt and shame; notably, there was no chapter in the 1995 volume dedicated to pride, and only three out of 20 chapters mentioned it. It was not until the past decade that a major surge in pride research occurred, with an average of 23.3 articles per year, each year since 2000.

We are pleased by this recent surge because, as we argue in this chapter, pride is a unique and important positive emotion that differs from other positive states (e.g., happiness, contentedness, excitement) and therefore needs to be studied as a distinct entity. Here, we review findings suggesting that pride is (1) an evolved part of human nature,

(2) unique from other positive emotions, and (3) functional primarily in the social, interpersonal domain. In taking this perspective, we draw on a larger movement in emotion research that emphasizes the evolutionary history and contemporary functions of discrete positive emotions (as opposed to treating positive affect as a single dimensional construct; e.g., Bartlett & DeSteno, 2006; Fredrickson, 1998; Griskevicius, Shiota, & Neufeld, 2010; Keltner, Haidt, & Shiota, 2006; Tracy & Robins, 2007c). Below, we first discuss research on the psychological structure of pride, which demonstrates that pride is a complex and not entirely positive emotion. We then review research showing that pride, like other evolved emotions, is associated with a distinct, universally recognized nonverbal expression. Consistent with this evolutionary approach, we next review findings on the development and neuroscience of pride, then discuss emerging work that addresses the question of why

pride evolved, and what functions it serves. Finally, we conclude with several current directions in pride research, each of which moves beyond questions about what pride is and why people experience it, toward questions of pride's impact on the social world. In our view, these directions are exciting both for their suggestion that pride is critical to a range of social processes, and because they take for granted that pride is a distinct and fundamental emotion that plays an important role in social life.

### The Psychological Structure of Pride

Scholars have taken note of pride's dual-faceted nature for over a millennium; its dark or "sinful" side, in particular, has been cautioned against by religious scholars and philosophers ranging from Aristotle and Lao Tzu to Thomas Aquinas and the Dalai Lama (see Tracy, Shariff, & Cheng, 2010). Partly on the basis of these accounts, emotion researchers have postulated distinct "authentic," or "beta pride," and "hubristic," or "alpha pride," components of the emotion (Lewis, 2000; Tracy & Robins, 2004a; Tangney, Wagner, & Gramzow, 1989); several lines of research 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 (labeled "authentic pride") includes words such as *accomplished* and *confident*, and fits with the prosocial, achievement-oriented conceptualization of pride. The second cluster (labeled "hubristic pride") includes words such as *arrogant* and *conceited*, and fits with a more self-aggrandizing, egotistical conceptualization (Tracy & Robins, 2007c). A very similar two-cluster pattern also emerged in a recent study examining semantic conceptualizations of pride in Mainland China, among university student participants who generated pride words indigenously in Chinese (Shi et al., 2013). This cross-cultural replication suggests that the tendency to make conceptual distinctions between authentic and hubristic pride is not likely to be an artifact of Western culture, but rather may reflect pride's universal structure.

The second piece of evidence supporting the dual-faceted structure of pride comes from studies that asked 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 several studies, factor analyses of participants' ratings consistently revealed two relatively independent factors, which closely parallel the two semantic clusters. Subsequent analyses demonstrated that the two pride 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 the English words found to represent authentic and hubristic pride in the U.S. (Shi et al., 2013). Chinese and Korean cultures tend to emphasize collectivistic, interdependent self-construals, and to downplay self-enhancing emotions in favor of those that are more self-derogating (Heine, Lehman, Markus, & Kitayama, 1999; Markus & Kitayama, 1991), so it would not be surprising if conceptualizations or experiences of pride among these individuals were somewhat different from those found in Western cultural contexts. Thus, the finding that, in fact, Chinese and Korean individuals experience and conceive of the same two pride facets as do Americans provides support for the universality of both facets.

What is the difference between these two facets of pride? Studies on their personality correlates have demonstrated that they diverge in a number of ways. At both the trait and state levels, authentic pride is positively related to the socially desirable and generally adaptive Big Five traits of Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Openness to Experience, whereas hubristic pride is consistently negatively related to the two prosocial traits of Agreeableness and Conscientiousness (Tracy & Robins, 2007c). These distinct personality profiles have also been replicated in a Chinese sample (Shi et al., 2013). Authentic pride is also positively related to both explicit and implicit self-esteem, whereas hubristic pride is negatively

related to implicit and explicit self-esteem, yet positively related to narcissism and shame-proneness (Tracy, Cheng, Robins, & Trzesniewski, 2009), consistent with a theoretical distinctions between the two prides as correspondent to the distinction between genuine self-esteem and narcissism (Tracy, Cheng, Martens, & Robins, 2011).

The facets also differ in their links to a range of social behaviors and mental health outcomes; essentially, each facet of pride seems to underlie a different way of engaging with the social world and approaching one's goals. Individuals high in dispositional authentic pride tend to be low in depression, trait anxiety, social phobia, aggression, hostility, and rejection sensitivity; and high in life satisfaction, relationship satisfaction, dyadic adjustment, and social support, and they typically are securely attached to their relationship partners. In contrast, individuals high in dispositional hubristic pride are more likely to experience chronic anxiety and engage in aggression, hostility, and a range of other antisocial misbehaviors (e.g., drug use, petty crimes), and to report lower dyadic adjustment and social support (Orth, Robins, & Soto, 2008; Tracy et al., 2009). Given these highly divergent personality profiles, it is not surprising that the pride facets are located in different quadrants on the Interpersonal Circumplex (i.e., the independent dimensions of agency and communion; Kiesler, 1983). Although both facets are linked to agency, individuals high in communion are prone to authentic pride only; hubristic pride shows a negative relationship with communal traits (Cheng, Tracy, & Henrich, 2010). This distinction plays out in goal striving as well; both facets are positively related to an approach orientation, evidenced by high scores on measures of the behavioral activation system and low scores on the behavioral inhibition system (Carver, Sinclair, & Johnson, 2010). However, individuals high in dispositional authentic pride seem to vigorously engage in their major life goals and are able to put failures in perspective, whereas individuals high in dispositional hubristic pride tend to set unrealistically high goals for fame and success, and to interpret any positive event as indicative of their own greatness (Carver et al., 2010).

Consistent with these distinct approaches to interpreting one's achievements, several

studies suggest that the two pride facets are elicited by distinct cognitive appraisals. Pride occurs when individuals appraise a positive event as relevant to their identity, and their goals for their identity, and as internally caused (i.e., due to the self; Ellsworth & Smith, 1988; Lewis, 2000; Roseman, 1991; Tracy & Robins, 2004a; Weiner, 1985); the finding that success elicits pride has now been replicated across American and Japanese samples (Imada & Ellsworth, 2011). Yet studies suggest that authentic and hubristic pride are further distinguished by subsequent attributions: Authentic pride may 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 occur from attributions to internal but stable, global, and uncontrollable causes, such as ability (e.g., "I won because I'm great") (Tracy & Robins, 2007c). One study supporting these links found that individuals instructed to attribute a hypothetical success to hard work (unstable, specific attribution) expected to feel authentic pride in response, whereas those instructed to attribute the same success to stable, global ability expected to feel greater hubristic pride. Another study found that individuals who tend to make internal but unstable and controllable attributions for a wide range of events also tend to be dispositionally prone to authentic pride, whereas those who make internal but stable and uncontrollable attributions are more prone to hubristic pride. Finally, a third study examined participants' descriptions of actual pride events and, using content analysis, found that those who reported greater authentic pride in response to these events tended to attribute them to unstable causes, whereas those who reported greater hubristic pride tended to attribute events to stable abilities, and not to their specific behaviors (Tracy & Robins, 2007c).

Recent work in China produced findings that largely replicate these patterns. Based on content coding of Chinese participants' pride descriptions, those who experienced hubristic pride tended to attribute their successes to internal and stable abilities, but *not* to unstable behaviors. Together, these findings suggest that the effort–ability attribution distinction may be a key factor in determining whether an individual experiences

authentic or hubristic pride in response to a given success. However, other factors, such as personality and social comparisons, are likely to play a role in this distinction as well, and future research is needed to address this issue further (see also Tracy & Robins, in press, for more on the question of whether these attributions distinguish between the two pride facets). In this vein, a recent set of studies examining judgments of authentic and hubristic pride in others found that although perceptions of a proud target's attributions influenced judgments of the target's authentic or hubristic pride, perceptions about the target's arrogance were also important (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 the way in which the targets made them (i.e., whether he or she was perceived to be bragging about the success). This suggests that, at least in determining which facet of pride *others* are experiencing, perceived arrogance and modesty may be as important as presumed cognitive appraisal elicitors.

### The Pride Nonverbal Expression

One of the most prominent “gold-standard” criteria used to determine whether a particular emotion is likely to be evolved (or “basic”) is whether it has a distinct, cross-culturally recognized nonverbal expression (e.g., Ekman & Cordaro, 2011; Tracy & Randles, 2011). Although pride was not included in the pantheon of emotions originally thought to meet this criterion, based on seminal cross-cultural studies by Ekman, Izard, and their colleagues (e.g., Ekman, Sorenson, & Friesen, 1969; Ekman et al., 1987; Izard, 1971), a number of studies in recent years have provided strong evidence for a cross-cultural, reliably recognized pride expression (see Figure 17.2; also see Tracy & Robins, 2007a, for a review). The prototypical pride expression includes the body (i.e., expanded posture, head tilted slightly back, arms akimbo with hands on hips or raised above the head with hands in fists) as well as the face (i.e., small smile) (Tracy & Robins, 2004b, 2007b), and is reliably recognized and distinguished from similar emotions



Expression A



Expression B

**FIGURE 17.2.** The prototypical pride expression. Both expressions (A and B) are reliably and cross-culturally recognized as pride and spontaneously displayed in response to success.

(e.g., happiness, excitement) by individuals across cultures. Accurate pride recognition has been found even among individuals living in highly isolated, largely preliterate, traditional small-scale societies from two different populations (Burkina Faso and Fiji), who had almost no exposure to Western cultural knowledge (Tracy & Robins, 2008b; Tracy, Shariff, Zhao, & Henrich, 2013). Pride-recognition rates in educated U.S. samples typically range around 80–90%, comparable to the recognition rates found for more established basic emotions (e.g., anger, sadness). Like those emotions, pride can be recognized quickly and efficiently from a single snapshot image (Tracy & Robins, 2008a).

Importantly, the recognizable pride expression is also spontaneously *displayed* in pride-eliciting situations by successful



children as young as 3 years old (Belsky & Domitrovich, 1997; Lewis, Alessandri, & Sullivan, 1992; Stipek, Recchia, & McClintic, 1992), high school students who have performed well on a class exam (Weisfeld & Beresford, 1982), and medal-winning adult Olympic athletes from a wide range of cultures, as well as congenitally blind athletes across cultures, who could not have learned to display pride through visual modeling (Tracy & Matsumoto, 2008). These findings suggest that the pride expression is likely to be a universal and innate behavioral response to success. It is unlikely that the expression (1) would be recognized so consistently and robustly, (2) by individuals who could not have learned it through cross-cultural transmission (i.e., films, television, magazines), or (3) be reliably and spontaneously displayed in pride-eliciting situations by individuals who have never seen others display it, if it were not an innate human universal.

Interestingly, a number of authors have noted that the pride expression differs from other highly recognizable emotion expressions, in that accurate recognition of pride requires 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, Robins, & Schriber, 2009), may be indicative of the unique early evolutionary origins of these two self-conscious emotion expressions; they may be homologous with nonhuman dominance and submission displays, which involve similar bodily and head movements (see Tracy & Randles, 2011, for a review). However, several researchers who recently probed this distinction found that pride can be recognized at fairly high levels of accuracy from the face and head alone (i.e., without expanded posture) if shown as a dynamic display (i.e., via video) (Nelson & Russell, 2011). This suggests that though static images of pride require expanded posture for accurate recognition, the observation of a head tilting back or up removes this need, and, therefore, in everyday interpersonal interactions pride displays probably can be reliably recognized even when bodily movements (beyond the head) are not visible.

Studies of vocal displays of emotion have also sought to identify a distinct

pride expression but with somewhat mixed results. While one set of studies failed to find a recognizable vocal burst associated with pride (Simon-Thomas, Keltner, Sauter, Sinicropi-Yao, & Abramson, 2009), another found that vocal bursts of achievement were fairly reliably identified as “achievement.” Achievement recognition rates were slightly lower than those typically found for visual pride displays (i.e.,  $M = 80\%$ ) but higher than those for vocal bursts intended to convey contentment, relief, and pleasure (Sauter & Scott, 2007). In general, research on vocal expressions of emotion is still somewhat in its infancy, and further work is needed to determine whether pride can be reliably conveyed through this medium.

A broader question for pride expression research, which arises in the face of evidence for two distinct pride facets, is whether each facet is associated with a distinct nonverbal expression. Several studies have addressed this issue by testing whether participants reliably identify different variants of the pride expression (e.g., with arms raised above the head vs. arms akimbo) as either authentic or hubristic pride. Thus far, all recognizable variants of the expression that have been tested have been found to be identified as authentic and hubristic pride at relatively equal rates (Tracy & Robins, 2007a). This suggests that the same expression conveys both facets, and, based on studies mentioned earlier, observers use contextual information (e.g., an expresser’s apparent arrogance) to determine which facet he or she is experiencing (Tracy & Prehn, 2012).

### Development of Pride

A number of studies have assessed the display, recognition, and understanding of pride in children, resulting in an emerging portrait of the emotion’s early developmental trajectory. Like all self-conscious emotions, pride is first experienced later in the course of development than more basic emotions such as fear and joy—at around 3 years of age (e.g., Campos, Barrett, Lamb, Goldsmith, & Stenberg, 1983; Lewis et al., 1992; Stipek et al., 1992). This finding is based on studies that present young children with a challenging task and compare their behavioral and verbal responses after successful completion

versus failure, or after successful completion in easy versus difficult conditions. Behavioral components of the pride expression and verbal indicators of pride tend to be shown by children who have reached 2.5 to 3 years of age, but not by younger children, and not in shame-inducing (i.e., failure) situations or easy success conditions.

The capacity to understand pride emerges somewhat later than its (assumed) experience. The earliest emerging form of understanding is the ability to recognize the pride nonverbal expression, which first appears when children reach age 4 (Tracy, Robins, & Lagattuta, 2005)—the same age at which they begin to show accurate recognition of most other expressions, such as surprise. In contrast, the ability to understand the situations and contexts in which pride is elicited seems to develop considerably later. Several studies have found that 7-year-olds have difficulty understanding that pride should be attributed 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, Olthof, Terwogt, & Hardman, 1987; Thompson, 1989). However, by age 9 or 10, children can make the appropriate attributional distinctions, and grant pride only to individuals who are the cause of their own success (Kornilaki & Chloverakis, 2004; Thompson, 1989).

This developmental trajectory is consistent with the assumption that certain cognitive capacities are prerequisites for the experience of self-conscious emotions: self-awareness, stable self-representations, comparisons between one's own behavior and external standards, and internal attributions (Lagattuta & Thompson, 2007; Lewis, 2000; Tracy & Robins, 2004a). By the age of 3, children demonstrate early-emerging components of self-awareness (i.e., mirror self-recognition, self-referencing, imitation; Hart & Karmel, 1996) and begin to display prideful behavioral responses to success, but cannot yet identify pride in others. The development of a full understanding of the situations and attributions that elicit pride and distinguish it from happiness seems to coincide with the achievement of a global sense of self and self-esteem (Harter, 1983). Future studies are needed to tease apart the likely bidirectional causal links between

these shifting pride experiences and children's maturing sense of self.

While no studies have addressed the question of whether and when young children experience and distinguish between the two distinct facets of pride, one study used a cross-sectional approach to delineate a portrait of normative developmental shifts in authentic and hubristic pride across the lifespan (Orth, Robins, & Soto, 2010). These researchers found that authentic pride increased fairly continuously from adolescence to old age, in a trend that paralleled 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, Wood, & Caspi, 2008), wherein maturing social roles are thought to facilitate the experience and expression of socially and intrapsychically adaptive emotions and traits.

### Neuroscience of Pride

Neurobiological research on pride remains fairly limited, but several researchers have begun to examine the brain structures and neurochemicals that may be involved in pride experiences. In the single functional magnetic resonance imaging (fMRI) study on pride experiences of which we are aware (Takahashi et al., 2008), greater activation was found in the posterior superior temporal sulcus and left temporal lobe—two brain regions thought to be involved in theory of mind—when participants imagined themselves in pride-eliciting scenarios, compared to when they imagined themselves in neutral scenarios. Although theory of mind may be an important cognitive prerequisite for pride (self-evaluations require the understanding that others can evaluate the self), these researchers had expected to find greater medial prefrontal cortex (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., Foshati et al., 2003; Kircher et al., 2002; Takahashi et al., 2004). The failure to find mPFC

activity in imagined pride experiences raises a number of questions, but these findings need to be replicated, ideally in studies that compare activation during pride to other positive emotional states, to control for shared variance in positivity or reward.

Other studies have examined the physiological correlates of pride and identified an apparently distinct pattern of cardiac activity. One study found that positive feedback on a laboratory task (assumed to induce pride) led to moderate increases in skin conductance and heart rate, and shifts in heart rate variability indicative of the sympathetic nervous system preparing for controlled action (Fourie et al., 2011). However, another study that compared cardiac arousal levels following pride, anger, and shame inductions found lower arousal for pride compared to that for the negative emotions (Herrald & Tomaka, 2002). Together, these findings may suggest that pride promotes moderate rather than large physiological changes, which help prepare the body for action.

In related work, posing a key component of the pride nonverbal expression—expanded posture—has been shown to promote increases in the hormone testosterone (Carney, Cuddy, & Yap, 2010). This finding may indicate direct links between holding the nonverbal display of pride and its physiological response, or that posing pride led participants to experience pride, which in turn promoted a corresponding hormonal response, consistent with the facial feedback hypothesis (Tomkins, 1962). This theory has been supported by studies showing that individuals who pose certain facial expressions of emotions demonstrate physiological changes corresponding to those emotions (Rosenberg & Ekman, 1994). In the case of pride, an association with testosterone is consistent with long-standing theoretical accounts of pride as the affective mechanism underlying status increases, and with prior research indicating an association between testosterone and dominance (Carré, McCormick, & Hariri, 2011; Mazur, 1983; Mehta & Josephs, 2010; see Tracy et al., 2010, for a review).

These few neurobiological findings are promising and support the suggestion that pride, like other basic emotions, is a bio-

logical and fully embodied psychological experience. However, additional research in this area is needed, including experimental studies to uncover the specific neural underpinnings of pride experiences and pride recognition, and direct tests of whether pride experiences are in fact associated with increases in testosterone. Given arguments that distinct neurocircuitry is a prerequisite for categorizing a given phenomenological state as a discrete emotion (Ekman & Cordaro, 2011; Levenson, 2011; Panksepp & Watt, 2011), such future studies may be some of the most important next steps in addressing questions about pride as a distinct positive emotion.

### Evolutionary Function of Pride

The findings we just reviewed suggest that pride meets at least one of the central criteria to be considered a “functional universal” (i.e., a psychological entity that evolved to serve a particular adaptive function; Norenzayan & Heine, 2005): Its cross-culturally recognized nonverbal expression is displayed by individuals across cultures in the same contexts and situations. Furthermore, the evidence that pride experiences and pride recognition emerge early in development, and that pride experiences may have distinct neural and physiological correlates, is also consistent with this account. From this perspective, pride is best considered a product of evolutionary processes and therefore is an adaptation for coping with challenges presented by the situations in which it occurs—success, or other opportunities for status enhancement. Several theorists have argued that pride evolved to help individuals transform culturally valued achievements into higher social status, an outcome with clear adaptive benefits (e.g., resource acquisition, mate retention, well-being; e.g., Adler, Epel, Castellazzo, & Ickovics, 2000; Ellis, 1995; von Rueden, Gurven, & Kaplan, 2011).

Based on extant research, there are several ways in which pride may promote status increases. First, a growing body of evidence suggests that the pride nonverbal display functions to signal an individual’s deservedness of high status. Behaviors consistent with the pride expression have been observed in



the dominance displays of a number of non-human animals; these displays are shown when animals seek to exert status or intimidate an opponent. For example, after defeating a rival or prior to an agonistic encounter, high-ranking chimpanzees show “inflated” or “bluff” displays that include behaviors such as arms raised and body expanded—two components of the human pride expression (de Waal, 1989; Martens, Tracy, Cheng, Parr, & Price, 2010). Second, and more directly supporting the link between human pride expressions and status attainment, one study found that individuals manipulated to experience pride prior to engaging in a group task were subsequently perceived by others in the group and outside observers as behaving in a more “dominant” manner, suggesting that the pride experience promoted interpersonal behaviors that increased perceived status (Williams & DeSteno, 2009). Results of other, earlier studies suggest that those critical dominant behaviors are likely to have been components of the pride expression: Behaviors such as head tilt upward, erect posture, and arms stretched upward and out from the body have been found to be displayed by preschool children who have won a fight (Strayer & Strayer, 1976), high school students who have performed well on a class exam (Weisfeld & Beresford, 1982), children as young as 3 years old in response to task success (Belsky & Domitrovich, 1997; Lewis et al., 1992; Stipek et al., 1992), and sighted and blind adults across cultures who have won an Olympic Games judo match (Tracy & Matsumoto, 2008)—all achievement-related situations that should promote higher social rank. Studies have also shown that posing these pride expression components—most notably, expanded chest—activates feelings of confidence and a tendency to take action, suggesting that the embodiment of pride displays promotes status-related thoughts and motives, perhaps through the facial feedback mechanism mentioned earlier (Fischer, Fischer, Englich, Aydin, & Frey, 2011; Huang, Galinsky, Guenfeld, & Guillory, 2011).

Perhaps the most direct evidence that pride displays function to *communicate* high status comes from studies that addressed this question using implicit measures (Shariff & Tracy, 2009). In this work, participants demonstrated an automatic tendency to

perceive pride displays as conveying high status, and pride was more strongly implicitly associated with high status than were low-status emotions (e.g., shame, embarrassment), other high-status emotions (e.g., happiness, anger), and emotions not theoretically relevant to status (e.g., disgust, fear). A subsequent study in this same article demonstrated that the association between pride displays and high status cannot be attributed to specific artifacts of the expression’s appearance, such as expanded body size or outstretched arms. Other research suggests that the status signal uniquely sent by pride displays is powerful enough to override contradictory status cues in the environment (Shariff, Tracy, & Markusoff, 2012). In this work, observers made automatic high-status inferences about targets displaying pride, even when those targets were paired with contextual information indicating that they merited low status. In each of these studies, participants were presented with two identical targets, each displaying different “context-incongruent” emotion expressions. For example, one target was portrayed as obviously high status (i.e., a skilled and respected soccer team captain), but displayed a shame expression, whereas the other target was portrayed as obviously low status (i.e., the soccer team’s unskilled, disrespected waterboy) but displayed pride. When participants were probed for their implicit status associations with each target, the low-status but pride-displaying waterboy was automatically judged as higher status than the high-status but shame-displaying captain, suggesting that pride expressions can outweigh contradictory contextual information in informing status judgments. Furthermore, although pride was compared with shame in these studies, other studies in this line of work included a neutral-display comparison, to demonstrate that effects were largely driven by pride rather than shame.

In all of these studies directly assessing perceptions of pride-displaying targets, the communication of high status has consistently been found to occur implicitly; in a study examining explicit status judgments of pride-displaying targets, similar effects emerged but were considerably weaker (Shariff et al., 2012). The automaticity of the pride status signal is relevant to our evolutionary account of pride displays because

if the expression evolved as a prelinguistic, preconscious form of communication, then its perception likely occurs through low-level cognitive processes that can elicit adaptive behavioral responses without any need for conscious reflection (Bargh & Pietromonaco, 1982). If understanding pride's functional message required conscious deliberation, then the expression would be less effective as a rapid source of information.

That said, the most important evidence for our account of pride displays as an *evolved* status signal is the finding that the automatic tendency to perceive these displays as high-status generalizes across diverse populations. Tracy and colleagues (2013) replicated several of the implicit association studies discussed earlier in a highly isolated, traditional, small-scale society on a remote island in Fiji. Despite having no prior computer experience, participants in these studies completed computer-based Implicit Association Tests (Greenwald, McGhee, & Schwartz, 1998) and demonstrated results largely convergent with those of North American university students. Among both groups, pride displays were strongly implicitly associated with high-status concepts. The Fijian villagers who participated in this research hold a set of cultural practices and norms that largely suppress personal displays of status or pride, so the finding that pride displays were nonetheless perceived as indicating high status among these individuals suggests that pride is a universal status signal.

### **Two Prides, Two Functions?**

One question that arises regarding our account of pride as an adaptation for coping with the challenge of status attainment is why such a functional emotion would have a seemingly dysfunctional, hubristic side? How might an antisocial, hubristic pride have evolved? To answer this question, we have drawn on a theoretical account suggesting that humans evolved to attain status using two distinct strategies, labeled *dominance* and *prestige* (Henrich & Gil-White, 2001). In this view, "dominance" is defined as status attained through force, threat, and intimidation, and it contrasts with "prestige," which is status attained through the display of knowledge, valuable skills, and

earned respect. Dominant individuals are thought to wield power by controlling costs and benefits in many domains, including access to resources, mates, and well-being. They incite fear in subordinates by withholding resources, and subordinates submit by complying with demands or providing deference. Prestige, in contrast, likely arose in evolutionary history when humans acquired the ability to obtain cultural knowledge from other group members, making it adaptive to selectively attend and defer to the most knowledgeable or skilled others. Prestigious individuals thus acquire power by virtue of their competence and expertise, and by permitting followers to copy them. Support for this account comes from a recent study examining hierarchy formation in small groups of unacquainted individuals, who interacted during a collaborative task. Group members who were rated by their peers as high in *either* dominance or prestige: (1) were viewed by other group members and outside observers as influential over the group's decisions, (2) exerted greater influence over the group's decision making, and (3) received more visual attention (a proxy of status and influence) from observers (Cheng, Tracy, Foulsham, Kingstone, & Henrich, 2013). These findings suggest that both dominance and prestige are likely to be adaptive, in the sense of promoting social influence.

Linking this account to pride, we have argued that the two facets may have separately evolved as the affective mechanisms that, respectively, underpin the dominance and prestige systems (see Cheng et al., 2010; Shariff, Tracy, Cheng, & Henrich, 2010; Tracy et al., 2010). Specifically, hubristic pride may facilitate the attainment of dominance 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, and to feel little empathy for those who get in the way. Indeed, when individuals experience hubristic pride, they evaluate themselves as superior to others, experience a subjective sense of dominance and superiority, and demonstrate low empathy toward those who are different from them (Ashton-James & Tracy, 2012; Tracy et al., 2009). In contrast, authentic pride may facilitate the attain-

ment of prestige by motivating and reinforcing achievements and other indicators of competence, and providing individuals with the feelings of genuine self-confidence that allow them to comfortably demonstrate both social attractiveness and generosity. In order to retain subordinates' respect, prestigious individuals must avoid succumbing to feelings of power and superiority, and authentic pride may allow these individuals to focus on their achievements while maintaining some sense of humility. The findings reviewed earlier, showing that authentic pride is associated with agreeableness, conscientiousness, voluntary moral action, and empathy toward outgroup members (Ashton-James & Tracy, 2012; Hart & Matsuba, 2007; Tracy et al., 2009; Tracy & Robins, 2007c) are consistent with this account. In addition, several prior lines of work suggest a strong connection between pride and achievement motivation (e.g., Hermal & Tomaka, 2002; Pekrun, Elliot, & Maier, 2009; Williams & DeSteno, 2008). These studies did not assess authentic pride in particular, however, so future studies should seek to replicate these results using narrower measures of each pride facet.

In addition to these supportive lines of work, several studies provide direct evidence for the unique theorized associations between each pride facet and the corresponding status-attaining strategy (Cheng et al., 2010). First, in a study assessing dispositional levels of authentic and hubristic pride and dominance and prestige, individuals prone to experiencing authentic pride were found to rate themselves as highly prestigious, whereas those prone to experiencing hubristic pride rated themselves as more dominant. In a second study, this pattern was replicated using peer ratings of dominance and prestige; varsity athletes rated the extent to which team members used each strategy. Individuals high in authentic pride were viewed as prestigious (but not dominant) by their peers, whereas those high in hubristic pride were viewed as dominant (but not prestigious). Follow-up analyses demonstrated that these effects could not be attributed to shared variance in positive affect; when controlling for authentic and hubristic pride, neither peer-rated prestige nor dominance was significantly related to positive affect. These results suggest that

although individuals high in prestige are generally happy, likable, and agreeable (Cheng et al., 2010), the emotion that accounts for their ability to attain high status is not their general positivity but rather their authentic pride. More broadly, these findings suggest that both facets of pride facilitate status attainment, but they do so through distinct mechanisms.

One implication of this account of authentic pride as the emotional mechanism underlying prestige is its suggestion that the pride expression might serve an additional function, beyond communicating high status: it might signal an opportunity for social learning. Given how widely and reliably recognized the pride expression is, even among young children, it is likely that recognizing pride has adaptive benefits for perceivers as well as expressers. In this view, the tendency to display pride in response to success may have coevolved with a tendency to recognize the pride shown by successful others and make functional inferences on that basis (Martens, Tracy, & Shariff, 2012). Specifically, observers may use others' pride displays to determine quickly and effortlessly which group members are high status and therefore likely to have knowledge or expertise that should be copied (if they are prestigious). If this is the case, the ability to rapidly detect and understand the pride expression would benefit observers by biasing their social learning, such that individuals would selectively copy those displaying pride.<sup>1</sup>

Two recent studies tested this account by examining whether financially motivated observers would choose to copy answers to difficult trivia questions provided by another group member (actually a confederate) if the other individual showed pride (Martens & Tracy, 2013). Across both studies, participants copied the answers of pride-displaying confederates more frequently (approximately 80% of the time) than they copied the answers of confederates displaying neutral, shame, or, importantly, happy expressions. This finding further supports the claim that pride's functionality cannot be attributed to positive affect more generally. It also suggests that, to the extent that pride displays are a reliable signal of knowledge or expertise, they are likely to be functional not only for those who display them

and acquire higher status, but also for those who observe and automatically interpret pride in others.

### Current Directions in Pride Research

Several emerging lines of research have built on the research we have reviewed, suggesting that pride is a distinct and evolved emotion, to examine how pride influences individuals' relationships with others, social behavior, and even mental health. Below, we review some of these exciting new findings.

#### *Pride and Social Interactions*

A small but growing literature suggests that pride can have a major impact on interpersonal interactions and social relationships. One line of research exemplifying this trend found that pride displays influence sexual attraction in gender-specific ways (Tracy & Beall, 2011). In a series of four studies using different methodological approaches, men who displayed pride were found to be most attractive to women, compared to men who displayed neutral, shame, or happy displays (male happy displays were, in fact, particularly unattractive). In contrast, women who displayed pride were perceived by male viewers as unattractive compared to women who displayed happy or shame expressions, and generally less attractive than women who displayed neutral expressions. These findings are consistent with the social status account of pride and evolutionary mating theory suggesting that high-status men are perceived as having high mate value, whereas for women status should be less relevant to mate quality. However, these findings are also consistent with social constructivist accounts suggesting that men should appear high status and women submissive, so more research is needed to tease apart these competing explanations.

In another line of work on pride's impact on relationships, several studies found that pride influences prejudicial attitudes (e.g., Ashton-James & Tracy, 2012). Across four studies, a sharp difference emerged between the two facets of pride, in that participants manipulated to experience authentic pride responded with greater positivity toward outgroup members, whereas those manipu-

lated to experience hubristic pride responded with hostility toward these individuals, and even displayed a propensity to discriminate against them. These effects were mediated by empathic concern for outgroup members, suggesting that authentic pride increases, and hubristic pride decreases, empathy toward those who are different. What is particularly surprising about these studies is that results emerged from both dispositional pride tendencies *and* momentarily manipulated pride states, suggesting that any person can become more or less prejudicial depending on the form of pride he or she happens to be experiencing. Given that pride is most typically experienced by high-status individuals—precisely those who have the power to hire, fire, or discriminate against others—these findings have important implications for pride in real-world settings. In related work, researchers are also beginning to examine the ways in which collective pride (e.g., pride in one's nation or social group) can influence intergroup relationships (e.g., Kavetsos, 2011; Luksyte & Avery, 2010; Reeskens & Wright, 2011). By taking into account the findings reviewed earlier suggesting that pride is an evolved part of human nature that has two distinct facets with markedly divergent outcomes, we expect that these emerging research trends will contribute enormously to our understanding of the emotions that underlie nationalism, patriotism, and intergroup hostility and alliances.

Finally, a third set of studies on pride and relationships found effects of pride on perceptions of similarity to others (Oveis, Horberg, & Keltner, 2010). These studies compared pride and compassion, and found that those who felt pride—at both a dispositional and momentary state level—experienced a sense of greater similarity toward strong social groups (e.g., professional athletes), whereas those who felt compassion experienced a sense of greater similarity toward weaker social groups (e.g., young children, the elderly). These studies did not distinguish between authentic and hubristic pride, so it is unclear whether both facets promote these feelings, but they are consistent with the high-status account of pride, given that feeling similar to strong others may motivate power seeking and achievement striving.

### **Pride and Psychopathology**

Consistent with the findings reviewed earlier suggesting that authentic pride is linked to well-being, recent studies have demonstrated that pride can play an ameliorative role in the trajectory of certain mood disorders, such as depression and bipolar disorder (BD). Pride has been found to negatively predict current manic symptoms and future depressive symptoms among individuals at-risk for BD (Gruber & Johnson, 2009; Gruber et al., 2009). In addition, pride may even be diagnostic of these disorders; highly depressive individuals show blunted reactivity when presented with pride-evoking film clips, despite normal reactivity to happiness-evoking clips (Gruber, Oveis, Keltner, & Johnson, 2011).

In contrast to these findings that suggest pride is associated with mental health, other studies indicate that individuals who experience high levels of pride are at greater risk for developing BD (Gruber & Johnson, 2009), and that pride predicts the development of BD above and beyond other positive emotions (e.g., love, compassion). Given the aforementioned positive relation between hubristic pride and unrealistic life goals (Carver et al., 2010), and the finding from this work that those at risk for BD engage in unrealistic goal setting (Gruber & Johnson, 2009), it seems likely that the form of pride most relevant to BD is hubristic pride. That said, this research would benefit greatly from studies that make an explicit distinction between the pride facets, which likely have important consequences for mental health.

### **Conclusion**

A relatively large body of research on pride has emerged in the past decade; these studies suggest that pride is a fundamental emotion in the biological and evolutionary sense, and in the social and interpersonal sense. It plays a major role in interpersonal and, in all likelihood, intergroup functioning, and, importantly, also shapes each individual's self-concept and self-esteem. Perhaps most important, pride is the single most important emotion underpinning the attainment and maintenance of social status; pride

experiences motivate status striving in a variety of ways, and pride displays communicate status-relevant information to others. We hope that the research reviewed in this chapter provides a foundation for future work addressing a range of remaining questions about pride and its antecedents, consequences, and impact on the social world.

### **Note**

1. One issue raised by this account is whether observers benefit from recognizing pride shown by dominant rather than prestigious individuals. Though future research is needed to address this issue, one possibility that is consistent with the extant evidence (Shariff et al., 2012; Shariff & Tracy, 2009; Tracy & Prehn, 2012) is that pride displays provide general information about a target's deservingness of high status, and additional contextual information is needed to determine whether the target is prestigious or dominant and should therefore be copied or feared.

### **References**

- Adler, N. E., Epel, E. S., Castellazzo, G., & Ickovics, J. R. (2000). Relationship of subjective and objective social status with psychological and physiological functioning: Preliminary data in healthy, white women. *Health Psychology, 19*, 586–592.
- Ashton-James, C. E., & Tracy, J. L. (2012). Pride and prejudice: Feelings about the self influence judgments about others. *Personality and Social Psychology Bulletin, 38*, 466–476.
- Bargh, J. A., & Pietromonaco, P. (1982). Automatic information processing and social perception: The influence of trait information presented outside of conscious awareness on impression formation. *Journal of Personality and Social Psychology, 43*, 437–449.
- Bartlett, M. Y., & DeSteno, D. (2006). Gratitude and prosocial behavior: Helping when it costs you. *Psychological Science, 17*, 319–325.
- Belsky, J., & Domitrovich, C. (1997). Temperament and parenting antecedents of individual difference in three-year-old boys' pride and shame reactions. *Child Development, 68*, 456–466.
- Campos, J. J., Barrett, K. C., Lamb, M. E., Goldsmith, H. H., & Stenberg, C. (1983). Socio-emotional development. In M. M. Haith & J.



- J. Campos (Eds.), *Handbook of child psychology: Infancy and developmental psychobiology* (Vol. 2, pp. 783–915). New York: Wiley.
- Carney, D. R., Cuddy, A. J. C., & Yap, A. J. (2010). Power posing: Brief non-verbal displays affect neuroendocrine levels and risk tolerance. *Psychological Science*, *21*, 1363–1368.
- Carré, J. M., McCormick, C. M., & Hariri, A. R. (2011). The social neuroendocrinology of human aggression. *Psychoneuroendocrinology*, *36*, 935–944.
- Carver, C. S., Sinclair, S., & Johnson, S. L. (2010). Authentic and hubristic pride: Differential relations to aspects of goal regulation, affect, and self-control. *Journal of Research in Personality*, *44*, 698–703.
- Cheng, J. T., Tracy, J. L., Foulsham, T., & Kingstone, A., & Henrich, J. (2013). Two ways to the top: Evidence that dominance and prestige are distinct yet viable avenues to social rank and influence. *Journal of Personality and Social Psychology*, *104*(1), 103–125.
- Cheng, J. T., Tracy, J. L., & Henrich, J. (2010). Pride, personality, and the evolutionary foundations of human social status. *Evolution and Human Behavior*, *31*, 334–347.
- de Waal, F. (1989). *Peacemaking among primates*. Cambridge, MA: Harvard University Press.
- Ekman, P., & Cordaro, D. (2011). What is meant by calling emotions basic? *Emotion Review*, *3*, 364–370.
- Ekman, P., Friesen, W. V., O'Sullivan, M., Chan, A., Diacoyanni-Tarlatzis, I., Heider, K., et al. (1987). Universals and cultural differences in the judgment of facial expressions of emotion. *Journal of Personality and Social Psychology*, *53*, 712–717.
- Ekman, P., Sorenson, E. R., & Friesen, W. V. (1969). Pan-cultural elements in facial displays of emotion. *Science*, *164*, 86–88.
- Ellis, L. (1995). Dominance and reproductive success among nonhuman animals: A cross-species comparison. *Ethology and Sociobiology*, *16*, 257–333.
- Ellsworth, P. C., & Smith, C. A. (1988). Shades of joy: Patterns of appraisal differentiating pleasant emotions. *Cognition and Emotion*, *2*, 301–331.
- Fischer, J., Fischer, P., Englich, B., Aydin, N., & Frey, D. (2011). Empower my decisions: The effects of power gestures on confirmatory information processing. *Journal of Experimental Social Psychology*, *47*, 1146–1154.
- Fossati, P., Hevenor, S. J., Graham, S. J., Grady, C., Keightley, M. L., Craik, F., et al. (2003). In search of the emotional self: An fMRI study using positive and negative emotional words. *American Journal of Psychiatry*, *160*, 1938–1945.
- Fourie, M. M., Rauch, H. G. L., Morgan, B. E., Ellis, G. F. R., Jordaan, E. R., & Thomas, K. F. G. (2011). Guilt and pride are heartfelt, but not equally so. *Psychophysiology*, *48*, 888–999.
- Fredrickson, B. L. (1998). What good are positive emotions? *Review of General Psychology*, *2*, 300–319.
- Graham, S., & Weiner, B. (1986). From an attributional theory of emotion to developmental psychology: A round-trip ticket? *Social Cognition*, *4*, 152–179.
- Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. K. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality and Social Psychology*, *74*, 1464–1480.
- Griskevicius, V., Shiota, M. N., & Neufeld, S. L. (2010). Influence of positive emotions on persuasion processing: A functional evolutionary approach. *Emotion*, *10*, 190–206.
- Gruber, J., Culver, J. L., Johnson, S. L., Nam, J. Y., Keller, K. L., & Ketter, T. A. (2009). Do positive emotions predict symptomatic change in bipolar disorder? *Bipolar Disorders*, *11*, 330–336.
- Gruber, J., & Johnson, S. L. (2009). Positive emotional traits and ambitious goals among people at risk for mania: The need for specificity. *International Journal of Cognitive Therapy*, *2*, 179–190.
- Gruber, J., Oveis, C., Keltner, D., & Johnson, S. L. (2011). A discrete emotions approach to positive emotion disturbance in depression. *Cognition and Emotion*, *25*, 40–52.
- Harris, P. L., Olthof, T., Terwogt, M. M., & Hardman, C. E. (1987). Children's knowledge of the situations that provoke emotion. *International Journal of Behavioral Development*, *10*, 319–343.
- Hart, D., & Karmel, M. P. (1996). Self-awareness and self-knowledge in humans, apes, and monkeys. In A. E. Russon, K. A. Bard, & S. T. Parker (Eds.), *Reaching into thought: The minds of the great apes* (pp. 325–347). New York: Cambridge University Press.
- Hart, D., & Matsuba, M. K. (2007). The development of pride and moral life. In J. L. Tracy, R. W. Robins, & J. P. Tangney (Eds.), *The*

- self-conscious emotions: Theory and research.* (pp. 114–133). New York: Guilford Press.
- Harter, S. (1983). Developmental perspective on the self-system. In E. M. Hetherington (Ed.), & P. H. Mussen (Series Ed.). *Handbook of child psychology: Vol 4. Socialization, personality, and social development* (4th ed., pp. 275–385). New York: Wiley.
- Heine, S. J., Lehman, D. R., Markus, H. R., & Kitayama, S. (1999). Is there a universal need for positive self-regard? *Psychological Review*, *106*, 766–794.
- Henrich, J., & Gil-White, F. J. (2001). The evolution of prestige: Freely conferred deference as a mechanism for enhancing the benefits of cultural transmission. *Evolution and Human Behavior*, *22*, 165–196.
- Herrald, M. M., & Tomaka, J. (2002). Patterns of emotion-specific appraisal, coping, and cardiovascular reactivity during an ongoing emotional episode. *Journal of Personality and Social Psychology*, *83*, 434–450.
- Huang, L., Galinsky, A. D., Gruenfeld, D. H., & Guillory, L. E. (2011). Powerful postures versus powerful roles: Which is the proximate correlate of thought and behavior? *Psychological Science*, *22*, 95–102.
- Imada, T., & Ellsworth, P. C. (2011). Proud Americans and lucky Japanese: Cultural differences in appraisal and corresponding emotion. *Emotion*, *11*, 329–345.
- Izard, C. E. (1971). *The face of emotion*. East Norwalk, CT: Appleton-Century-Crofts.
- Kavetsos, G. (2011). National pride: War minus the shooting. *Social Indicators Research*, *106*, 173–185.
- Keltner, D. (1995). Signs of appeasement: Evidence for the distinct displays of embarrassment, amusement, and shame. *Journal of Personality and Social Psychology*, *61*, 441–454.
- Keltner, D., Haidt, J., & Shiota, M. N. (2006). Social functionalism and the evolution of emotions. In M. Schaller, J. A. Simpson, & D. T. Kenrick (Eds.), *Evolution and social psychology* (pp. 115–142). Madison, CT: Psychosocial Press.
- Kiesler, D. J. (1983). The 1982 Interpersonal Circle: A taxonomy for complementarity in human transactions. *Psychological Review*, *90*, 185–214.
- Kircher, T. T. J., Brammer, M., Bullmore, E., Simmons, A., Bartels, M., & David, A. S. (2002). The neural correlates of intentional and incidental self processing. *Neuropsychologia*, *40*, 683–692.
- Kornilaki, E. N., & Chloverakis, G. (2004). The situational antecedents of pride and happiness: Developmental and domain differences. *British Journal of Developmental Psychology*, *22*, 605–619.
- Lagattuta, K. H., & Thompson, R. A. (2007). The development of self-conscious emotions: Cognitive processes and social influences. In J. L. Tracy, R. W. Robins, & J. P. Tangney (Eds.), *The self-conscious emotions: Theory and research* (pp. 91–113). New York: Guilford Press.
- Levenson, R. W. (2011). Basic emotion questions. *Emotion Review*, *3*, 379–386.
- Lewis, M. (2000). Self-conscious emotions: Embarrassment, pride, shame, and guilt. In M. Lewis & J. M. Haviland-Jones (Eds.), *Handbook of emotions* (2nd ed., pp. 623–636). New York: Guilford Press.
- Lewis, M., Alessandri, S. M., & Sullivan, M. W. (1992). Differences in shame and pride as a function of children's gender and task difficulty. *Child Development*, *63*, 630–638.
- Luksyte, A., & Avery, D. R. (2010). The effects of citizenship dissimilarity and national pride on attitudes towards immigrants: Investigating mediators and moderators of intergroup contact. *International Journal of Intercultural Relations*, *34*, 629–641.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*, 224–253.
- Martens, J. P., & Tracy, J. L. (2013). The emotional origins of a social learning bias: Does the pride expression cue copying? *Social Psychological and Personality Science*, *4*, 492–499.
- Martens, J. P., Tracy, J. L., Cheng, J. T., Parr, L. A., & Price, S. (2010, January). *Do the chimpanzee bluff display and human pride expression share evolutionary origins?* Poster presented at the Society for Personality and Social Psychology Preconference on Evolutionary Psychology, Las Vegas, NV.
- Martens, J. P., Tracy, J. L., & Shariff, A. F. (2012). Status signals: Adaptive benefits of displaying and observing the non-verbal expressions of pride and shame. *Cognition and Emotion*, *26*, 390–406.
- Mazur, A. (1983). Hormones, aggression, and dominance in humans. In B. B. Svare (Ed.), *Hormones and aggressive behavior* (pp. 535–562). New York: Plenum.
- Mehta, P. H., & Josephs, R. A. (2010). Testoster-

- one and cortisol jointly regulate dominance: Evidence for a dual-hormone hypothesis. *Hormones and Behavior*, 58, 898–906.
- Nelson, N. L., & Russell, J. A. (2011). When dynamic, the head and face alone can express pride. *Emotion*, 11, 990–993.
- Norenzayan, A., & Heine, S. J. (2005). Psychological universals: What are they and how can we know? *Psychological Bulletin*, 131, 763–784.
- Orth, U., Robins, R. W., & Soto, C. J. (2010). Tracking the trajectory of shame, guilt, and pride across the lifespan. *Journal of Personality and Social Psychology*, 99, 1061–1071.
- Oveis, C., Horberg, E. J., & Keltner, D. (2010). Compassion, pride, and social intuitions of self–other similarity. *Journal of Personality and Social Psychology*, 98, 618–630.
- Panksepp, J., & Watt, D. (2011). What is basic about basic emotions?: Lasting lessons from affective neuroscience. *Emotion Review*, 3, 387–396.
- Pekrun, R., Elliot, A. J., & Maier, M. A. (2009). Achievement goals and achievement emotions: Testing a model of their joint relations with academic performance. *Journal of Educational Psychology*, 101, 115–135.
- Reeskens, T., & Wright, M. (2011). Subjective well-being and national satisfaction: Taking seriously the “proud of what” question. *Psychological Science*, 22, 1460–1462.
- Roberts, B. W., Wood, D., & Caspi, A. (2008). The development of personality traits in adulthood. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 375–398). New York: Guilford Press.
- Roseman, I. J. (1991). Appraisal determinants of discrete emotions. *Cognition and Emotion*, 5, 161–200.
- Rosenberg, E. L., & Ekman, P. (1994). Coherence between expressive and experiential systems in emotion. *Cognition and Emotion*, 8, 201–229.
- Sauter, D. A., & Scott, S. K. (2007). More than one kind of happiness: Can we recognize vocal expressions of different positive states? *Motivation and Emotion*, 31, 192–199.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5–14.
- Shariff, A. F., & Tracy, J. L. (2009). Knowing who’s boss: Implicit perceptions of status from the nonverbal expression of pride. *Emotion*, 9, 631–639.
- Shariff, A. F., Tracy, J. L., Cheng, J. T., & Henrich, J. (2010). Further thoughts on the evolution of pride/s two facets: A response to Clark. *Emotion Review*, 2, 399–400.
- Shariff, A. F., Tracy, J. L., & Markusoff, J. (2012). (Implicitly) judging a book by its cover: The power of pride and shame expressions in shaping judgments of social status. *Personality and Social Psychology Bulletin*, 38(9), 1178–1193.
- Shi, Y., Chung, J., Cheng, J. T., Tracy, J. L., Robins, R. W., Chen, X., et al. (2013). *Cross-cultural evidence for the two-facet structure of pride*. Manuscript under review.
- Simon-Thomas, E. R., Keltner, D. J., Sauter, D., Sinicropi-Yao, L., & Abramson, A. (2009). The voice conveys specific emotions: Evidence from vocal burst displays. *Emotion*, 9, 838–846.
- Stipek, D., Recchia, S., & McClintic, S. (1992). Self-evaluation in young children. *Monographs of the Society for Research in Child Development*, 57, 100.
- Strayer, F. F., & Strayer, J. (1976). An ethological analysis of social agonism and dominance relations among preschool children. *Child Development*, 47, 980–989.
- Takahashi, H., Matsuura, M., Koeda, M., Yahata, N., Suhara, T., Kato, M., et al. (2008). Brain activations during judgments of positive self-conscious emotion and positive basic emotion: Pride and joy. *Cerebral Cortex*, 18, 898–903.
- Takahashi, H., Yahata, N., Koeda, M., Matsuda, T., Asai, K., & Okubo, Y. (2004). Brain activation associated with evaluative processes of guilt and embarrassment: An fMRI study. *NeuroImage*, 23, 967–974.
- Tangney, J. P., & Fisher, K. W. (Eds.). (1995). *Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride*. New York: Guilford Press.
- Tangney, J. P., Wagner, P., & Gramzow, R. (1989). *The Test of Self-Conscious Affect*. George Mason University, Fairfax, VA.
- Thompson, R. A. (1989). Causal attributions and children’s emotional understanding. In C. Saarni & P. L. Harris (Eds.), *Children’s understanding of emotion* (pp. 117–150). New York: Cambridge University Press.
- Tomkins, S. S. (1962). *Affect imagery consciousness: The positive affects* (Vol. 1). New York: Springer.
- Tracy, J. L., & Beall, A. (2011). Happy guys finish last: The impact of emotional expressions on sexual attraction. *Emotion*, 11, 1379–1387.

- Tracy, J. L., Cheng, J. T., Robins, R. W., & Trzesniewski, K. H. (2009). Authentic and hubristic pride: The affective core of self-esteem and narcissism. *Self and Identity*, 8, 196–213.
- Tracy, J. L., Cheng, J. T., Martens, J. P., & Robins, R. W. (2011). The affective core of narcissism: Inflated by pride, deflated by shame. In W. K. Campbell & J. Miller (Eds.), *Handbook of narcissism and narcissistic personality disorder* (pp. 330–343). New York: Wiley.
- Tracy, J. L., & Matsumoto, D. (2008). The spontaneous display of pride and shame: Evidence for biologically innate nonverbal displays. *Proceedings of the National Academy of Sciences*, 105, 11655–11660.
- Tracy, J. L., & Prehn, C. (2012). The use of contextual knowledge to differentiate hubristic and authentic pride from a single non-verbal expression. *Cognition and Emotion*, 26, 14–24.
- Tracy, J. L., & Randles, D. (2011). Four models of basic emotions: A review of Ekman and Cordaro, Izard, Levenson, and Panksepp and Watt. *Emotion Review*, 3, 397–405.
- Tracy, J. L., & Robins, R. W. (2004a). Putting the self into self-conscious emotions: A theoretical model. *Psychological Inquiry*, 15, 103–125.
- Tracy, J. L., & Robins, R. W. (2004b). Show your pride: Evidence for a discrete emotion expression. *Psychological Science*, 15, 194–197.
- Tracy, J. L., & Robins, R. W. (2007a). Emerging insights into the nature and function of pride. *Current Directions in Psychological Science*, 16, 147–150.
- Tracy, J. L., & Robins, R. W. (2007b). The prototypical pride expression: Development of a nonverbal behavioral coding system. *Emotion*, 7, 789–801.
- Tracy, J. L., & Robins, R. W. (2007c). The psychological structure of pride: A tale of two facets. *Journal of Personality and Social Psychology*, 92, 506–525.
- Tracy, J. L., & Robins, R. W. (2008a). The automaticity of emotion recognition. *Emotion*, 7, 81–95.
- Tracy, J. L., & Robins, R. W. (2008b). The nonverbal expression of pride: Evidence for cross-cultural recognition. *Journal of Personality and Social Psychology*, 94, 516–530.
- Tracy, J. L., & Robins, R. W. (in press). Conceptual and empirical strengths of the authentic/hubristic model of pride. *Emotion*.
- Tracy, J. L., Robins, R. W., & Lagattuta, K. H. (2005). Can children recognize the pride expression? *Emotion*, 5, 251–257.
- Tracy, J. L., Robins, R. W. & Schriber, R. A. (2009). Development of a FACS-verified set of basic and self-conscious emotion expressions. *Emotion*, 9, 554–559.
- Tracy, J. L., Shariff, A. F., & Cheng, J. T. (2010). A naturalist's view of pride. *Emotion Review*, 2, 163–177.
- Tracy, J. L., Shariff, A. F., Zhao, W., & Henrich, J. (2013). Cross-cultural evidence that the pride expression is a universal automatic status signal. *Journal of Experimental Psychology: General*, 142, 163–180.
- von Rueden, C., Gurven, M., & Kaplan, H. (2011). Why do men seek status?: Fitness payoffs to dominance and prestige. *Proceedings of the Royal Society B: Biological Sciences*, 278, 2223–2232.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, 92, 548–573.
- Weisfeld, G. E., & Beresford, J. M. (1982). Erectness of posture as an indicator of dominance or success in humans. *Motivation and Emotion*, 6, 113–131.
- Williams, L. A., & DeSteno, D. (2008). Pride and perseverance: The motivational role of pride. *Journal of Personality and Social Psychology*, 94, 1007–1017.
- Williams, L., & DeSteno, D. (2009). Pride: Adaptive social emotion or seventh sin? *Psychological Science*, 20, 284–288.