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Leading with Pride:

Do Hubristic and Authentic Pride Underlie the Attainment of Dominance and Prestige?

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## Abstract

Based on ethological observations and evolutionary logic, Henrich and Gil-White (2001) distinguished between two distinct routes to attaining social status in human societies: *dominance* (i.e., the use of force and intimidation) and *prestige* (i.e., sharing of wisdom, skills, or expertise). The present research tested the novel theory that two distinct facets of pride, “hubristic” and “authentic” (Tracy & Robins, 2007), may have evolved to promote dominance and prestige, respectively. Support for this hypothesis emerged from two studies employing self-reports (Study 1), and self- and peer-reports of group members on varsity-level athletic teams (Study 2). Results from both studies showed that hubristic pride is positively associated with dominance, whereas authentic pride is positively associated with prestige. Moreover, the two facets of pride are part of a larger suite of traits that foster dominance and prestige, respectively. Specifically, hubristic pride is associated with traits such as narcissism, aggression, disagreeableness, and physical size, which are positively related to dominance, whereas authentic pride is positively associated with traits such as genuine self-esteem, agreeableness, conscientiousness, academic achievement, advice-giving, and pro-sociality, which are positively related to prestige. The present research is also the first to show that individuals within groups can reliably and accurately report on their own and their peers’ dominance and prestige, and can distinguish between the two forms of high status. Discussion focuses on the implications of these findings for our understanding of the evolutionary origins of pride and social status, and the importance of emotion and personality to status attainment.

Keywords: social status, authentic pride, hubristic pride, dominance, prestige

From 1967 to 2005, Hank Greenberg, CEO of American International Group (AIG), helped build AIG into one of the 20 largest public companies in the world. Greenberg attained this success, in part, by developing a reputation for mercilessly harassing his managers and demonstrating an obsessive drive for power and control. He is still feared for his ability to humiliate subordinates and colleagues, and is widely viewed as one of the most arrogant and autocratic CEOs ever to grace the company. Yet, having increased AIG's market value from \$300 million to \$150 billion, Greenberg is a business legend. Meg Whitman, former CEO of eBay, presents a contrasting story of business success. Unlike Greenberg, Whitman achieved her success by subtly steering, rather than controlling, the decision-making process. She has been described as leading by "not leading", instead hiring intelligent collaborators and allowing them to reach the correct decisions. She has said, "We reach consensus or I make the decision. If I am wrong, I change it, and I don't take myself too seriously" (Hayward, 2007, p. 118).

Although both Greenberg and Whitman are successful leaders who have influenced the lives of thousands of employees, they have done so through seemingly opposite leadership styles. The present research examines whether these two leadership styles represent distinct strategies to acquiring social status, and whether they are driven by distinct emotions.

### *The Evolution of Social Status*

Human societies tend to be organized hierarchically; this structure is thought to reduce conflicts over resources and mating opportunities (Ellis, 1995; Savin-Williams, 1980). High status individuals tend to have disproportionate influence, such that social status can be defined as the degree of influence one possesses over resource allocations, conflicts, and group decisions (Bales, Strodbeck, Mills, & Roseborough, 1951; Berger, Cohen, & Zelditch, 1972). In contrast, low-status individuals must forsake these benefits and ensure their provision to higher-status

conspecifics. As a result of this disparity, high status tends to promote higher fitness than low status, and a large body of evidence attests to a strong relation between social rank and fitness or well-being (e.g., Barkow, 1975; Cowlshaw & Dunbar, 1991; Hill, 1984). As a result, humans likely evolved a motivation to “get ahead” within their social group by competing with other group members for status (Handgraaf, Van Dijk, Vermunt, Wilke, & De Dreu, 2008; Krebs, Davies, & Parr, 1993).

### *Pride and Status*

In humans, the emotion of pride may be the affective mechanism that facilitates the attainment and maintenance of status. At least in those cultures where it has been studied, pride has been found to motivate achievements and perseverance at difficult or tedious tasks (Herrald & Tomaka, 2002; Verbeke, Belschak, & Bagozzi, 2004; Williams & DeSteno, 2008); consequent achievements are, in turn, rewarded with social approval, acceptance, and status. Consistent with this link, studies show that individuals intuitively associate pride with high status (Tiedens, Ellsworth, & Moskowitz, 2000), dispositionally agentic (i.e., assertive and firm) individuals tend to feel greater pride than those low in agency (Anderson & Berdahl, 2002; Keltner, Gruenfeld, & Anderson, 2003), and individuals induced to feel pride display more high-status behaviors and are perceived by others as more influential, compared to individuals in a neutral-emotion condition (Williams & DeSteno, 2009). The pride-high status association generalizes across cultures; individuals from Germany, France, Japan, and the U.S. share this belief (Mondillon et al., 2005).

In addition, nonverbal displays of pride, which are universally recognized and shown in response to success (Tracy & Matsumoto, 2008; Tracy & Robins, 2008), send a rapidly and automatically perceived message of high status to conspecifics (Shariff & Tracy, in press). In

fact, pride has been shown to signal high status more strongly than any other emotion expression examined, and the high-status message sent by the pride expression is so powerful as to override contradicting contextual information in predicting implicit judgments of status (Shariff, Markusoff, & Tracy, under review). Thus, it seems likely that pride evolved as a mechanism for motivating behaviors oriented toward increasing one's social status and informing other group members of deserved status shifts.

### *Two Facets of Pride*

One question that arises from this account, however, is why there exist two distinct facets of pride, only one of which is associated with socially valued achievements (e.g., Tangney, Wagner, & Gramzow, 1989; Tracy & Robins, 2004; 2007). Studies have shown that pride is best characterized as consisting of an *authentic* facet, fueled by feelings of accomplishment, confidence, and success; and a more *hubristic* facet, marked by arrogance and conceit. These two facets are conceptualized and experienced as distinct and independent, and are associated with highly divergent personality profiles (Tracy & Robins, 2007). Authentic pride is the more pro-social, achievement-oriented facet, associated with the socially desirable Big Five personality traits of extraversion, agreeableness, and conscientiousness; high implicit and explicit self-esteem; satisfying interpersonal relationships; and positive mental health. In contrast, hubristic pride is the more anti-social facet, associated with disagreeableness, neuroticism, and low conscientiousness; narcissism; shame-proneness; problematic relationships; and poor mental health outcomes (Tracy & Robins, 2007; Tracy, Cheng, Robins, & Trzesniewski, 2009).

Given the notably negative personality correlates of hubristic pride, it is not immediately evident why both facets might have evolved. One possibility is that both pride facets promote social status, but they do so in different ways.

### *Two Fundamental Status Strategies: Prestige and Dominance*

Henrich and Gil-White (2001) proposed an evolutionary model articulating two distinct paths to attaining status in human societies: *dominance* and *prestige*. *Dominance* refers to the use of intimidation and coercion to attain a social status that is largely based on fear. In the dominance hierarchies that characterize most nonhuman species and also exist in humans, social rank is determined on the basis of agonistic encounters (Krebs, Davies, & Parr, 1993; Trivers, 1985). In humans, dominance is not limited to physical conflict, but can be wielded by individuals who control access to money, mates, well-being, or self-esteem. Dominant individuals create fear and powerlessness in subordinates by threatening to withhold, or explicitly denying, resources; subordinates submit by complying with demands or providing material or social resources, to safeguard other more valuable resources such as their physical survival.

In contrast, *prestige* refers to status achieved by individuals who are recognized and respected for their skills or knowledge. According to Henrich and Gil-White (2001), prestige arose in evolutionary history when humans acquired the ability to attain, use, and share cultural information, because selection favored learning from knowledgeable or skilled conspecifics. As a result, subordinate group members would be motivated to provide deference (e.g., mates, food, praise, coalitional support) to prestigious individuals, who in turn allow deferential followers access to learn and copy their skills and expertise.

Although this account of dominance and prestige is consistent with distinctions made previously in other disciplines (e.g., Chance & Jolly, 1970; Gilbert, Price, & Allan, 1995; Kemper, 1990), and is supported by ethological observations of small-scale societies, few studies have directly tested whether both forms of status characterize hierarchical relationships in

contemporary human groups. In perhaps the only study to date assessing personality correlates of the two forms of status, Buttermore (2006) found divergent personality profiles associated with the two constructs, with dominance characterized by Machiavellianism, aggression, and disagreeableness; and prestige by high self-esteem, low aggression, agreeableness, conscientiousness, and openness to experience. In another study, Snyder and colleagues (2008) found that women viewed prestigious men as more desirable as mates than dominant men. In the only other study, of which we are aware, to have empirically examined the two forms of status, basal levels of testosterone were unrelated to dominance but negatively related to prestige (Johnson, Burk, & Kirkpatrick, 2007), which may be due to the need for prestigious individuals to maintain their viability as attractive social models by suppressing aggression.

#### *Which Strategy to Use?*

Although both dominance and prestige are, in theory, viable strategies for acquiring high status, the effectiveness of each may vary depending on individual attributes (e.g., physical size, skills) and the situation in which it is used. Dominance-oriented behaviors (e.g., aggression, manipulateness) can impose greater costs than benefits when individuals lack the capacity to intimidate others or enforce threats, or in social groups that do not permit or reward authoritative influence. Prestige, too, can be ineffective, when individuals are not perceived as possessors of valued cultural information, or in social groups structured largely around dominance hierarchies.

However, conscious, deliberate analysis about which status strategy to pursue in a given situation would be costly, as such mental computations are inefficient and subject to error (Cosmides & Tooby, 2000). An automatic affective mechanism promoting the appropriate response in each context would free valuable mental resources (Plutchik, 1980). Indeed, affect programs guided by automatic analyses of the relative costs and benefits of potential responses to

events are thought to have evolved to promote quick behavioral and cognitive responses to recurrent, evolutionarily significant events (Bargh & Chartrand, 1999; Cosmides & Tooby, 2000). From this perspective, pride may be the automatic affective program that allows individuals to cope most effectively with opportunities for status attainment, and the two facets of pride may have separately evolved to guide behaviors oriented more specifically toward the attainment of dominance or prestige. Specifically, hubristic pride may have evolved to motivate behaviors, thoughts, and feelings oriented toward attaining dominance, whereas authentic pride may have evolved to motivate behaviors, thoughts, and feelings oriented toward attaining prestige (Tracy, Shariff, & Cheng, in press).

*Hubristic pride and dominance.* The feelings of superiority and arrogance associated with hubristic pride may provide the mental preparedness for attaining and sustaining dominance. Hubristic pride may also motivate specific behaviors needed to attain dominance, such as aggression and manipulateness. Studies have shown that highly narcissistic and disagreeable individuals are more likely to experience hubristic pride in response to pride-eliciting situations, and individuals prone to hubristic pride tend to be disagreeable, aggressive, and Machiavellian (Tracy & Robins, 2007; Tracy et al., 2009). By promoting these anti-social traits and behaviors, hubristic pride may allow individuals to galvanize fear in subordinates, and maneuver their way up the dominance hierarchy. Further supporting this link, individuals high in trait hubristic pride tend to have poor interpersonal relationships and show a willingness to engage in anti-social behaviors (Tracy et al., 2009).

*Authentic pride and prestige.* In contrast, the feelings of confidence and accomplishment associated with authentic pride may provide the mental preparedness for attaining prestige; these feelings may also serve as psychological reinforcement for socially valued achievements, given



that authentic pride feelings arise from accomplishments attributed to unstable, controllable behaviors, such as effort and hard work (Tracy & Robins, 2007). Furthermore, studies have shown that effort-based achievements—the kind that generate authentic pride—promote greater perseverance on challenging tasks and greater desire for future success, both of which should lead to increased prestige (Dweck, 1999; Verbeke et al., 2004).

More broadly, individuals who are confident, agreeable, hard-working, energetic, kind, empathic, and non-dogmatic—the personality profile associated with trait authentic pride (Hart & Matsuba, 2007; Tracy et al., 2009; Tracy & Robins, 2007)—should have the greatest success in out-competing others in the contest to become attractive social models. Competition for prestige should favor individuals who demonstrate knowledge and a willingness to share it but do not arrogate their authority; aggressive interpersonal behaviors would in some sense “raise the price” subordinates must pay to attain valued knowledge. In fact, overly aggressive behaviors have been identified as attributes that can ‘break a leader’ in largely prestige-based hierarchies (Ames & Flynn, 2007; Bass, 1990). Supporting the theoretical link between confidence and prestige, two-year olds determine which adults to copy on the basis of how confident they appear to be (Birch, Akmal, & Framptom, in press). Authentic pride thus may have evolved to facilitate the attainment of prestige by promoting a focus on one’s effort and accomplishments, motivating productivity and hard work, and fostering agreeableness, a sense of confidence without arrogance, and a willingness to share one’s knowledge.

In sum, each facet of pride may have evolved to promote a coordinated set of cognitive and behavioral responses to achievements, which allow for the attainment of dominance or prestige. Importantly, although the two pride facets may allow individuals to flexibly utilize both status strategies, individuals are also likely to show cross-situational consistency in strategy use

(i.e., adopting one strategy more frequently than the other), which may be guided by chronic, dispositional tendencies to experience one facet of pride or the other. Given that the costs and benefits of each strategy may be partly determined by individual differences in genetically based traits—such as the Big Five personality traits, physical size, and intelligence—these traits may influence which facet of pride individuals are prone to experiencing and which form of status they are thus likely to attain. In fact, previous research has shown that using force to gain power—a dominance-oriented strategy—is positively correlated with traits of narcissism, aggression, and body size (Brunell et al., 2008; Buss & Perry, 1992; Buttermore, 2006; Raine, Reynolds, Venables, Mednick, & Farrington, 1998); whereas traits such as high self-esteem, conscientiousness, agreeableness, intelligence, and altruism are associated with social acceptance and respect (Buttermore, 2006; Judge, Bono, Ilies, & Gerhardt, 2002; Rubin, Bukowski, & Parker, 1998)—interpersonal characteristics central to attaining prestige.

Integrating this deductive theoretical account with a more inductive psychological account of the proximal processes through which pride may promote social status, Figure 1 presents a theoretical model of the overarching causal process. In predicted pathways to both prestige and dominance, a success occurs, signaling the potential to advance one's status. In the prestige pathway, an individual with an authentic pride-prone personality—high agreeableness, conscientiousness, emotional stability, and self-esteem—makes an internal, unstable, and controllable (i.e., effort-based) attribution for the success, which would elicit authentic pride. The emotion motivates behaviors such as pro-social sharing of wisdom and skills, and continued effort toward future accomplishments; these behaviors in turn promote a prestigious reputation. In contrast, in the pathway to dominance, an individual with a hubristic pride-prone personality—disagreeable, aggressive, neurotic, and narcissistic—makes an internal, stable, and

uncontrollable (i.e., ability-based) attribution for success, eliciting hubristic pride. The emotion motivates behaviors that permit intimidation and control, such as aggression and manipulation; these behaviors in turn promote a dominant reputation.<sup>1</sup> In the present research, we test several hypotheses emerging from this model.

*Hypothesis 1.* Hubristic pride will be positively related to dominance, and authentic pride will be positively related to prestige. We tested this Hypothesis in two studies. In Study 1, participants reported dispositional levels of hubristic and authentic pride, and dominance and prestige. In Study 2, participants were varsity-level athletes on university teams who reported dispositional levels of hubristic and authentic pride, and provided self-reports of dominance and prestige, and peer-reports of their teammates' dominance and prestige.

*Hypothesis 2.* Hubristic pride will be positively related to traits that foster dominance, and authentic pride will be positively related to traits that foster prestige. That is, hubristic pride should be positively related to narcissism, aggression, social rejection, disagreeableness, and body size, and all of these traits should show positive relations with dominance, and null or negative relations with prestige. In contrast, authentic pride should be positively related to self-esteem, social acceptance, agreeableness, conscientiousness, emotional stability, openness to experience, and academic achievement, and these traits should show positive relations with prestige and null or negative relations with dominance. This hypothesis was also tested in both studies, by assessing self-reports (Study 1) and peer-reports (Study 2) of status, personality traits, and related attributes.

In addition, by assessing status using both self- and peer-reports in Study 2, we were able to examine accuracy and bias in the self-perception of dominance and prestige, and to test whether the two facets of pride have divergent effects on these biases. Although previous studies

have addressed questions of accuracy and bias in self-perceptions of undifferentiated status, no previous research has examined whether individuals can accurately report where they and others in their social group stand on each of the two hierarchies, and whether individuals can differentiate between prestigious and dominant group members. This question is critical to Henrich and Gil-White's (2001) model; if both hierarchies serve an adaptive function in social groups, individuals must be able to accurately determine their rank, and that of others, within each hierarchy.

This research also extends previous findings by being the first to test the novel theory that the two facets of pride evolved to promote distinct forms of status. Previous studies examining the link between pride and status have focused exclusively on the association between undifferentiated pride (i.e., not distinguishing between hubristic and authentic) and undifferentiated status (i.e., not distinguishing between dominance and prestige; e.g., Shariff & Tracy, in press; Tiedens et al., 2000; Williams & DeSteno, 2009). More broadly, previous research on status has tended to neglect its dual-faceted nature, instead defining status as either exclusively prestige (e.g., Anderson, John, Keltner, & Kring, 2001; Barkow, 1975; Eibl-Eibesfeldt, 1989; Goldhamer & Shils, 1939; Goode, 1978) or exclusively dominance (e.g., Bernhardt, 1997; Collins, 1990; Ellis, 1995; Hill, 1984; Kemper, 1991; Raven & French, 1958; but see Johnson, Burk, & Kirkpatrick, 2007). Thus, another contribution of this work is our test of Henrich and Gil-White's (2001) two-facet model of status; this is the first research to examine whether the two forms of status can be reliably measured through self- and peer-reports. In doing so, we also report the development and validation of new scales for assessing dominance and prestige using both self- and peer-reports.

## Study 1

In addition to testing Hypotheses 1 and 2, Study 1 sought to validate a new measure for assessing dominance and prestige. Our strategy was to include a broad item pool and subsequently refine the scales, based on reliability and factor analyses across Studies 1 and 2, with particular attention paid to replication across samples and methods (i.e., self- and peer-reports). Thus, as a first step, Study 1 aimed to identify a set of descriptors that are conceptually relevant to each trait, cohere together empirically, and show a clean factor structure with high loadings on the primary factor and low loadings on the other factor.

## Method

### *Participants and Procedure*

191 undergraduates (70% female) completed an on-line questionnaire in exchange for course credit.

### *Measures*

*Developing the initial item pool for assessing dominance and prestige.* We began with the 16 items constituting the Self-Perceived Social Status Scale (Buttermore, 2006), which was developed as a self-report measure of dominance and prestige. To ensure coverage of the full scope of each theoretical construct, we supplemented these scales with six new items, resulting in an initial item pool of 10 dominance and 12 prestige items (see Table 1). Participants were instructed to “indicate the extent to which each statement accurately describes *you*” using a rating scale ranging from 1 (*Not at all*), to 7 (*Very much*), with 4 anchored as *Somewhat*.

*Trait hubristic and authentic pride.* Dispositional hubristic and authentic pride were assessed with the 14-item Hubristic and Authentic Pride-Proneness Scales (Tracy & Robins, 2007);  $\alpha$ s = .89 and .87, for hubristic and authentic pride, respectively.

*Traits predicted to underlie dominance or prestige.* We assessed the Big Five factors of personality using the Big Five Aspects Scale (BFAS; DeYoung et al., 2007), which provides scores for each of the Big Five traits as well as two distinct aspects within each trait: extraversion ( $\alpha = .81$ ; enthusiasm and assertiveness,  $\alpha s = .83$  and  $.87$ , respectively), agreeableness ( $\alpha = .81$ ; compassion and politeness,  $\alpha s = .85$  and  $.75$ , respectively), conscientiousness ( $\alpha = .81$ ; industriousness and orderliness,  $\alpha s = .82$  and  $.74$ , respectively), neuroticism ( $\alpha = .81$ ; withdrawal and volatility,  $\alpha s = .81$  and  $.87$ , respectively), and openness to experience ( $\alpha = .81$ ; intellect and openness,  $\alpha s = .84$  and  $.75$ , respectively). Aggression was assessed with the Aggression Questionnaire (Buss & Perry, 1992;  $\alpha = .91$ ); and social acceptance with the Inclusionary Status Scale (Spivey, 1990;  $\alpha = .91$ ). Self-esteem was assessed with the Rosenberg Self-Esteem scale (RSE; Rosenberg, 1965;  $\alpha = .89$ ); and narcissism with the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988;  $\alpha = .86$ ). Given that self-esteem and narcissism are distinct but share variance in self-favorability, we computed separate variables to capture the unique variance in each by regressing self-esteem on narcissism, and vice-versa, and saving the standardized residuals. The resultant residualized variables can be conceptualized as the non-overlapping constructs of genuine self-esteem and narcissistic self-aggrandizement (Paulhus, Robins, Trzesniewski, & Tracy, 2004).

Finally, we also assessed traits that are theoretically relevant to dominance and prestige: academic achievement (measured with Grade Point Average, or GPA), age, height, and Body Mass Index (BMI), a measure of body weight adjusted for height.

## Results and Discussion

### *Development of Dominance and Prestige Scales*

We conducted principal axis factor analyses, with oblimin rotation, to verify the presumed two-factor structure of the 22 dominance and prestige items and to determine which items to retain. As predicted, a scree test suggested two factors; eigenvalues for the first six factors were 4.86, 4.23, 1.54, 1.43, .97, and .90. Together, these two components accounted for 41.29% of the total variance (22.07 % for Factor 1, and 19.22% for Factor 2). As shown in Table 1, the 10 presumed dominance items loaded highly and positively on the first factor, and had low loadings on the second factor, whereas the 12 presumed prestige items loaded highly and positively on the second factor, and had low loadings on the first factor. The factors were correlated .02, indicating that dominance and prestige are independent.

We next identified potentially problematic items (i.e., items that did not cleanly load on only one of the two factors) as those with primary factor loadings below .50 and/or cross loadings greater than .30. Seven items met this criterion, but, because all 7 loaded more highly on their primary factor, which was the predicted factor for each, and because reliability analyses suggested good internal consistency for the full scales ( $\alpha$ s = .84 and .82 for dominance and prestige, respectively), we retained all 22 items at this stage. Thus, results for Study 1 are based on scale scores for the full 10 dominance and 12 prestige items.<sup>2</sup>

### *Is Hubristic Pride Positively Related to Dominance, and Authentic Pride Positively Related to Prestige?*

Consistent with Hypothesis 1, trait hubristic pride was positively related to dominance ( $r = .48, p < .0001$ ) and negatively to prestige ( $r = -.17, p < .05$ ). Also consistent with Hypothesis 1, trait authentic pride was positively related to prestige ( $r = .51, p < .0001$ ). Authentic pride was

positively related to dominance as well ( $r = .19, p < .01$ ), but this association was considerably weaker ( $Z = 3.52, p < .001$ ) than that between hubristic pride and dominance, and was likely due to shared variance in agency. The two facets of pride were not significantly correlated ( $r = .07, ns$ ).

To test whether the strong associations between the two facets of pride and corresponding forms of status were driven by the broader, theoretically (and empirically) related traits of self-esteem and narcissism, we conducted multiple regression analyses predicting each form of status from both facets of pride and narcissism and self-esteem. Hubristic pride significantly predicted dominance over and above the effects of the other variables,  $\beta = .31, t(186) = 4.89, p < .0001$ ; authentic pride was a marginally significant predictor of prestige when controlling for shared variance with the other predictors,  $\beta = .14, t(186) = 1.78, p = .08$ . Narcissism also predicted dominance,  $\beta = .49, t(186) = 6.69, p < .0001$ , and, more weakly, prestige,  $\beta = .26, t(186) = 3.57, p < .001$ . Self-esteem also emerged as a predictor of prestige,  $\beta = .35, t(186) = 4.05, p < .0001$ . These results provide evidence for the incremental validity of hubristic pride in predicting dominance, and suggest that while authentic pride is strongly related to prestige, this relation may work in part through its association with self-esteem.

*Is Hubristic Pride Positively Related to Traits that Foster Dominance, and Authentic Pride to Traits that Foster Prestige?*

Table 2 presents correlations of the two facets of pride and forms of status with self-esteem, narcissism, social acceptance, aggression, and the Big Five personality traits. As predicted, dominance and hubristic pride were both negatively related to genuine self-esteem and social acceptance, and strongly positively related to narcissistic self-aggrandizement and aggression. In contrast, as predicted, prestige and authentic pride were strongly positively related



to genuine self-esteem and social acceptance, and negatively to aggression. Although narcissistic self-aggrandizement was positively related to prestige and authentic pride, the magnitude of these associations was considerably weaker than that between narcissism and dominance,  $Z = -4.55, p < .0001$ , and between narcissism and hubristic pride,  $Z = -2.70, p < .01$ , respectively.

For the most part, dominance and hubristic pride, and prestige and authentic pride, also showed convergent patterns of correlations with the Big Five traits (see Table 2). Prestigious individuals and individuals high in authentic pride tended to be extraverted, conscientious, emotionally stable, and open to experience. Prestigious individuals were also high in agreeableness, but no significant relation emerged between authentic pride and agreeableness—likely due to the measure of agreeableness used here, given that previous studies have found a robust positive relation between authentic pride and agreeableness using a more established measure (Tracy & Robins, 2007; Tracy et al., 2009). Dominant individuals and individuals high in hubristic pride tended to be disagreeable, but individuals high in dominance were also extraverted and somewhat conscientious, whereas those high in hubristic pride were somewhat introverted, low in conscientiousness, and low in openness.

Some of these discrepancies, too, may be due to the Big Five measure used here, given that previous studies have not found any significant relation between hubristic pride and extraversion, which fits with the expectation that hubristic pride might be positively related to the assertive aspects of extraversion, but negatively to the enthusiastic and sociable aspects. In fact, based on the Big Five Aspects scales included here, assertiveness (an aspect of extraversion) was positively related to both dominance ( $r = .46$ ) and prestige ( $r = .56$ ), as well as authentic pride, ( $r = .51$ ; the correlation with hubristic pride was not significant,  $r = .00$ ), whereas enthusiasm (the other aspect) was positively related to prestige ( $r = .45$ ) and authentic pride ( $r$

= .35), but negatively to hubristic pride ( $r = -.27$ , all  $ps < .001$ ) and trended toward a negative relation with dominance ( $r = -.11$ ,  $p = .13$ ). Previous research has demonstrated the importance of extraversion to status attainment (e.g., Anderson et al., 2001; Judge et al., 2002), but this finding adds nuance to the association, by indicating that the various aspects of extraversion may promote different forms of high status.

Finally, as predicted, dominance was positively associated with height, controlling for gender,  $\beta = .63$ ,  $t(186) = 2.08$ ,  $p < .05$ , and height bore no significant relation with prestige. Also as expected, prestige and authentic pride were positively associated with academic achievement ( $rs = .24$  and  $.33$ ,  $ps < .001$ ), which was unrelated to dominance and hubristic pride.

Overall, these results are consistent with the expectation that individuals high in dominance and hubristic pride are narcissistic and socially disliked group members who acquire influence through aggression, assertiveness, intimidation, emotional volatility, and physical size (height). In contrast, individuals high in prestige and authentic pride tend to be socially accepted, have genuine high self-esteem, and exhibit enthusiasm alongside their assertiveness, as well as conscientiousness, emotional stability, openness, and high levels of achievement. Both forms of high status are associated with narcissism, but prestige considerably less so. Thus, these results support our two hypotheses, and provide evidence for the discriminant validity of dominance and prestige.

However, one limitation of Study 1 is its reliance on self-report measures of status. Although previous research suggests that individuals are generally accurate perceivers of their own social status (Anderson, Srivastava, Beer, & Spataro, 2006), other studies suggest that individuals tend to overestimate their positive traits (Taylor & Brown, 1988). Furthermore, pride-prone individuals may be particularly vulnerable to such biases, possibly leading to

artificial inflation of the key correlations of interest. Thus, in Study 2 we assessed both self- and peer-reported status.

## Study 2

Study 2 tested Hypotheses 1 and 2 using peer- and self-ratings of status. Study 2 also extended the findings of Study 1 by examining status in naturalistic hierarchically structured social groups: university-level varsity athletic teams. Athletic teams provide an ideal context for examining social status, for several reasons. First, as long-term group members who spend an extensive amount of time together, teammates are well suited to serve as peer-raters on a variety of domains. Second, athletic teams typically have an explicit hierarchical structure, increasing the likelihood that individuals agree about the relative social rank of others. Third, studies have found that once a group's hierarchical structure has emerged, this structure remains stable over time (Anderson et al., 2001), so relative levels of dominance and prestige within this sample should be fairly solidified.

Another contribution of Study 2 is that we attained peer-reports of traits theoretically relevant to dominance and prestige; no previous study has examined whether the two forms of status are built upon divergent peer-perceived trait profiles. We expected that prestigious individuals would be perceived by their teammates as good sources of advice (i.e., possessing high quality information and a willingness to share it), and highly intellectual and pro-social. In contrast, we expected that dominant individuals would be perceived as low in pro-sociality and helpfulness. We expected both forms of status to be positively related to perceived leadership. Given this expected pattern, we also tested whether highly prestigious and dominant individuals would share a motivation to “get ahead” (i.e., agency), but differ in the motivation to “get along” (i.e., communion; Bakan, 1966).

The methodology of Study 2 also allowed us to examine several novel questions concerning the interpersonal perception of status: (a) Do group members show consensus in their judgments of a given individual's dominance and prestige? (b) Are self-perceptions of dominance and prestige accurate (i.e., convergent with peer-perceptions)? And, (c) is hubristic pride systematically related to overestimation of dominance, and authentic pride systematically related to overestimation of prestige?

The first question, concerning inter-rater agreement on dominance and prestige, addresses Henrich and Gil-White's (2001) theoretical assumption that displaying appropriate and discriminant deference to dominant and prestigious individuals bears important adaptive consequences. Knowing *whom* to defer to—whom to learn from in the case of prestige, and whose demands to comply with in the case of dominance—is essential, so individuals should have an accurate perception of each group member's level of dominance and prestige (i.e., convergent with the perceptions of other group members). The second question addresses whether individuals can accurately perceive their own social status, and discriminate between the two forms of status in their self-perceptions. According to functionalist accounts of status, individuals must “know where they stand”, in order for the group to tactfully coordinate each member's rank-defined role (Anderson et al., 2006; Goffman, 1967). Given the costs associated with errors in status self-perception (e.g., demanding deference from non-subordinates could lead to attacks, and failing to demand deference from subordinates could cost opportunities for resource acquisition), selection pressures may have favored an acute sensitivity toward accurate perceptions of one's own relative levels of prestige and dominance.

Importantly, however, although individuals should be motivated toward accurate self-perceptions of status, they may also be motivated to self-enhance on the domain of status. A

motivation to self-enhance may be part of impression management (Robins & John, 1997); by convincing themselves that their status is higher than it actually is, individuals may more effectively persuade others, leading to actual increased status and acceptance. More specifically, holding an exaggerated view of one's dominance may generate feelings of hubristic pride, which would motivate the aggressive and forceful behaviors that increase actual dominance.

Conversely, holding an exaggerated view of one's prestige may generate authentic pride, which in turn would motivate the achievements, conscientious behavior, and generosity that increases actual prestige. These relations are likely reciprocal: hubristic pride feelings may motivate a tendency to self-enhance on dominance, and authentic pride feelings may motivate a tendency to self-enhance on prestige. Supporting this expectation, studies have shown that narcissists tend to show an "egoistic" self-enhancement bias, exaggerating agentic traits such as extraversion, whereas individuals with genuine high self-esteem tend to show a "moralistic" self-enhancement bias, exaggerating their communal traits such as pro-sociality and social conformity (Campbell, Rudich, & Sedikides, 2002; Paulhus & John, 1998). Thus, hubristically proud individuals may show distortions in self-perceptions of dominance—the form of status based on power and egoism—but not necessarily prestige, given that prestige-relevant traits (e.g., social acceptance, generosity) are peripheral to their identity. In contrast, authentically proud individuals value their social relationships, so may show distortions (i.e., exaggeration) in self-perceptions of prestige. Thus, our third question addresses whether hubristic pride is systemically associated with overestimating dominance, and authentic pride with overestimating prestige.<sup>3</sup>

## Methods

### *Participants and Procedure*

Ninety-one male<sup>4</sup> athletes from four university-level varsity athletic teams (baseball,  $n = 33$ , soccer,  $n = 19$ , volleyball,  $n = 13$ , and rugby,  $n = 26$ ) completed questionnaires in exchange for a lump-sum payment to the team.<sup>5</sup> All participants were members of the team for at least 4 months, allowing sufficient time for acquaintanceships to develop and hierarchical relationships to stabilize.

In addition to self-reporting on personality, status, and pride, participants rated five teammates on dominance, prestige, and traits theoretically relevant to developing a dominant or prestigious reputation. Judges and targets were paired using a Latin square design, such that pairings were pseudo-random and each participant was both a judge and a target. Participants were instructed to complete the questionnaires privately and avoid discussing the study with teammates prior to completion.

### *Measures*

*Self-reports.* As in Study 1, dominance and prestige were assessed with the full 22-item scales; dispositional hubristic and authentic pride were assessed with the Hubristic ( $\alpha = .88$ ) and Authentic ( $\alpha = .78$ ) Pride-Proneness scales; aggression with the AQ ( $\alpha = .89$ ); social acceptance with the Inclusionary Status Scale ( $\alpha = .78$ ); self-esteem with the RSE ( $\alpha = .84$ ); and narcissism with the NPI ( $\alpha = .86$ ). Genuine self-esteem and narcissistic self-aggrandizement scales were again computed by regressing self-esteem on narcissism, and vice-versa, and saving the standardized residuals. Big Five personality traits were assessed with the 44-item Big Five Inventory (BFI; John, Donahue, & Kentle, 1991), with scales measuring extraversion ( $\alpha = .84$ ), agreeableness ( $\alpha = .81$ ), conscientiousness ( $\alpha = .79$ ), neuroticism ( $\alpha = .74$ ), and openness to

experience ( $\alpha = .76$ ). Agency and communion were assessed with 8 items from the Revised Interpersonal Adjective Scales (IAS-R; Wiggins, Trapnell, & Phillips, 1988); these were the four items at each pole of the two major axes: “self-assured”, “assertive”, “self-confident”, “dominant”, “timid”, “unauthoritative”, “shy”, and “unaggressive” (combined to form an agency scale, with the latter 4 items reverse-scored;  $\alpha = .85$ ) and “softhearted”, “tender”, “gentlehearted”, “tenderhearted”, “hardhearted”, “unsympathetic”, “coldhearted”, and “warmthless” (combined to form a communion scale, with the latter 4 items reverse-scored;  $\alpha = .89$ ). We also again assessed academic achievement (measured as GPA), age, height, and BMI.

*Peer-reports.* After completing all self-ratings, participants were told: “You will now be asked to provide your impressions and feelings about other members of your team. Please read the name at the top of each page very carefully and think about this particular person as you are providing your responses. You will be providing your impressions about 5 members in total.” For each target, participants were presented with the 22-item dominance and prestige scales, reworded to refer to a peer (see Table 1). Internal consistency alphas were .89 and .87 for peer-rated dominance and prestige, respectively, and inter-rater alphas were .80 and .80, respectively. This high level of inter-rater reliability suggests that individuals were able to reach agreement regarding their peers’ dominance and prestige.

Judges also completed the Self-Attributes Questionnaire (Pelham & Swann, 1989) for each target, in which they were instructed to: “Rate your impressions about the activities and abilities of this particular person...relative to other members of your group by using the scale ranging from 1 (*bottom 5% of group*), 6 (*upper 50%*), to 10 (*upper 5% of group*)”. We added several traits to the original questionnaire to assess, in total: intellectual ability (inter-rater reliability  $\alpha = .74$ ), social skills ( $\alpha = .78$ ), artistic and/or musical ability ( $\alpha = .62$ ), athletic ability

( $\alpha = .70$ ), leadership ability ( $\alpha = .80$ ), altruism ( $\alpha = .55$ ), cooperativeness ( $\alpha = .59$ ), helpfulness ( $\alpha = .55$ ), ethicality ( $\alpha = .55$ ) and morality ( $\alpha = .45$ ). Participants were also asked to indicate the likelihood that they would approach each of the five targets for advice in the following domains: school ( $\alpha = .59$ ), family ( $\alpha = .37$ ), friends ( $\alpha = .41$ ), romantic partners ( $\alpha = .38$ ), work ( $\alpha = .44$ ), sports ( $\alpha = .55$ ), and the target's area of expertise ( $\alpha = .48$ ). The low inter-rater agreement on these items likely reflects the fact that idiosyncratic factors such as friendships play an important role in determining who is sought for advice. However, the fact that any consensus emerged points to the importance of some underlying attribute in predicting an individual's "advisorliness". To index each target's overall perceived advice-giving ability, we aggregated ratings across the seven domains (internal consistency  $\alpha = .87$ ; inter-rater  $\alpha = .61$ ).

## Results and Discussion

### *Development of Dominance and Prestige Scales*

To examine whether the factor structure of dominance and prestige that emerged in Study 1 replicated across self- and peer-ratings, and across samples, we conducted principal axis factor analyses using oblimin rotation separately on self- and peer-reports of the 22 items.

Using the self-ratings, the two-factor structure that emerged in Study 1 was generally replicated. Eigenvalues for the first six factors were 5.40, 3.58, 1.88, 1.52, 1.08, and 1.06, and the first two components accounted for 40.81% of the total variance (23.08% for Factor 1 and 21.54% for Factor 2) and correlated .04, confirming their independence. In contrast to Study 1, the prestige factor emerged as the first factor and dominance as the second factor, suggesting either that both forms of status are equally important components, or that prestige is more important or salient in the context of athletic teams, and dominance is more important or salient in generalized personality. With the exception of a single item (*I have flashes of unpredictable or*



*erratic anger*), which was designed to assess dominance but loaded slightly higher, and *negatively* on prestige (-.45 vs. .44), all items loaded more strongly and positively on their presumed primary factors than their presumed secondary factors.

To provide a quantitative index of the level of correspondence between the factor structures that emerged in Studies 1 and 2, we computed correlations between the two profiles of factor loadings. These correlations, computed across the 22 items rather than across participants, indicate the extent to which items with a high (vs. low) loading on the dominance or prestige factor in Study 1 also had a high (vs. low) loading on the dominance or prestige factor in Study 2. The two dominance factors correlated .89, and the two prestige factors correlated .94, suggesting a high level of consistency in the factor structure across the two studies.

We next conducted principal axis factor analysis using oblimin rotation on the 22 peer-reported dominance and prestige items.<sup>6</sup> Based on the scree test, a two factor structure again emerged. Eigenvalues for the first six factors were 6.01, 5.86, 1.40, .97, .84, and .78. The first two components accounted for 53.96% of the total variance (27.31% and 26.65% for Factors 1 and 2, respectively) and correlated -.01. Once again, all items loaded more strongly and positively on their presumed primary factors, and dominance emerged as the first factor and prestige as the second factor.

To index the level of correspondence between the factor structures of the self- and peer-reported items, we computed correlations between the profiles of factor loadings on the self-rated and peer-rated factors. Again, these correlations were computed across the 22 items, rather than across participants. Peer- and self-rated dominance profiles correlated .40 ( $p = .06$ ), and peer- and self-rated prestige profiles correlated .51 ( $p < .05$ ). Thus, a similar structure emerged across self- and peer-ratings, though consistency was not as high as when comparing self-ratings across

studies. This suggests that although the primary and secondary factor loading of each item did not differ across self- and peer-perceptions, the relative magnitude of each loading, on each factor, was not entirely consistent; loadings that were most indicative of prestige (or dominance), based on self-ratings, were not necessarily most indicative of prestige (or dominance) when peer-ratings were used.

To determine which items to retain for the final dominance and prestige scales, we evaluated each item based on results of all three factor analyses (Study 1 self-ratings and Study 2 self- and peer-ratings). We first excluded all items with primary factor loadings below .50 and/or cross-loadings above .30 in at least two of the three sets of ratings. This led to the exclusion of 5 items from the initial 22, and four remaining items that were sub-optimal in one of the three sets (see Table 1). We opted to retain these four items because although they fell short of the established criteria in one set of ratings (two were suboptimal in Study 1, one in Study 2 self-ratings, and one in Study 2 peer-ratings), they had good properties in the other two sets, and their inclusion increased the overall scale alphas.<sup>7</sup> The final scales thus included 8 dominance items with good internal consistency ( $\alpha$ s = .83 in Study 1, .77 for self-ratings in Study 2, and .88 for peer-ratings in Study 2) and inter-rater reliability (alpha = .78, Study 2); and 9 prestige items with good internal consistency ( $\alpha$ s = .80 in Study 1, .84 for self-ratings in Study 2, and .85 for peer-ratings in Study 2) and inter-rater reliability (alpha = .84, Study 2).<sup>8</sup> All analyses presented below are based on these final scales.

*Is Hubristic Pride Positively Related to Dominance, and Authentic Pride Positively Related to Prestige?*

*Self-reported status.* Consistent with Hypothesis 1 and the results of Study 1, trait hubristic pride was positively related to dominance ( $r = .49, p < .0001$ ) and not significantly

related to prestige ( $r = -.16, p = .13$ ). Also consistent with Study 1, trait authentic pride was positively related to prestige ( $r = .56, p < .0001$ ) and dominance ( $r = .22, p < .05$ ), with the latter association considerably weaker ( $Z = 2.72, p < .01$ ). As in Study 1, hubristic and authentic pride were independent,  $r = -.01, ns$ .

We next examined the incremental validity of the two facets of pride in predicting each form of status when narcissism and self-esteem were entered as simultaneous predictors. Replicating Study 1, hubristic pride significantly predicted dominance over and above the effects of the other variables,  $\beta = .32, t(186) = 3.45, p < .001$ , and significantly predicted a drop in prestige,  $\beta = -.19, t(186) = -2.14, p < .05$ . Authentic pride also remained a significant predictor of prestige when controlling for shared variance with the other predictors,  $\beta = .27, t(186) = 2.41, p < .05$ .

*Peer-reported status.* Hierarchical linear models were estimated to account for the fact that peer-ratings of dominance and prestige were nested within perceivers and targets, and observations exhibited clustering and non-independence of error (Bryk & Raudenbush, 1992). Peer-ratings were thus modeled as random effects that may vary across both perceivers and targets. Variance in the dependent variable was partitioned into within-person and between-person components, allowing predictor terms to be represented at the level of the specific dyad (Level 1) and at the level of the person (Level 2). For clarity of presentation, however, we present a single equation that specifies the multiple sources of variation from both Levels 1 and 2. Separate models were estimated for dominance and prestige. We specified the following model to estimate the effect of hubristic pride on dominance:

$$(1) Y_{ij} = \beta_{00} + \beta_{01} \text{Authentic Pride}_j + \beta_{02} \text{Hubristic Pride}_j + \beta_{03} T_1 + \beta_{04} T_2 + \beta_{05} T_3 + \alpha_i + \rho_j + \varepsilon_{ij}$$

$Y_{ij}$  is perceiver  $i$ 's rating of target  $j$  on dominance. Random effects are modeled with terms  $\alpha_i$ , and  $\rho_j$ —representing person  $i$ 's target effect, and person  $j$ 's perceiver effect—and their variances are estimated as parameters of the model.  $T_1$ ,  $T_2$ , and  $T_3$  are dummy codes for the volleyball team, soccer team, and rugby team, respectively, with baseball team as the reference group. The tests of the coefficients for the team dummy codes ( $\beta_{03}$ ,  $\beta_{04}$ , and  $\beta_{05}$ ) represent tests of each sports team's difference in mean dominance level when compared to the baseball team. Dummy codes correct for differences in the mean dominance of the teams when examining the effect of pride on dominance ratings (i.e., the regression of dominance on hubristic and authentic pride with team membership controlled). The hypothesis of interest will be examined by testing  $\beta_{02}$ , which is the effect of hubristic pride on peer-rated dominance, and comparing it to  $\beta_{01}$ , the effect of authentic pride on dominance.

As predicted, hubristic pride was positively related to peer-rated dominance,  $b = .36$ ,  $z = 3.03$ ,  $p < .01$ , but authentic pride was not related to peer-rated dominance,  $b = .01$ ,  $z = .06$ ,  $ns$ . No significant relation emerged for any of the team dummy codes, suggesting that teams did not differ in mean levels of dominance,  $bs$  ranged  $-.10$  to  $.33$ ,  $zs$  ranged  $-.35$  to  $1.04$ , all  $ns$ . Thus, individuals high in hubristic pride attained higher dominance in the eyes of their peers.

We next specified the following model to estimate the effect of authentic pride on prestige:

$$(2) Y_{ij} = \beta_{00} + \beta_{01} \text{Authentic Pride}_j + \beta_{02} \text{Hubristic Pride}_j + \beta_{03} T_1 + \beta_{04} T_2 + \beta_{05} T_3 + \alpha_i + \rho_j + \varepsilon_{ij}$$

This model is identical to the model predicting peer-rated dominance, except that  $Y_{ij}$  is Perceiver  $i$ 's rating of Target  $j$  on prestige. Consequently, the terms  $\alpha_i$ , and  $\rho_j$ —representing person  $i$ 's target effect, and person  $j$ 's perceiver effect—are random variables and their variances

are estimated as parameters of the model. In this model, the key test of our hypothesis is  $\beta_{01}$ , which is the effect of authentic pride on peer-rated prestige, and examining how it compares to  $\beta_{02}$ , the effect of hubristic pride on prestige.

In examining the set of Level 2 predictors, the only significant relation that emerged was that of a positive effect of authentic pride on peer-rated prestige,  $b = .33$ ,  $z = 2.21$ ,  $p < .05$ , indicating that individuals high in trait authentic pride were perceived as more prestigious by their teammates. In contrast, hubristic pride was not related to peer-perceived prestige,  $b = -.01$ ,  $z = -.14$ , *ns*. No significant relation emerged for any of the team dummy codes, suggesting that teams did not differ in mean levels of prestige,  $bs$  ranged .29 to .41,  $zs$  ranged 1.28 to 1.45, all *ns*. Thus, individuals high in authentic pride obtained higher prestige in the eyes of their peers.

We next examined the incremental validity of the two facets of pride in predicting peer-rated dominance and prestige when narcissism and self-esteem were entered as simultaneous Level 2 predictors. Replicating Study 1, hubristic pride remained a significant predictor of peer-rated dominance,  $\beta = .25$ ,  $z = 1.92$ ,  $p = .05$ . However, authentic pride was no longer a significant predictor of peer-rated prestige,  $\beta = -.08$ ,  $z = -.41$ , *ns*; the attenuation of this relation is likely due to shared variance with self-esteem ( $r = .64$ ,  $p < .0001$ ), which was a significant predictor of peer-rated prestige,  $\beta = .57$ ,  $z = 2.68$ ,  $p < .01$ .

*Do Group Members Agree on which Team Members are Dominant and which are Prestigious?*

To test whether group members' convergence in their perceptions of their teammates' status was due to something about the target being rated (i.e., target variance), rather than to something about the perceivers making the ratings (i.e., perceiver variance), we examined the degree to which targets elicited similar status ratings from their peers (i.e., the part of total variance that is explained by the role of the target; Kenny, 1995). In contrast to inter-rater

reliabilities, which indicate the extent to which peers agree on a given target's status, target variance identifies the *source* of this agreement—whether it is due to targets' behaviors and personality, or to raters' perceptual biases.

Target and perceiver effects were modeled as random variables in a hierarchical linear modeling framework (see Equations 1 and 2), representing residual variation left unexplained by authentic and hubristic pride that are due to a target's tendency to elicit status ratings from others and a perceiver's idiosyncratic ratings of others, respectively. Target variance reflects variation in peer-ratings due to the target, so a larger proportion of target variance (relative to overall variance) indicates that a given target elicited consistent status ratings, or a high level of consensus, from others. For example, peer-rated Big Five traits, such as extraversion, tend to have relative target variance levels of about 30% (Kenny, Albright, Malloy, & Kashy, 1994). Of the total variance in peer-rated dominance, the percentage of target variance was 49%, indicating that perceivers showed a high level of agreement in rating targets' dominance. Of the total variance in peer-rated prestige, the percentage of target variance was 43%, suggesting that individuals also showed substantial agreement in rating targets' prestige.

#### *Are Self-Perceptions of Status Accurate?*

To test whether individuals can accurately judge their dominance and prestige relative to others, we next examined *differential accuracy*, defined as the extent of convergence between self- and peer-ratings (Cronbach, 1955). Analyses were conducted on mean status ratings across the five perceivers for each target, which were viewed as indicators of targets' actual status. For each individual, self-rated dominance and prestige were correlated with mean peer-rated dominance and prestige, respectively, controlling for group effects due to sports teams. Partial

correlations were .33 for dominance and .40 for prestige, both  $ps < .01$ , indicating high differential accuracy in self-perceptions of both forms of status.

*Do the Two Facets of Pride Predict Individual Differences in Status Self-Enhancement?*

Although individuals are fairly accurate in perceiving their dominance and prestige, they may nonetheless differ systematically in their relative level of accuracy; specifically, we expected hubristic and authentic pride to promote the over-estimation of dominance and prestige, respectively. We assessed individual differences in self-enhancement using the *criterion discrepancy* operationalization, which quantifies self-enhancement as the extent to which an individual overestimates his/her traits relative to a credible criterion, such as peer-ratings (John & Robins, 1994). Self-enhancement was indexed by difference scores (subtracting a target's mean status rating, across 5 perceivers, from his/her self-rating) and residual scores (regressing self-ratings onto mean peer-ratings and saving the standardized residuals; Zumbo, 1999).

As is shown in Table 3, authentic pride was positively correlated with self-enhancing on prestige, using both the difference-score and residual-score indices, and hubristic pride was positively correlated with self-enhancing on dominance, using both scores. Authentic pride was also positively correlated with self-enhancing on dominance, but only when residual scores were used. These results suggest that both facets of pride promote status self-enhancement, but they do so in different ways. Individuals high in authentic pride are more likely to overestimate their prestige, whereas individuals high in hubristic pride self-enhance only on dominance.

*Is Hubristic Pride Positively Related to Traits that Foster Dominance, and, Authentic Pride, to Traits that Foster Prestige?*

As is shown in Table 4, self- and peer-rated dominance and self-rated hubristic pride were positively related to narcissism, aggression, extraversion, and disagreeableness. Self- and peer-rated prestige and self-rated authentic pride were positively related to self-esteem, social acceptance, and conscientiousness. Authentic pride was also positively related to extraversion and emotional stability, but peer-rated prestige was not significantly related to extraversion, agreeableness, or emotional stability, though trends were in the expected direction. Overall, these correlations replicated those with self-rated dominance and prestige in Study 1, with the exception of a marginally significant negative relation between conscientiousness and self-rated dominance ( $r = -.19, p = .08$ ; compared to a small but significant positive relation in Study 1).

Also as predicted, both dominance and prestige, and both pride facets, were positively associated with agency, whereas communion was positively associated with self-rated prestige and negatively with self-rated dominance (hubristic pride was also negatively correlated with communion). Correlations of communion with peer-ratings of dominance and prestige (and self-ratings of authentic pride) were in the predicted direction but did not reach significance.

Replicating Study 1, GPA was positively related to peer-rated prestige ( $r = .19, p < .05$ , one-tailed, .95 CI [-.02, .38]), self-rated prestige ( $r = .28$ ), and authentic pride ( $r = .36$ , both  $ps < .01$ ). Age was positively related to both peer-rated dominance and prestige ( $rs = .26$  and  $.30$ , both  $ps < .05$  respectively). Consistent with Study 1, BMI was unrelated to self-rated dominance; however, it was positively associated with peer-rated dominance ( $r = .19, p = .06$ ). No significant associations emerged between height and any of variables examined.



To further explore the characteristics that promote the attainment of each form of status, we next examined correlations with peer-ratings of individuals' advice-giving abilities and expertise. As is shown in the lower half of Table 4, individuals perceived as prestigious were viewed as capable advice-givers; this correlation held with self-rated prestige, as well.

Dominance was unrelated to perceived advice-giving abilities. Individuals rated high in prestige were also viewed as intellectual, possessing good social, leadership, athletic, and artistic or musical skills. Individuals rated high in dominance were also viewed as possessing leadership, athletic, artistic, or musical abilities, suggesting that dominance is related to competence in some domains, but fewer than those that underlie prestige. Peer-rated prestige was also positively related to peer-perceived altruism, cooperativeness, helpfulness, ethicality, and morality, whereas peer-rated dominance was negatively correlated with these pro-social traits. Consistent with our theoretical model, individuals high in authentic pride were also viewed by peers as possessing social skills and strong leadership abilities, and individuals high in hubristic pride were perceived as low in altruism, cooperativeness, helpfulness, ethicality, and morality.

#### *Summary and Limitations*

Overall, the findings of Study 2 are generally consistent with those of Study 1. Individuals high in dispositional hubristic pride attained greater dominance within their social group, whereas individuals high in dispositional authentic pride attained greater prestige; these relations emerged through self- and peer-ratings of dominance and prestige. In support of Hypothesis 2, hubristic pride and dominance had similar profiles of personality correlates, characterized by narcissism, aggression, disagreeableness, and low communion. Authentic pride and prestige also had similar correlates, which were diametrically opposed to the traits

underlying dominance and hubristic pride: high self-esteem, social acceptance, conscientiousness, and emotional stability.

Study 2 also demonstrated that individuals show a high level of consensus in evaluating the dominance and prestige of others in their social group, suggesting that group members can make reliable distinctions between the two forms of status. Furthermore, individuals showed high differential accuracy in self-perceptions of status, suggesting that they have insight into their own social rank, relative to others, within both the dominance and prestige hierarchies. As predicted, individual differences in self-enhancement on dominance and prestige were linked to distinct pride dispositions, such that individuals high in authentic pride tended to overestimate their prestige, whereas individuals high in hubristic pride tended to overestimate their dominance.

### General Discussion

The primary goal of the present research was to examine whether hubristic and authentic pride might promote the attainment of different forms of status—dominance and prestige. Using self- and peer-reports of status, and assessing status as a dispositional trait and within the context of a specific hierarchically structured social group, we found that individuals high in dispositional hubristic pride tend to view themselves, and be viewed by their peers, as dominant, whereas individuals high in dispositional authentic pride tend to view themselves and be viewed by peers as prestigious.

We also found converging support across studies for Hypothesis 2, that the pride facets and their respective forms of status share similar patterns of correlates, specifically with traits relevant to the attainment of dominance and prestige. Consistent with the causal model portrayed in Figure 1, individuals high in dispositional hubristic pride tended to be narcissistic, aggressive, extraverted, disagreeable, agentic, and physically large—all of which seemed to promote a

dominant reputation. In contrast, individuals high in dispositional authentic pride tended to have high genuine self-esteem and be conscientious, communal, agentic, and intelligent—traits that were positively related to prestige. Importantly, the finding from Study 2 that both dominant and prestigious individuals were viewed by peers as possessing leadership abilities is consistent with the expectation that both forms of status are adaptive leadership styles. However, traits that promote intimidation and the use of force to acquire power (e.g., narcissism, aggression, extraversion, and disagreeableness) were positively related to peer-perceived dominance; whereas traits that establish an individual's attractiveness as a social model (e.g., self-esteem, conscientiousness, social acceptance, and intelligence) were positively related to peer-perceived prestige. Similarly, individuals who were perceived as good advisors, on a range of topics, were viewed as prestigious but not dominant. For the most part, the traits found to underlie prestige and dominance showed convergent relations with authentic and hubristic pride, respectively, though in several cases relations with the pride facets were weaker, in all likelihood because dispositional pride is only one component of the broader status acquisition process. Thus, whereas prestigious and dominant reputations are broad traits based on a range of narrower traits, emotions, and interpersonal behaviors, authentic and hubristic pride are narrower emotional dispositions that likely promote some of the behaviors relevant to attaining each form of status, but, perhaps, not the entire constellation.

In addition to testing the novel theory that the two facets of pride promote distinct forms of status, our findings extend previous research in several ways. Less than a handful of studies have examined the determinants of dominance and prestige. In general, our findings replicate those of Buttermore (2006), but they extend this previous research by showing that dominance and prestige are associated with distinct, theoretically predicted personality profiles even when

status is assessed using peer-, rather than self-, perceptions. This contribution is particularly important because an individual's social status, perhaps more than any other trait, is more validly measured by asking his/her peers, given that status is defined as the amount of influence conferred by group members. Furthermore, the use of peer-reports allowed us to eliminate the possibility that differences in the personality profiles of dominant and prestigious individuals are due to socially desirable responding or other sources of shared method variance. Thus, our findings provide compelling evidence that: (a) dominance and prestige represent distinct ways of attaining and maintaining status in naturalistic groups; (b) the attainment of dominance and prestige rests on different sets of emotions and traits; and (c) personality traits have a strong influence over who attains social status and, more specifically, which form of status is attained.

In addition, the use of a multimethod approach to assess dominance and prestige in Study 2 allowed us to examine: (a) whether social group members agree about the relative rank of others in their group on each hierarchy; (b) whether individuals are accurate perceivers of their own dominance and prestige; and (c) whether self-enhancing on the two forms of status is differentially linked to the two facets of pride.

Findings revealed that group members show a high level of consensus in their perceptions of others' dominance and prestige, suggesting that relative differences in both traits characterize the social ecology of naturalistic groups, and individuals are sensitive to these differences. Individuals were also highly accurate in perceiving their own dominance and prestige; this finding extends and clarifies previous research demonstrating accuracy in self-perceptions of overall status (Anderson et al., 2006). Accurately perceiving others' and one's own level of dominance and prestige is likely to be essential to the social comparisons necessary for appropriate intragroup behavior in any hierarchically structured situation, and to effectively

competing for higher rank. Although previous studies have examined differential accuracy and self-enhancement in the self-perception of status (e.g., Anderson et al., 2006), this is the first research to show that both processes occur for both dominance and prestige, and that self-enhancement on each form of status can be predicted from distinct emotional dispositions. Individuals prone to hubristic pride overestimate their own dominance, whereas those prone to authentic pride overestimate their own prestige. These differences may be due to the divergent values and goals associated with the two facets of pride; hubristic pride may promote a more egoistic bias, leading individuals to self-enhance on traits that emphasize their competence and ability to assert power over others, and authentic pride may promote a moralistic bias, leading individuals to self-enhance on pro-social traits.

In general, by demonstrating that dominance and prestige are distinct routes to high status which can accurately and reliably be assessed from group members, this research provides the first empirical support for Henrich and Gil-White's (2001) conceptualization of group hierarchies. As a result, these findings have several implications for the literature on social status. First, when researchers ask questions about which group members attain status, it is imperative to make the clarification: What kind of status? Previous studies have defined status as general influence (Anderson et al., 2001; Anderson & Kilduff, 2009; Littlepage, Schmidt, Whisler, & Frost, 1995), importance (Reyes-Garcia et al., 2008), leadership (Brunell et al., 2008; Judge et al., 2002), toughness (Weisfeld & Beresford, 1982); or respect (Anderson et al., 2001; Hardy & Van Vugt, 2006), and, not surprisingly, have yielded discrepant and sometimes incompatible conclusions on the predictors of high "status". Based on the present findings, researchers might fruitfully return to this previous literature and examine whether the status assessed was likely akin to dominance or prestige; this distinction may account for the divergent findings that have

emerged. For example, several studies have found that agreeableness is unrelated to status (Anderson et al., 2001; Judge et al., 2002), but others have shown that individuals who behave altruistically (and thus are likely to be highly agreeable) enjoy higher status (Hardy & Van Vugt, 2006). The present research demonstrates that agreeableness is negatively related to dominance but positively related to prestige, thereby qualifying Anderson and colleagues' (2001) conclusion that "being nice, warm, and kind" does not lead to higher status. These traits clearly do matter in prestige-based contexts.

Our findings also shed light on longstanding debates about the role of narcissism in the attainment of status. Several studies have shown that narcissists emerge as leaders in social groups (Brunell et al., 2008; Maccoby, 2000; Rosenthal & Pittinsky, 2006), but others have shown narcissists to have poor leadership skills and be disliked by their peers (Blair, Hoffman, & Helland, 2006; Harms, Wood, & Roberts, 2009). The present findings suggest that narcissism, and hubristic pride, may promote status largely by increasing dominance, which does not require respect or social acceptance.

#### *Limitations and Future Directions*

One limitation of this research is that the correlational nature of both studies prevented us from directly addressing questions of causality—whether the experience of each facet of pride promotes behaviors that lead to a reputation of dominance or prestige. However, given that the impact of each facet of pride on status likely occurs over time (i.e., leadership reputations are shaped over many experiences), these causal relations may be difficult to assess experimentally in a laboratory setting. It is not clear that a one-time experience of hubristic pride would lead to perceptions of dominance—but this is an important question for future research. Recent research suggests that experimentally manipulated, state experiences of authentic versus hubristic pride

have divergent effects on prejudicial beliefs and behaviors, indicating that these emotional experiences may elicit concurrent dominance and prestige-oriented interpersonal behaviors (i.e., state experiences of hubristic pride promoted hostility and outgroup derogation, whereas state experiences of authentic pride promoted forgiveness and outgroup favoritism; Ashton-James & Tracy, under review). Furthermore, the present finding that dispositional hubristic and authentic pride retain their predictive power on dominance and prestige, in most cases, even when controlling for shared variance in narcissism and self-esteem, allows us to rule out the possibility that the correlations found here are entirely due to these third-factor variables.

A second limitation is that Study 2 participants provided peer-ratings for only five group members, rather than all others in the group (i.e., a full round-robin structure). The large number of ratings requested from this unique sample and the large number of individuals on each team necessitated limiting the number of targets each individual was asked to rate. However, this design feature prevented us from testing for dyadic relationship effects (Kenny, 1994). In reality, high-status individuals likely manage a mix of hierarchical relationships, some prestige-based and some dominance-based, so the particular status strategy deployed by a given individual may vary across relationship contexts. Future studies are needed to examine potential relationship effects on peer-perceptions of status.

Given that the present research was limited to long-term groups where status dynamics are fairly solidified, another important future direction is to examine the early formation of dominance and prestige hierarchies. In such contexts, initial judgments of traits such as intelligence and competence (prestige cues) may be misled by more noticeable traits that may be viewed as predictive of prestige, such as extraversion or (low) shyness (Paulhus & Morgan, 1997). Thus, the effects of authentic pride on prestige may be attenuated in early group

formation, making these hierarchies unstable. Indeed, recent research has found that highly agentic individuals, even those lacking competence, can attain influence by *appearing* confident and competent in newly acquainted groups (Anderson & Kilduff, 2009), where they are presumably assumed to be prestigious (these authors measured only generalized status).

In conclusion, the present research provides the first evidence that the two facets of pride might have arisen from the need to attain dominance and prestige, and that these two forms of status represent distinct avenues to social influence. These findings suggest that the highly divergent patterns of behaviors exhibited by Hank Greenberg, CEO of AIG, and Meg Whitman, CEO of E-Bay, may have been motivated by distinct facets of pride. Although both leadership styles resulted in considerable power and success, it is likely that both Greenberg and Whitman, and their subordinates, could reliably report the particular form of high status that each possessed.



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*Table 1.* Initial 22-Item Pool Used to Assess Dominance and Prestige, and Factor Loadings from Study 1 (Self-Rated) and Study 2 (Peer-Rated)

Items	Study 1 Factor 1	Study 1 Factor 2	Study 2 Factor 1	Study 2 Factor 2
Dominance				
I (he/she) enjoy(s) having control over others (other members of the group).	.768		.838	
I (he/she) often try(ies) to get my (his/her) own way regardless of what others (in the group) may want.	.687		.792	
I (he/she) am (is) willing to use aggressive tactics to get my (his/her) way.	.731		.782	
I (he/she) try(ies) to control others rather than permit them to control me (him/her).	.772		.806	
R I (he/she) do(es) not have a forceful or dominant personality.	.563		.513	
Others (Other members of the group) know it is better to let me (him/her) have my (his/her) way.	.596		.775	
R I (he/she) do(es) not enjoy having authority over other people (members of the group).	.583		.780	.105
*Some people (members of your group) are afraid of me (him/her).	.603	-.227	.666	-.128
†I (he/she) have (has) flashes of unpredictable or erratic anger.	.448	-.392	.726	-.165
R †I (he/she) dislike(s) giving orders.	.472	.238	.479	.183



*Note.*  $N_s = 191$  (Study 1) and 438 (Study 2). Self-report versions of all items are presented; modifications for peer-report assessment are presented in parentheses. An “R” denotes reverse scored items. Loadings  $< .10$  are not presented. Items with sub-optimal properties in only one of the three sets of factor analyses (in both Studies 1 and 2), which were retained in final scale, are indicated by \*. Items eliminated from the final scale due to sub-optimal properties in two of the three sets of analyses are indicated by †.

Table 2. Correlations of Hubristic and Authentic Pride, and Dominance and Prestige, with Theoretically Related Traits, Study 1

	Hubristic Pride	Self-rated Dominance	Authentic Pride	Self-rated Prestige
Self-Esteem (controlling for narcissism)	-.24**	-.16*	.56**	.45**
Narcissism (controlling for self-esteem)	.42**	.56**	.17*	.15*
Social Acceptance	-.14†	-.16*	.43**	.59**
Aggression	.47**	.55**	-.28**	-.38**
Extraversion	-.16*	.20**	.50**	.59**
Agreeableness	-.68**	-.61*	.00	.27**
Conscientiousness	-.16*	.15*	.46**	.39**
Neuroticism	.12†	.13†	-.49**	-.39**
Openness	-.21**	.08	.32**	.43**

Note.  $N = 191$ .

†  $p < .10$ . \*  $p < .05$ . \*\*  $p < .001$

*Table 3.* Correlations of Dispositional Hubristic and Authentic Pride with Self-Enhancement on Dominance and Prestige, Study 2

	Hubristic Pride	Authentic Pride
Dominance self-enhancement		
Difference score index	.23*	.18
Residual score index	.45**	.23*
Prestige self-enhancement		
Difference score index	-.17	.23*
Residual score index	-.19	.48**

*Note.*  $N = 91$ . The difference score index was computed by subtracting a target's mean peer-rated status from the target's self-rating. The residual score index was computed by regressing self-ratings onto mean peer-ratings and saving the standardized residuals.

\*  $p < .05$ . \*\*  $p < .001$



*Table 4.* Correlations of Hubristic and Authentic Pride, and Self-rated and Peer-rated Dominance and Prestige, with Theoretically Related Traits and Abilities, Study 2

	Hubristic Pride	Self-rated Dominance	Peer-rated Dominance	Authentic Pride	Self-rated Prestige	Peer-rated Prestige
Self-rated Traits						
Self-Esteem (controlling for narcissism) <sup>a</sup>	-.17	-.13	-.03	.49**	.47**	.24*
Narcissism (controlling for self-esteem) <sup>a</sup>	.41**	.62**	.22*	.27*	.18†	.17
Social Acceptance	-.20	.05	.08	.43**	.57**	.29**
Aggression	.32**	.50**	.35**	-.21*	-.25*	.03
Agency	.23*	.49**	.46**	.40**	.53**	.39**
Communion	-.45**	-.38**	-.12	.14	.21*	.05
Extraversion	.25*	.38**	.29**	.27**	.38**	.12
Agreeableness	-.57**	-.46**	-.39**	.12	.20†	.15
Conscientiousness	-.31**	-.19†	-.13	.32**	.26*	.23*
Neuroticism	.18†	.04	-.02	-.43**	-.44**	-.15

	Hubristic Pride	Self-rated Dominance	Peer-rated Dominance	Authentic Pride	Self-rated Prestige	Peer-rated Prestige
Openness	-.16	.05	.13	.15	.34**	.10
Mean Peer-rated Abilities						
Advice-giving ability	-.12	-.12	.12	.09	.25*	.56**
Intellectual ability	-.17	-.10	-.06	.20†	.32**	.37**
Social skills	-.01	.16	.19†	.24*	.45**	.71**
Artistic/musical ability	-.05	-.08	.21*	.19†	.25*	.28**
Athletic ability	-.01	.14	.29**	.08	.21*	.57**
Leadership ability	.08	.18†	.40**	.21*	.40**	.73**
Altruism	-.25*	-.26*	-.36**	.02	.12	.36**
Cooperativeness	-.29**	-.25*	-.54**	.05	.11	.33**
Helpfulness	-.27*	-.32**	-.38**	-.02	.09	.39**
Ethicality	-.31*	-.41**	-.41**	.03	.14	.26**
Morality	-.34*	-.38**	-.32**	.03	.17	.31**

*Note.*  $N = 91$ .

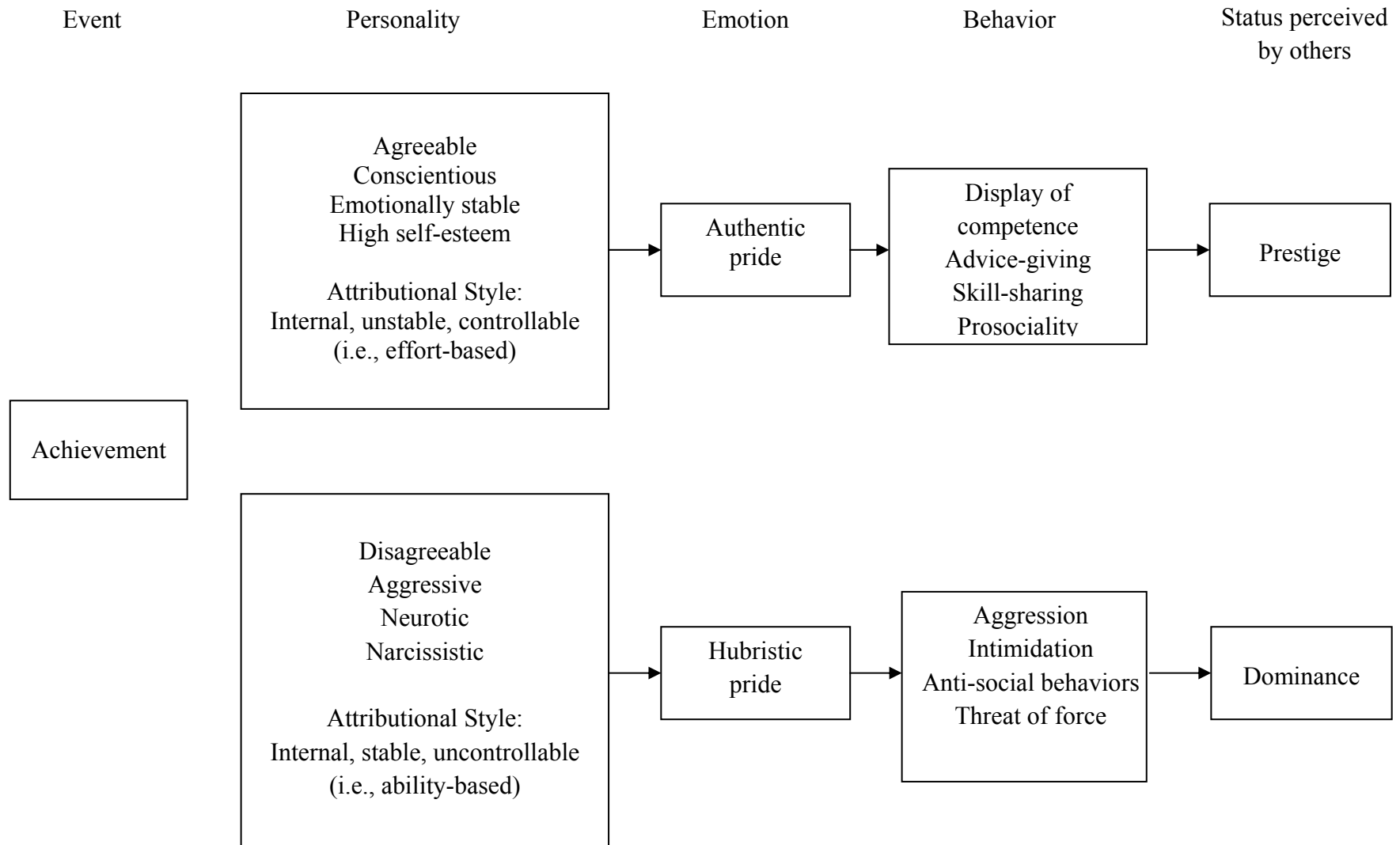
†  $p < .10$ . \*  $p < .05$ . \*\*  $p < .001$

## Figure Captions

Figure 1.

*Theoretical Causal Process Model of the Proximal Influence of Personality and Pride Facets on Dominance and Prestige.* In this model, personality influences the causal attributions (i.e., internal, stable, uncontrollable vs. internal, unstable, controllable) individuals make for achievement events, and these attributions elicit hubristic or authentic pride. The two facets of pride respectively promote different suites of behaviors, which in turn promote a prestigious or dominant reputation.

Figure 1.



## Endnotes

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<sup>1</sup> Figure 1 implies that personality, emotions, and behaviors lead to increases in status in a serial, step-by-step sequence. However, it is likely that these processes involve numerous feedback loops and bidirectional influences. For example, the attainment of either form of status is likely to reciprocally boost pride and shape personality.

<sup>2</sup> All results from Study 1 held using the finalized scales reported in Study 2.

<sup>3</sup> Evidence is mixed on the question of whether self-enhancement is likely to occur universally (see Heine, 2005; Sedikides, Gaertner, & Vevea, 2005), so findings on this issue may be restricted to the Western cultural samples included here.

<sup>4</sup> We were unable to persuade female athletic teams to participate.

<sup>5</sup> Data from a football team ( $n = 51$ ) were excluded from analyses because decomposition of dominance peer-ratings into target- and perceiver-variance components (Kenny, Albright, Malloy, & Kashy, 1994) revealed that football players could not reach consensus on their teammates' levels of dominance (relative target variance = 0%, in contrast to  $M = 49%$  in the other teams examined).. Results for the football team are available by request from the first author.

<sup>6</sup> This factor analysis was conducted on all available responses: 438 sets of peer-ratings across 91 targets.

<sup>7</sup> We also conducted a confirmatory factor analysis (CFA) on the final 17 items using EQS 6.1 (Bentler, 2003). Using pooled self-ratings from Studies 1 and 2, we compared the two-factor solution with a forced one-factor solution. The one-factor model had a poor fit,  $\chi^2(119, N = 282) = 800.31, p < .0001, CFI = .47, GFI \text{ index} = .64, RMSEA = .15 (.90 \text{ CI } [.14, .16])$ , and the two-

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factor model, with the factors constrained to be independent, significantly improved the fit,  $X^2_{\text{change}}(1, N = 282) = 505.17, p < .0001$ . Allowing the two factors to correlate did not significantly improve fit,  $X^2_{\text{change}}(1, N = 282) = 5.19, ns$ . Although the two-factor model fit parameters were still below optimal levels,  $X^2(119, N = 282) = 295.14, p < .0001$ , CFI = .86, Joreskog-Sorbom's GFI fit index = .88, RMSEA = .07 (.90 CI [.06, .09]), the fit improved with the removal of 3 additional items that had high cross-loadings on their secondary factor,  $X^2(76, N = 282) = 169.99, p < .05$ , CFI = .92, GFI = .91, RMSEA = .06 (.90 CI [.05, .08]). We nonetheless opted to retain these items because they capture unique components of each construct not assessed by other items on the scale, and while their negative loadings on the secondary factor made the two-factor structure less clean as assessed by CFA, this is also what makes these items keenly represent the distinction between dominance and prestige.

<sup>8</sup> These final scales excluded two of the original Buttermore items and added three new items.