© 2013 American Psychological Association 1528-3542/13/\$12.00 DOI: 10.1037/a0031711

# Conceptual and Empirical Challenges to the "Authentic" Versus "Hubristic" Model of Pride

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Colin Holbrook University of California, Los Angeles Jared Piazza
University of Pennsylvania

Daniel M. T. Fessler University of California, Los Angeles

An increasingly influential perspective in the study of pride holds that there are two distinct facets characterized by distinct ways of appraising the causes of achievement. "Authentic Pride" has been characterized as attributing success to one's temporary effort, whereas "Hubristic Pride" purportedly attributes success to one's stable, innate ability. In four studies, we present evidence against both predicted attributional profiles, and demonstrate that the Hubristic Pride Scale does not measure feelings of pride at all, but rather measures acknowledgment that one has displayed pride in an excessive manner. In Studies 1a and 1b, perceptions of not genuinely meriting credit for successes significantly mediated Hubristic Pride ratings; in Study 2, Hubristic Pride scores correlated with sensitivity to social evaluations of oneself, and in Study 3, Hubristic Pride scores correlated with perceptions of oneself as undeserving of true credit for success. Across studies, Hubristic Pride scores were repeatedly uncorrelated with causal attributions of success to effort, personal ability, stable traits, or the actions of the self, but positively correlated with appraisals of personal shortcomings along these dimensions as causing failure. In contrast to this self-deprecating appraisal style, Authentic Pride scores predicted attributions of success to effort, ability, stable traits, and the self, but negatively correlated with appraisals of the causes of failures. Although our results are incompatible with the Authentic and Hubristic model of pride as previously formulated and measured, we advocate, on evolutionary grounds, for continued inquiry into the prospective two-facet structure of pride using improved instruments.

Keywords: pride, Authentic Pride, Hubristic Pride, causal attribution, evolution

Despite its prominence in theology and literature, until recently, pride received little attention from emotion researchers. Nonetheless, understanding pride is indispensable to understanding the psychology of one of humanity's most fundamental drives: status attainment. In numerous social species, a hedonic affective state termed *proto-pride* is theorized to be elicited when an individual regards herself as occupying a physically dominant position in a status hierarchy (Fessler, 1999). Uniquely, however, in human societies, social rank typically derives from recognition of skill or knowledge, quite distinct from the capacity to dominate—although dominance remains another viable route to status (Barkow, 1975; Henrich

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Colin Holbrook, Center for Behavior, Evolution and Culture, Department of Anthropology, University of California, Los Angeles; Jared Piazza, Department of Psychology, University of Pennsylvania; Daniel M. T. Fessler, Department of Anthropology, University of California, Los Angeles

We thank Jason Clark, Jennifer Hahn-Holbrook, Mae Sebastian, the members of the UCLA XBA Lab, and two anonymous reviewers for helpful feedback.

Correspondence concerning this article should be addressed to Colin Holbrook, Center for Behavior, Evolution and Culture, Department of Anthropology, 341 Haines Hall, University of California, Los Angeles, Los Angeles, CA 90095-1553. E-mail: cholbrook01@ucla.edu

& Gil-White, 2001). This hypothesized progression from dominance to both dominance- and prestige-oriented status-seeking strategies suggests that pride may similarly have diverged into two distinguishable aspects tailored to serve each function (Cheng, Tracy, & Henrich, 2010; Clark, 2010; Fessler & Gervais, 2010).

Indeed, over the last decade, Jessica Tracy and colleagues have developed an influential perspective postulating two "facets" to pride, termed Authentic Pride and Hubristic Pride, which promote distinct prestige- versus dominance-based strategies in the pursuit of higher social status (Carver, Sinclair, & Johnson, 2010; Cheng et al., 2010; Tracy, Cheng, Robins, & Trzesniewski, 2009; Tracy & Robins, 2004, 2007a, 2007b, 2007c; Tracy, Shariff, & Cheng, 2010). These two pride facets are thought to be distinguishable along a number of dimensions, including their underlying semantic structure (Tracy & Robins, 2007a), behavioral correlates (Carver, Sinclair, & Johnson, 2010; Cheng et al., 2010; Tracy, Cheng, Robins, & Trzesniewski, 2009), and causal antecedents or appraisals (Tracy & Robins, 2004, 2007a, 2007b, 2007c). Most relevant for the present article, it has been claimed that Authentic Pride (henceforth AP) arises when attributing successes to one's hard work, whereas Hubristic Pride (henceforth HP) purportedly arises when attributing successes to one's superior natural ability (Tracy & Robins, 2004, 2007c).

Although the two-facet Authentic/Hubristic model of pride (henceforth A/H model) has increasingly been adopted, investiga-

tors have not questioned whether the instrument used to measure AP and HP actually assesses two facets of pride. Instead, debate in this area has revolved around whether the psychological processes motivating participants to rate themselves as high in AP and HP should be classified as distinct pride emotion kinds (cf. Shariff, Tracy, & Cheng, 2010; Williams & DeSteno, 2010), and how best to characterize the evolutionary origins of the two facets (cf. Clark, 2010; Shariff, Tracy, Cheng, & Henrich, 2010). Thus, most researchers have accepted both the existence of AP and HP as affective syndromes along the dimensions outlined by Tracy et al., and the methods used to operationalize these two facets.

Although we laud Tracy et al.'s focus on the natural history of pride, and agree that there may well be distinguishable varieties of pride related to dominance versus prestige-oriented status striving, we question the construct validity of the A/H model, particularly with regard to how the hypothesized pride facets have been measured. Here, we argue that the instrument used to measure the proposed pride facets—the Authentic and Hubristic Pride Scales (AHPS; Tracy & Robins, 2007a)—does not assess pride deriving from one's self-perceived effort (the theorized character of AP) or pride deriving from one's natural ability (the theorized character of HP). We demonstrate empirically that the HP instrument is a measure of the perception that one has engaged in an excessive pride display (i.e., that one has claimed or displayed more credit for a success than is truly merited or socially desirable) but not a measure of prideful feelings. Further, we show that the AP instrument measures appraisals of oneself or others as genuinely meriting success due to both effort and ability, and that AP scores correlate with narcissism and willingness to coerce others in order to get one's way, traits typically thought endemic to dominance strategies. Thus, AP appears to measure the affective experience of pride, but not the effort-oriented, prosocial facet hypothesized previously. In short, the AHPS does not capture two divergent facets of pride, and hence its use can only confuse efforts to uncover prestige-oriented versus dominance-oriented articulations of pride. Below, we introduce the A/H model of pride, present our alternative interpretation of what the AHPS actually measures, outline competing hypotheses derived from the two models, and present four studies in support of our perspective.

# The Authentic/Hubristic Model of Pride

The A/H model has its origins in Tracy and Robins' (2004, 2007c) Process Model of Self-Conscious Emotions, which depicts pride as elicited by goal-congruent outcomes (i.e., successes) appraised as having been internally caused by the self (rather than by external causes). Which facet of pride a person experiences is thought to depend on secondary appraisals of stability (i.e., the extent to which a cause has permanence beyond the event) and controllability (i.e., the extent to which a cause can be controlled or regulated; see Weiner, 1985). When an individual attributes success to unstable, controllable causes (i.e., temporary bouts of hard work and effort) they are said to experience AP; when an individual attributes success to stable, uncontrollable causes (e.g., natural ability or talent) they are said to experience HP. AP is thus claimed to correlate with attributing successes to diligence rather than innate ability (e.g., "I succeeded because I worked hard"), whereas HP is claimed to correlate with attributing successes to innate ability rather than diligence (e.g., "I succeeded because I'm

gifted"). The pattern of appraisals underlying positively valenced experiences of pride, elicited by success in socially valued endeavors, are hypothesized to also map to negatively valenced emotions elicited by failure (i.e., shame; Tracy et al., 2009). That is, the causal appraisal patterns characteristic of AP also promote attributing failure to temporary, effort-based lapses (e.g., "I failed because I didn't try hard enough, but I can do better next time), whereas the causal appraisal patterns characteristic of HP promote attributing failure to permanent, ability-based lapses (e.g., "I failed because I'm not good enough, and I never will be.").

These postulated patterns of causal appraisal have been theoretically linked to distinct personality styles (Cheng et al., 2010; Tracy et al., 2009; Tracy & Robins, 2007a). Individuals who regularly experience AP are thought to react to personal successes and failures in a psychologically healthy manner conducive to confidence, productivity, and self-worth. When failures occur, the causal appraisal structures proposed to underlie AP in contexts of success are said to promote the attribution of failure to a lack of effort, rather than to a sense of oneself as inherently incompetent (Tracy & Robins, 2004, 2007a). Consistent with this view, AP has been linked to positive personality traits, including agreeableness, conscientiousness, and global self-esteem, though AP has also been moderately linked to narcissism (Tracy & Robins, 2007a). By contrast, HP is argued to be the less psychologically healthy facet (Tracy & Robins, 2007a, 2007b, 2007c). HP has been strongly linked to low self-esteem (Tracy et al., 2009; Tracy & Robins, 2007a), a finding which, at face value, conflicts with findings of positive associations between HP scores and narcissism, particularly given the robust relationship between narcissism and high self-esteem (e.g., see Campbell, Bosson, Goheen, Lakey, & Kernis, 2007; Campbell, Rudich, & Sedikides, 2002). To explain the negative relationship between HP and global self-esteem, Tracy and colleagues appeal to an idea that has its origin in psychodynamic theory (e.g., Morrison, 1983), namely that a hubristic pattern of appraisals may serve to protect the narcissistic individual from concealed or unconscious feelings of self-loathing (Tracy & Robins, 2003).

Tracy and Robins (2007a) operationalize the two postulated pride facets via the two 7-item scales comprising the AHPS. The AP scale consists of semantic items related to achievement: accomplished, like I am achieving, confident, fulfilled, productive, like I have self-worth, and successful. In contrast, the HP scale contains items related to extravagant feelings or displays of pride: arrogant, conceited, egotistical, pompous, smug, snobbish, and stuck-up. The AHPS was developed by examining lay conceptions of the semantic structure of pride among North American undergraduate students. Researchers identified English pride-related words and asked participants to rate their semantic similarity. Hierarchical cluster analysis of the ratings revealed two clusters words pertaining to "achievement" and words pertaining to "selfaggrandizement." Further studies replicated this two-factor structure, demonstrated that it emerged whether the words were assessed in terms of stable traits or transient states, and provided preliminary evidence for the effort-based versus ability-based appraisal patterns predicted to correlate with AP and HP (see the General Discussion for a detailed critique of these appraisal findings).

CHALLENGES TO "AUTHENTIC" VS. "HUBRISTIC" PRIDE

# An Alternative Account: Merited Success Versus **Unmerited Display**

On several grounds, we question the psychological validity of the dual facets ostensibly measured by the AHPS. Most strikingly, the HP scale is comprised of pejoratives that refer to excessive displays of pride, that is, socially proscribed behaviors, such as a swaggering gait or verbal eulogizations of one's prowess, that can be, but need not be, motivated by chronic or state feelings of pride. At face value, the self-critical affective states implicated by viewing oneself as having displayed pride in a socially undesirable, excessive manner differ from, or even directly counter, experiences of pride. 1 Obviously, pride displays may be considered excessive due to simple intensity. In addition, however, pride displays are often viewed as excessive because they are perceived to be unwarranted, in the sense of overclaiming credit or ability (Hareli & Weiner, 2000; Leary, 1995; Sedikides, Gregg, & Hart, 2007). This suggests that some participants who affirm the HP items perceive themselves as prone to excessively intense pride displays, while others may affirm the HP items because they feel undeserving of the degree of credit they have claimed or been granted by others. In the former case, it should be noted that intense displays of pride need not stem from genuine feelings of pride (i.e., the display could be deceptive), nor does identifying oneself as prone to such excesses necessarily stem from pride (i.e., one could rue the fact that one behaves arrogantly). In the latter case, although constituting an intriguing psychological dynamic, the postulated mismatch between achievement and perceived merit would not constitute pride. In sum, the HP scale appears to conflate acknowledgment of the excessiveness of pride display (either due to intensity or overclaiming) with pride itself.

Proponents of the A/H model contend that HP has a negative relationship with self-esteem as a consequence of narcissists' covertly low self-esteem, but the notion that narcissists harbor covertly low self-esteem has been discredited by a number of studies (see Baumeister, Bushman, & Campbell, 2000; Campbell et al., 2007, 2002). Indeed, recent work suggests that narcissists exhibit both explicitly and implicitly inflated self-views (Brown & Zeigler-Hill, 2004; Campbell et al., 2007). Moreover, the negative relationship between HP and self-esteem holds for both implicit and explicit measures of self-esteem (see Tracy et al., 2009), directly contradicting the notion that HP correlates with low selfesteem because narcissists mask low self-esteem beneath overtly high self-regard.

Reframing HP as a measure of overclaiming may illuminate why HP has been found to correlate with both narcissism and low self-esteem. Narcissists should be inclined to endorse the pejorative HP items, as research suggests that narcissists readily admit that others perceive them to be prone to extravagant pride displays (Carlson, 2012; Carlson, Vazire, & Oltmanns, 2011). Narcissism should also correlate with AP scores, to the extent that narcissists are proud of themselves. We, therefore, propose that HP correlates negatively with self-esteem for reasons independent of narcissism. Individuals with negative self-views tend to doubt the legitimacy of their successes, and to believe that others concur that they overclaim credit (Swann, Pelham, & Krull, 1989; Swann & Read, 1981; Swann, Wenzlaff, Krull, & Pelham, 1992). Hence, low self-esteem may be expected to correlate with high HP scores, indexing perceptions of oneself as expressing pride in an unmer-

ited, and hence socially undesirable, manner. For similar reasons, those who are particularly sensitive to social feedback can also be expected to describe themselves as having displayed pride in a socially proscribed, excessive manner.

Our alternative account—call it the "Merited Success versus Unmerited Display Model" (M/U model)—produces a number of competing hypotheses regarding the appraisals of the causes of success and failure (see Table 1). The AP scale describes having T1 brought about personal success—in other words, terms likely to index pride. However, granting that the AP scale measures pride does not entail adopting the A/H appraisal model, which predicts that AP will promote attributions of success to effort, but not to ability (Tracy & Robins, 2007c). Instead, the M/U model predicts that pride will positively correlate with appraisals of one's effort, talent, and stable inner tendency to succeed, all of which connote achievement, in line with the self-enhancing appraisal style characteristic of individuals who believe they are genuinely accomplished (e.g., see Blaine & Crocker, 1993; Carlston & Shovar, 1983; Grove, Hanrahan, & McInman, 1991; Russell & McAuley, 1986; Vallerand & Richer, 1988; Zuckerman, 1979). With respect to failures, whereas the A/H model predicts that AP will correlate with attributions of lack of effort, the M/U model predicts that AP will not promote attributions of the causes of failure to oneself at all, for the simple reason that pride is antithetical to failure. Thus, AP scores should either not correlate, or negatively correlate, with attributions of failures to personal effort, ability, or a permanent inner tendency to fail.

The A/H model predicts that HP should be positively related to appraisals of stable ability, but not effort, as causing success (Tracy & Robins, 2007c). However, if our interpretation of the HP scale is correct, then HP scores should not correlate with the pattern of self-enhancing causal appraisals indicative of pride—to the contrary, those who perceive their pride displays as unmerited should not attribute achievements to personal effort, ability, or permanent inner traits. Indeed, they should tend not to credit these positive outcomes to themselves at all, but rather to external causes. Inasmuch as displaying unmerited pride constitutes a failure to meet valued social norms of modesty (see Cai et al., 2011; Robinson, Johnson, & Shields, 1995; Schlenker & Leary, 1982; Sedikides et al., 2007; Wosinska, Dabul, Whetstone-Dion, & Cialdini, 1996), the M/U model predicts that individuals who acknowledge this sort of social failure (by affirming the HP items) may self-deprecatingly attribute other life failures to personal shortcomings in effort, ability, or permanent inner tendencies (see Table 1).

# Overview of the Present Studies

In three studies, we tested the competing hypotheses of the A/H and M/U models. In Study 1, we experimentally manipulated

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<sup>&</sup>lt;sup>1</sup> To confirm that AP and HP differ in social desirability, we conducted a prestudy with 57 British undergraduates (32 female). Participants rated the AHPS items in terms of social desirability (i.e., how positively other people would respond to someone experiencing or expressing the AHPS items). As predicted, the HP items were significantly less desirable (M =1.36, SD = 0.34) than the AP items (M = 4.04, SD = 0.51), t(56) = 32.19, p < .001, the HP scale was rated significantly lower than the midpoint of the scale, t(56) = -35.84, p < .001, and the AP scale was rated significantly higher than the midpoint of the scale, t(56) = 15.39, p < .001.

Table 1 Contrasting Appraisal Patterns Predicted by the Authentic and Hubristic (A/H) Model of Pride (Tracy & Robins, 2007a) and Our Alternative Merited Success and Unmerited Display (M/U) Model

	A/H Model		M/U Model	
	"Authentic"	"Hubristic"	"Authentic"	"Hubristic"
Success				
Effort	Yes	No	Yes	No
Ability	No	Yes	Yes	No
Stable causes	No	Yes	Yes	No
External causes	No	No	No	Yes
Failure				
Lack of effort	Yes	No	No	Yes
Lack of ability	No	Yes	No	Yes
Stable causes	No	Yes	No	Yes
External causes	No	No	Yes	No

perceptions of overclaiming versus genuinely meriting success, and examined the effects of this manipulation on self-ratings (Study 1a) and other-ratings (Study 1b) on the AHPS, on causal appraisals of effort and ability, and on the amount of credit warranted by the target. This allowed us to compare the competing predictions of the A/H and M/U models regarding whether the HP scale measures ability-focused or overclaiming pride within an experimental mediational design. In Studies 2 and 3, we examined the appraisal correlates of the AP and HP scales regarding the causes of success and failure, as well as personality traits bearing directly on our alternative account (e.g., self-perceived status, merit, and fear of negative social evaluation).

# Study 1a

The principal aim of Study 1a was to experimentally test whether the HP scale assesses feelings of pride in one's superior abilities, or the perception that one's displays of pride are disproportionate to the degree of credit one actually merits. We manipulated perceptions of overclaiming by having participants recall either a time that they were recognized for an achievement and boasted excessively about it, or a time that they were recognized for an achievement, with no mention of boasting. We collected state measures of HP and AP, ratings of the contributions of effort, ability, and external causes, a measure of how personally genuine (as opposed to inauthentically overclaiming) they felt at the time, and a measure of how much they regretted their actions. We predicted that participants who recalled a time when they boasted excessively would report significantly more HP than participants who recalled a time when they were recognized for a success (with no mention of boasting). We expected equally high levels of AP between the two conditions, as in both cases the participant actually achieved success. More importantly, we predicted that perceptions of genuineness would mediate the effect of boasting on HP, whereas appraisals of ability would not mediate this effect, consonant with the hypothesis that HP relates to perceptions of overclaiming rather than pride in one's natural ability.

# Method

Participants. Participants were 160 adult residents of the United States (70 female), who participated online via Amazon's Mechanical Turk (www.mturk.com; see Horton, Rand, & Zeck- AQ:3 hauser, 2011) in exchange for a payment of \$0.50. The mean age of the sample was 32.22 years (SD = 11.23). All participants provided complete written responses.

Design, materials, and procedures. Participants were randomly assigned to either the boasting condition (n = 73) or the achievement control condition (n = 87). In the boasting condition, participants were asked to write about a time in their life when they boasted more about an accomplishment than was warranted. In the achievement control condition, participants were asked to write about a time in their life when others recognized them for an accomplishment. In both conditions, participants were instructed to remember the event in as much vivid detail as possible, and were provided a large textbox in which to type their recollections. Afterward, they responded to a manipulation check, "To what extent did you boast about this accomplishment?"  $(1 = Very \ little;$ 5 = A great deal.

Next, participants responded to the AHPS scales (AP  $\alpha = .88$ ; HP  $\alpha = .96$ ). Participants rated the degree to which they thought each item described the way they felt at the time  $(1 = Not \ at \ all;$ 5 = Extremely). Then, they assessed their perceptions of personal genuineness via six items: phony, authentic, fake, honest, true, and false ( $\alpha = .84$ ). Participants rated the degree to which they thought each item described thoughts they had about themselves at the time, on a 5-point scale  $(1 = Not \ at \ all; 5 = Extremely)$ . Half of the items were reverse scored so that greater scores represented increasing levels of genuineness.

Next, we assessed causal attributions for the recalled success event. On a scale of 1 (Strongly disagree) to 7 (Strongly agree), participants evaluated statements about their success. Four items assessed appraisals of natural, permanent ability ("The event may be attributed to my abilities"; "The event may be attributed to my talents"; "The event may be attributed to who I am as a person"; "The event may be attributed to something about me that is stable or permanent";  $\alpha = .85$ ). Appraisals of effort were assessed with four items ("The event may be attributed to my hard work"; "The event may be attributed to the effort I put into the task"; "The event would not have occurred without hard work"; "The event would have occurred without much effort from me" [reverse scored];  $\alpha =$ .83). Finally, participants provided their feelings of regret about their behavior at the time ("I regret having acted this way," "I'm not proud of the way I acted"; "I wish I could go back and undo my actions"; "If I had to do it all over again, I'd act the same way" [reverse scored];  $\alpha = .85$ ). Assessments of regret about one's actions upon being recognized for an accomplishment versus unduly boasting about an accomplishment were included in this study as a secondary manipulation check. If participants understood their boasting to be socially inappropriate, they should report greater regret about their actions than participants in the control condition. Finally, all participants were debriefed, thanked and paid.

# **Results and Discussion**

Manipulation check. The manipulation was successful: Participants in the boasting condition reported having boasted about their achievement (M = 3.40, SD = 1.33) more than those in the

control condition (M = 2.32, SD = 1.32), F(1, 158) = 30.67, p < .001, and also reported more regret (M = 2.87, SD = 1.06) than control participants (M = 1.52, SD = 0.70), F(1, 158) = 92.11, p < .001.

**Main analysis.** We conducted a one-way MANOVA on aggregated scores of the appraisal measures. As predicted, there was a main effect of condition on HP, F(1, 156) = 47.63, p < .001,  $\eta_p^2 = .23$ , but no effect of condition on AP, F < 1, ns. Participants reported greater HP when they boasted about an accomplishment (M = 2.54, SD = 1.17) than when they were simply recognized for an accomplishment (M = 1.48, SD = 0.74). However, they reported equal levels of AP in the boasting (M = 3.56, SD = 0.92)and control conditions (M = 3.59, SD = 0.88). Also as predicted, there was a main effect of condition on self-perceptions of genuineness, F(1, 156) = 27.75, p < .001,  $\eta_p^2 = .15$ . Participants felt more genuine in the control condition (M = 4.11, SD = 0.71) than in the boasting condition (M = 3.48, SD = 0.90). There was also a main effect of condition on appraisals of effort, F(1, 156) = 9.91, p < .01,  $\eta_p^2 = .06$ . Participants in the control condition attributed their achievement to effort (M = 5.67, SD = 1.21) to a greater extent than participants in the boasting condition (M = 5.00, SD =1.57). Participants in the control condition also attributed their achievement to ability (M = 5.22, SD = 1.24) more than participants in the boasting condition (M = 4.77, SD = 1.49), F(1, 156) $= 5.42, p = .02, \eta_p^2 = .03.$ 

**Correlations.** AP and HP were significantly correlated, r(160) = .20, p < .01. To test whether this positive correlation was influenced by the experimental manipulation, we conducted separate analyses within each condition. In the nonboasting control condition, the AP and HP scales were not significantly correlated, r(87) = .15, p = .16, whereas AP and HP were correlated in the boasting condition, r(73) = .32, p < .01. This pattern suggests that the success recollection in the boasting condition elicited both greater AP scores (reflecting feelings of pride in one's accomplishment) and greater HP scores (reflecting assessments of oneself as having displayed pride in an excessive manner relative to social norms). Nevertheless, when condition is treated as a covariate, AP and HP remain significantly correlated: r(157) = .24, p < .01, suggesting that being reminded of one's responses to a salient accomplishment similarly affected ratings of both scales.

To assess links between AP, HP, and appraisals of the causes of success, partial correlations were conducted to control for shared variance between AP and HP scores (see Tracy & Robins, 2007a). Table 2 depicts part correlations of AP (controlling for HP) and HP

Table 2
Partial Correlations of Authentic and Hubristic Pride, Causal Appraisals, and Genuineness (Study 1a)

	Residual Authentic Pride	Residual Hubristic Pride
Appraisals Ability	.58***	19*
Effort	.56***	19 25**
Genuineness	.50***	59***

 $\it Note. \, N=160.$  The Authentic and Hubristic Pride scales were answered in terms of the way participants recalled having felt following a socially recognized or boasted over success.

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(controlling for AP), causal appraisals, and genuineness. As predicted by the M/U model, AP was positively correlated with appraisals of both ability and effort for success (i.e., a self-enhancing appraisal style). By contrast, HP was negatively correlated with appraisals of ability and effort for success (i.e., a self-deprecating appraisal style).

**Mediation analysis.** To test our prediction that perceived (lack of) genuineness would mediate the effect of boasting on HP scores, we conducted a bootstrapping procedure using the SPSS macro INDIRECT (Preacher & Hayes, 2008). We entered genuineness scores as the mediating variable, boasting condition as the independent variable, and HP scores as the dependent variable. Appraisals of ability were not included in the analysis, because appraisals of ability were actually greater in the control condition, which elicited significantly less HP than the boasting condition. Although the direct effect of boasting on HP remained significant, p < .001, when genuineness was treated as a mediator, the indirect effect of genuineness was likewise significant, p < .001, and the bias-corrected and accelerated confidence intervals (BCa CI) did not overlap with zero (BCa CI from .123 to .506), indicating a significant degree of mediation.

The results of Study 1a were consistent with the M/U model's contention that the HP scale measures overclaiming rather than ability-focused pride. HP scores were higher for participants who recalled boasting about an achievement as opposed to simply achieving, and perceptions of one's actions as less than genuine significantly mediated this effect. Contrary to the A/H model, despite evoking a significant increase in HP scores, the boasting manipulation actually produced appraisals of ability to a lesser extent than the achievement condition. Further supporting the M/U model, appraisals of ability and effort as contributing to success were both positively correlated with AP ratings, and both negatively related to HP ratings. In Study 1b, we sought to extend these findings to perceptions of another person's overclaiming pride displays. We also sought to test the M/U model more directly by manipulating whether the target deserved credit, and by measuring attributions of success to external circumstances.

# Study 1b

We asked participants to recall a time when someone they knew either claimed more credit for a success than they deserved, or claimed credit for a success for which they rightfully deserved acknowledgment. Participants then evaluated how well the AHPS items described the target individual, appraised the contributions of effort and ability to the target's success, and rated how genuine the target appeared at the time. We predicted that, paralleling Study 1a, participants would attribute more HP to the undeserving target than to the deserving target. Given that, unlike in Study 1a, this manipulation explicitly emphasized differences in deservedness, we predicted that participants would attribute more AP to the deserving target than to the undeserving target. As in Study 1a, we predicted that appraisals of genuineness, and not appraisals of ability, would mediate the effects of perceived credit on HP. Finally, we predicted that HP scores would correlate with attributing success to external factors rather than to the target herself.

<sup>\*</sup> p < .05. \*\* p < .01. \*\*\* p < .001.

# Method

Participants. Participants were 60 British undergraduates (48 female) who participated in exchange for course credit. The mean age of the sample was 19.92 years (SD = 2.86). All participants provided complete written responses.

Design, materials, and procedures. Participants were randomly assigned to the deserved credit condition (n = 29) or the undeserved credit condition (n = 31). In the undeserved credit condition, participants were prompted to think about a time when someone they knew accepted credit for a positive outcome for which the person did not deserve credit. In the deserved credit condition, participants were prompted to think about a time when someone they knew was recognized for a positive action or achievement for which they rightly deserved credit. All participants were asked to vividly recall the experience, and then write a description of what transpired. As a manipulation check, participants rated the extent to which they felt the target person deserved credit for the positive action or accomplishment (1 = Did not deserve any credit; 5 = Deserveda great deal of credit). The AHPS was then presented to participants in terms of attributes that might describe another person, a framing of the scale previously employed by Cheng, Tracy, and Henrich (2010, Study 2). Participants rated the degree to which each item described the target person on the same 5-point scale used in Study 1a. Scale reliability was good for both AP ( $\alpha = .85$ ) and HP ( $\alpha = .89$ ). The genuineness of the target individual during the recalled episode was rated using the same instrument used in Study 1a ( $\alpha = .94$ ). Appraisals of the target's ability were assessed with three of the four items from Study 1a ( $\alpha = .82$ ); appraisals of effort were assessed with three of the four items from Study 1a ( $\alpha = .81$ ). Appraisals of the successful outcome as having been caused by external factors rather than the target individual were assessed with two items: "The event may be attributed to another person besides them"; "The event may be attributed to someone or something other than them" ( $\alpha = .92$ ). Participants rated their agreement with these items according to the same 7-point scale used in Study 1a, and then were thanked and debriefed.

#### **Results and Discussion**

Manipulation check. Participants reported that the target deserved more credit in the deserved credit condition (M = 4.80, SD = 0.50) than in the undeserved credit condition (M = 1.59, SD= 0.75), F(1, 50) = 325.41, p < .001.

Main analysis. A one-way MANOVA was conducted on the appraisal variables, with credit condition as the independent variable. Consistent with predictions, HP was attributed more when credit was undeserved (M = 3.10, SD = 0.97) than when credit was deserved (M = 1.64, SD = 0.87), F(1, 58) = 37.40,p < .001,  $\eta_p^2 = .39$ . Also consistent with predictions, significantly more AP was attributed when credit was deserved (M =3.89, SD = 0.42) than when it was undeserved (M = 2.57, SD = 0.60), F(1, 58) = 95.63, p < .001,  $\eta_p^2 = .62$ . Also as expected, perceptions of the person as genuine were greater when credit was deserved (M = 4.49, SD = 0.43) than when it was undeserved (M = 2.27, SD = 0.85), F(1, 58) = 157.66, p < .001,  $\eta_p^2 = .73$ . Appraisals of effort were greater when credit was deserved (M = 6.08, SD = 1.13) than when credit was undeserved  $(M = 3.33, SD = 1.26), F(1, 58) = 78.77, p < .001, \eta_p^2 =$ .58. Appraisals of ability were also greater when credit was deserved (M = 5.78, SD = 0.98) than when credit was undeserved  $(M = 3.54, SD = 1.32), F(1, 58) = 55.01, p < .001, \eta_p^2 = .49.$ 

**Correlations.** HP and AP were negatively correlated, r(60) =-.38, p < .01. To test whether this negative correlation was influenced by the experimental manipulation, we conducted separate analyses within each condition. In the deserved credit condition, AP and HP were not correlated, r(29) = .01, p = .95, whereas in the undeserved credit condition, AP and HP were positively correlated, r(31) = .37, p < .05. The positive correlation in the undeserved credit condition suggests that persons regarded as taking undeserved credit for a success are simultaneously associated with overclaiming (described by the HP scale) and with social recognition of accomplishment (described by the AP scale). The low levels of HP ratings relative to AP ratings in the overall sample made possible a negative correlation between the two scales (in an instance of the "reversal paradox," Messick & Van de Geer, 1981). When condition is treated a covariate, AP and HP are only marginally correlated: r(57) = .23, p > .07.

To assess links between AP, HP, and causal appraisals, partial correlations were conducted as in Study 1a to remove shared variance between AP and HP. Paralleling Study 1a, AP positively correlated with appraisals of ability and effort, and with ratings of the target's genuineness; similarly, HP negatively correlated with appraisals of ability and effort, and with ratings of genuineness. Strikingly, HP positively correlated with attributions of success to external causes (see Table 3).

**Mediation analysis.** We predicted that appraisals of genuineness, but not appraisals of ability, would mediate the effect of credit condition on HP. To test this prediction, we conducted a bootstrapping test as in Study 1a but with appraisals of ability entered as a potential mediator along with genuineness scores. Consistent with predictions, the direct effect of credit on HP was not significant with the mediators included in the analysis, p = .33, the indirect effect of genuineness on HP was significant, p < .001(BCa CI: -2.29, -1.11), and the indirect effect of ability appraisals on HP was not significant, p = .12 (BCa CI: -.77, .04). In short, perceptions of (lack of) genuineness fully mediated the effects of perceived credit on HP scores.

Study 1b replicated and extended the results of Study 1a to ratings of another person. Consistent with our proposal that HP measures overclaimed or excessive pride display rather than a form of pride related to natural ability, in both experiments, shifts

Table 3 Part Correlations of Authentic and Hubristic Pride, Causal Appraisals, and Genuineness (Study 1b)

	Residual Authentic Pride	Residual Hubristic Pride
Appraisals		
Ability	.62**	44**
Effort	.63**	38**
External causes	15	.31*
Genuineness	.65**	73**

*Note.* N = 60. The Authentic and Hubristic Pride scales were applied to the traits of an individual who claimed deserved versus undeserved credit for a success. p < .05. p < .001.

in HP scores were mediated by perceptions of genuineness, not natural ability. Indeed, in both Studies 1a and 1b, HP was negatively correlated with attributions of ability, as well as effort. In Study 1b, the HP scale correlated with attributions of success to external factors rather than to the target individual, indicating that the HP items need not be taken as a measure of pride at all. The findings of Study 1 also challenge the A/H model's construal of the AP scale as a measure of pride in hard work but not in natural ability, as AP scores were highly correlated with appraisals of both dimensions. Our findings suggest that the AP scale measures pride in genuine achievements, which are attributed to both hard work and natural talent.

Study 1 employed experimental manipulations directing participants to recall episodes specifically related to excessive pride display. To directly test how the causes of personal achievement relate to the AHPS, in Study 2 we employed a free-response paradigm.

# Study 2

In a within-subjects design, we extended our investigation of the competing appraisal hypotheses to include failures as well as successes. In line with the M/U model, but inconsistent with the A/H model, we predicted that AP scores would positively correlate with attributing success to effort, ability, and stable traits, but negatively correlate with these attributions for failure, whereas the inverse would be true for HP scores (see Table 1).

We also collected a battery of personality measures related to subjective status, self-regard, and sensitivity to the social judgments of others. With respect to subjective status and self-regard, the predictions of the M/U model converge with those of the A/H model: as found in previous research, both the AP and HP scales should correlate with subjective status and narcissism, AP scores should positively correlate with global self-esteem, and HP scores should negatively correlate with self-esteem. Sensitivity to other's evaluations of the self was assessed using personality measures that have not hitherto been tested with the AHPS. They included measures of public self-consciousness, fear of negative evaluation, and concerns about appearing immodest. The M/U model predicts that individuals who are highly cognizant of the impressions they make on others will be inclined to endorse HP items, because such individuals should be sensitive to feedback that they have displayed pride in a proscribed manner. However, individuals who are specifically motivated to avoid appearing immodest should be unlikely to endorse HP items to the extent that the HP scale relates to boastful displays—thus, ratings of concern about appearing immodest should constitute the inverse of the HP scale. The AP scale was anticipated to correlate with a sense of social confidence and status, and hence either not correlate with, or even negatively correlate with, excessive worry about how others view the self.

Studies 1a-b focused on the first motive we hypothesized would correlate with endorsement of the HP scale—namely, perceptions of having claimed or been accorded an excessive degree of personal credit. In Study 2, we included a measure of narcissism along with the aforementioned assessments of concern about the social evaluations of others in order to test the second hypothesized motivational explanation we have proposed for endorsing the HP scale. In light of recent findings that narcissistic individuals not only possess the tendency to display their inflated sense of self-

worth in an intense, socially proscribed manner, but are also aware of and willing to acknowledge this tendency when answering psychological scales, narcissism should correlate with HP. Thus, in Study 2, narcissism was predicted to positively correlate with HP and self-esteem, and to negatively correlate with concern about appearing immodest or being otherwise negatively evaluated by others.

# Method

Participants. We recruited 465 adults online from mturk.com AQ: 5 in exchange for \$1.75 to participate in a study advertised as "Personality and Life's Successes and Failures." Participation was restricted to U.S. residents who had not participated in Study 1a. Participants were screened prior to analysis for incomplete responses or overly brief sessions (under 5 minutes, as this study was pretested to require 5-10 minutes to answer thoughtfully), leaving a sample of 455 (252 female) with a mean age of 31.96 years (SD = 11.51).

# Materials and measures.

Authentic and Hubristic Pride. Participants completed the trait version of the AHPS (Tracy & Robins, 2007a). Both scales were internally reliable (AP  $\alpha = .92$ ; HP  $\alpha = .91$ ).

Recall task and causal appraisals for success and failure. Participants were asked to write about their greatest personal successes and worst failures, presented in counterbalanced order. They received the following instructions:

Please take a few minutes to think about two of your greatest achievements [worst failures] in life and the reasons for why these achievements [failures] came about. Try to remember how it felt to succeed [fail] in these important endeavors. Using the box below, please spend a few minutes writing about your achievements [failures], particularly what you think were the causes of your achievements [failures]. Make sure to write at least three sentences about each.

Each writing task was immediately followed by assessments of the appraisals of the causes of the recalled events. Appraisals of effort were assessed with two items ("My achievements reflect my hard work/My failures reflect my lack of hard work"; "My achievements would not have occurred without the effort I put into them/My failures would not have occurred if I had put more effort into them";  $\alpha s = .77 - .83$ ). Appraisals of ability were assessed with two items ("My achievements reflect my natural talent or ability/My failures reflect my lack of natural talent or ability"; "My achievements would not have occurred without my natural ability/My failures would not have occurred if I had more natural ability";  $\alpha s = .78 - .79$ ). Lastly, appraisals of stable causes for success/failure were assessed with two items ("My achievements/ failures came from an inner quality I have that is stable or permanent-something about me that has always been there"; "My achievements/failures may be attributed to something about me that cannot be changed";  $\alpha = .70 - .72$ ). Participants rated their agreement on a 7-point scale (1 = Strongly disagree to 7 = Strongly agree).

Global self-esteem. Global self-esteem was measured using the Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965), a 10item measure (e.g., "I feel that I have a number of good qualities";  $\alpha = .92$ ), used in previous studies of correlates of AHPS (e.g., Tracy et al., 2009; Tracy & Robins, 2007a). Participants rated their

agreement with each statement on the same scale used for rating causal attributions.

Narcissistic personality. Narcissism was measured using the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988), a 39-item measure (e.g., "I am more capable than other people"), comprising seven subcomponents, including, authority, self-sufficiency, superiority, exhibitionism, exploitativeness, vanity, and entitlement. The seven subcomponents were aggregated to obtain an overall measure of narcissistic personality ( $\alpha = .95$ ). The NPI has been used in past studies of the correlates of AHPS (e.g., Tracy et al., 2009; Tracy & Robins, 2007a). Participants rated their agreement with each statement on the same scale used for rating causal attributions.

Self-perceived status. Self-perceived status was assessed using the MacArthur Scale of Subjective Social Status, which depicts an image of a ladder that metaphorically represents the spectrum of socioeconomic status in the United States, and invites participants to select the rung which best reflects their overall social status relative to others (see Adler, Epel, Castellazzo, & Ickovics, 2000).

**Public** self-consciousness. Public self-consciousness was measured using the Public Self-Consciousness Scale (Fenigstein, Scheier & Buss, 1975). Participants rated their agreement with six items on a 7-point scale (e.g., "I'm concerned about what other people think of me"; "I usually worry about making a good impression";  $\alpha = .80$ ).

**Fear of negative evaluation.** Fear of negative evaluation was measured with the Brief Fear of Negative Evaluation Scale (Leary, 1983). Participants rated their agreement with 12 items on a 7-point scale (e.g., "I am usually worried about what kind of impression I make,"  $\alpha = .94$ ).

Concerns about appearing immodest. The tendency to be concerned about appearing immodest was measured using a novel 7-item measure. On a 7-point scale, participants rated their agreement with the following items: "I am careful to downplay the significance of my successes when talking about them with others"; "I err on the side of being overly humble to avoid appearing the least bit boastful"; "When I succeed in life, I generally share this news only with close friends and family"; "When I talk about my successes with others, I worry that they will see me as boastful and arrogant"; "I try hard to not be seen by others as arrogant or boastful"; "When I succeed in life, I always tell people about it" [reverse scored]; "I sometimes boast to others about my successes" [reverse scored]. The scale had an adequate reliability ( $\alpha = .73$ ).

**Procedures.** Participants answered the AHPS first. Next, they wrote about their personal successes and failures in counterbalanced order. Immediately following each recall/writing task, participants appraised the causes of the given events. Finally, participants answered the personality measures in the order listed above, then were debriefed, thanked, and paid.

# Results

**Preliminary analyses.** Replicating prior findings (e.g., Tracy & Robins, 2007a), when measured in terms of chronic feelings, AP (M = 4.48, SD = 1.17) was reported to a significantly greater extent than HP (M = 2.09, SD = 1.08), t(454) = 32.92, p < .001. AP and HP were slightly correlated in this study, though not significantly, t(455) = .06, t(455) =

we nonetheless conducted partial correlations of AP and HP to control for any shared variance between these variables, as others have done (see Tracy et al., 2009; Tracy & Robins, 2007a).

Authentic and Hubristic Pride and appraisals for success and failure. Part correlations of AP, HP, and the causal appraisals for success and failure are presented in Table 4. As predicted to the M/U model, AP positively correlated with appraisals of effort, ability, and stable causes for success, and negatively correlated with appraisals of lack of effort, lack of ability, and stable causes for failure (i.e., a self-enhancing appraisal style). Also consonant with the M/U model, HP negatively correlated with appraisals of effort as causing success, was unrelated to appraisals of ability or stable traits as causing success, and positively correlated with appraisals of lack of effort, lack of ability, and stable causes for failure (i.e., a self-deprecating appraisal style).

Personality correlates of Authentic and Hubristic Pride. As predicted, AP was positively associated with measures of global self-esteem, narcissism, and self-perceived status, and negatively associated with fear of negative evaluation. AP was unrelated to public self-consciousness and concerns about appearing immodest (see Table 5). Also consistent with predic- T5 tions, HP was positively associated with narcissism, selfperceived status, public self-consciousness, and fear of negative social evaluation, and negatively associated with global selfesteem and concerns about appearing immodest (see Table 5). According to the A/H model, AP correlates with narcissism primarily due to shared variance between measures of narcissism and self-esteem. We, therefore, conducted partial correlation analyses controlling for self-esteem. Controlling for global self-esteem, narcissism remained positively correlated with both AP, r(452) = .39, p < .001, and HP, r(452) = .50, p < .001.001.

**Self-esteem, narcissism, and appraisals for success and failure.** Our findings for HP and AP revealed that, contrary to the A/H model, the appraisal patterns underlying HP reflect a self-deprecating appraisal style, whereas those underlying AP reflect a self-enhancing appraisal style. However, it remains to be seen whether Tracy et al.'s appraisal predictions might apply more generally to narcissism (linked to HP scores in the A/H model) or high self-esteem (linked to AP scores in the A/H model). To explore this possibility, we conducted correlation analyses of narcissism, global self-esteem, and the appraisal measures for success and failure. As is usually the case, global self-esteem and narcis-

Table 4
Part Correlations of Trait Authentic and Hubristic Pride and
Appraisals of the Causes for Success and Failure (Study 2)

	Residual Authentic Pride	Residual Hubristic Pride
Success		
Effort	.36***	16**
Ability	.27***	.03
Stable causes	.26***	01
Failure		
Lack of effort	13**	.18***
Lack of ability	21***	.18***
Stable causes	19***	.14**

Note. N = 452.

\*\* p < .01. \*\*\* p < .001.

Table 5
Part Correlations of Trait Authentic and Hubristic Pride With
Personality Variables (Study 2)

	Residual Authentic Pride	Residual Hubristic Pride
RSE	.74***	29***
NPI	.51***	.45***
Self-perceived status	.32***	.14**
PSC	03	.14**
FNE	31***	.15**
Concerns about appearing Immodest	- 02	- 25***

*Note.* N = 452. RSE = Rosenberg Self-Esteem Scale; NPI = Narcissistic Personality Inventory; PSC = Public Self-Consciousness Scale; FNE = Fear of Negative Evaluation Scale.

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sism correlated highly, r(455) = .32, p < .001, thus, we conducted partial correlations to control for shared variance (see Table 6).

The appraisal pattern for global self-esteem was identical to that of AP. That is, high self-esteem was reflected by a self-enhancing appraisal style attributing success to effort, ability, and stable inner traits, and denying that failure resulted from a lack of effort, a lack of ability, or stable inner traits. Narcissism was positively linked with attributions of success to ability and stable causes, but unrelated to appraisals of effort. This pattern is consistent with the A/H model's HP predictions with regard to success (but recall that narcissism was also significantly linked to AP in this sample, even after controlling for self-esteem). However, with regard to failure, the appraisal pattern was not consistent with Tracy et al.'s predictions, as narcissists did not exhibit a self-deprecating appraisal pattern for failure. Rather, opposite to the predictions of the A/H model for HP, narcissism was positively related to appraising lack of effort as causing failure, yet unrelated to appraisals of lack of ability or stable causes. Thus, overall, our findings with regard to global self-esteem and narcissism portray both high self-esteem individuals and narcissists as exhibiting a somewhat selfenhancing appraisal style, with narcissists especially attributing their success to their superior ability and talent, and more willing than high self-esteem individuals to attribute failures to lapses in effort. Consistent with a self-enhancing style, narcissists appear to chalk failure up to insufficient effort rather than shortcomings in ability or a permanent inner quality.

If, as we have argued, some participants' endorsement of the HP scale items stems from low self-esteem, whereas others' endorsement of the HP scale items stems from narcissism, then these divergent personality profiles may possess differing causal attribution styles, potentially negating one another when analyzed together. Specifically, recall that in this study, inconsistent with the results of Studies 1a and 1b (see Tables 2 and 3), HP was not negatively correlated with appraisals of personal ability as having caused success. To assess whether the lack of negative correlations between HP and ability in Study 2 owed to narcissism, we conducted partial correlation analyses. As predicted, controlling for narcissism, HP was negatively correlated with attributions of success to ability, r(451) = -.09, p < .05. In addition, HP and attributions of success to stable inner traits were also negatively correlated, r(451) = -.13, p < .01, and the

negative correlation between HP and effort remained significant, r(451) = -.26, p < .001.

Self-esteem, narcissism, and concerns about social evaluation. The HP scale correlates with high narcissism as well as low self-esteem, which we have taken as reflecting divergent motives for endorsing the socially pejorative HP items. Narcissists are characterized by an inflated sense of their personal value, and are prone to flaunt their self-assessed fabulousness regardless of modesty norms (Carlson, 2012; Carlson et al., 2011). To test whether narcissism contributes to HP scores by blunting concerns about negative social evaluation, we correlated narcissism with fear of negative social evaluation, concerns about appearing immodest, and public selfconsciousness. As predicted, narcissism was negatively correlated with fear of negative social evaluation, r(451) = -.15, p = .001, and with concerns about appearing immodest, r(451) = -.31, p < .001. Interestingly, narcissism was positively correlated with public self-consciousness, r(451) = .14, p < .01, which may promote endorsement of the HP items inasmuch as narcissists are attuned to how others regard their ostentatious displays. Indeed, public self-consciousness differentiated narcissism from high self-esteem, as self-esteem was inversely correlated with public self-consciousness, r(451) =-.23, p < .001. Self-esteem was also inversely correlated with fear of negative social evaluation, r(451) = -.51, p < .001, but not with concerns about appearing immodest, r(451) = -.07, p = .14, perhaps because those having low self-esteem, who are more concerned about being perceived as excessive in their pride displays, are somewhat prone to endorse behaving more boastfully than they should. The three measures of concern about social evaluation were all mutually correlated, rs > .15, ps < .001.

# Discussion

In Study 2, participants rated the extent to which their effort, hard work, and stable inner qualities caused important life successes and failures. The results were compatible with our M/U interpretation of the AHPS, but almost entirely inconsistent with the A/H model. AP scores were positively correlated with all three appraisals of the causes of success, but negatively correlated with all three appraisals of the causes of failure. This overall pattern is consistent with the notion that the AP scale measures pride, but in

Table 6
Part Correlations of Self-Esteem, Narcissism, and Appraisals of
the Causes of Success and Failure (Study 2)

	Residual self-esteem	Residual narcissism
Success		
Effort	.29***	.04
Ability	.13**	.23***
Stable causes	.11*	.23***
Failure		
Lack of effort	11*	.14**
Lack of ability	28***	.01
Stable causes	23***	02

*Note.* N = 452. p < .05. \*\* p < .01. \*\*\* p < .001.

<sup>\*\*</sup> p < .01. \*\*\* p < .001.

a generally self-enhancing manner which, contrary to the A/H model, neither emphasizes effort nor de-emphasizes ability or stable inner qualities. HP scores differed strikingly from AP scores, but not in the manner predicted by the A/H model. Instead, HP was unrelated to attributions of success to either ability or stable inner traits, but was correlated with all three appraisals of the causes of failure. The negative correlation between HP and attributions of success to personal ability observed in Studies 1a and 1b did not initially replicate in this study, but emerged once covarying narcissism was controlled for. In addition, controlling for narcissism, HP was negatively correlated with attributions of success to stable inner traits.

The personality measures included in Study 2 illuminate the motivations underlying these divergent appraisal patterns. AP was strongly correlated with self-esteem, narcissism, and perceived status, was unrelated to public self-consciousness or concerns about appearing immodest, and was negatively related to the fear of negative social evaluation—precisely the profile one would associate with pride, the affective index of elevated status. Conversely, HP was positively related to narcissism, perceived status, public self-consciousness, and fear of negative social evaluation, and negatively correlated with self-esteem and concern about appearing immodest. This profile is readily explicable by our interpretation of the HP scale. The HP items describe counternormative behavioral displays. Individuals with low self-esteem, for whom being evaluated negatively by others is particularly worrisome, should therefore endorse the HP items, for example, "I worry that others see me as arrogant," and so forth. Conversely, those who are relatively unconcerned about appearing boastful to others endorse the HP scale simply because they recognize that they engage in such counternormative, excessive displays. Finally, those with low self-esteem may rate themselves as high in HP because these individuals tend to perceive themselves as undeserving of credit for their accomplishments, and believe that other people agree that they do not warrant credit (Swann et al., 1989; Swann & Read, 1981; Swann et al., 1992).

Both AP and HP should be expected to link with narcissism. The AP scale is linked with a dramatically self-enhanced appraisal style and a personality profile characteristic of narcissism; with respect to the HP scale, narcissists acknowledge displaying pride in a manner which others consider excessively arrogant (Carlson, 2012; Carlson et al., 2011).

Arguably, Studies 1 and 2 comprise sufficient evidence that, contrary to the A/H model, the AHPS does not measure two distinct facets of pride, a prosocial (non-narcissistic, otherregarding) facet characterized by attributing success to effort, and an antisocial (narcissistic, self-aggrandizing) facet characterized by attributing success to natural ability. Taken together, these studies demonstrate that (a) the AP scale is linked to narcissism, self-esteem, and a self-enhancing style of causally appraising one's achievements as owing to effort, ability, and a stable inner tendency to succeed; and (b) the HP scale is linked not only to narcissism, but to perceptions of oneself as undeserving of true credit for successes and a self-deprecating style of causally appraising one's achievements as not owing to personal effort, ability, or stable inner traits, whereas all three of these dimensions are seen as bringing about failure. However, given the novelty of our perspective relative to the preponderance of research involving the AHPS, we felt obliged to replicate the principal effects once more,

and to probe deeper into the hypothesis that HP is best described as a measure of unwarranted displays of pride.

# Study 3

In a within-subjects design, we again tested the appraisal hypotheses of the A/H model of pride in the context of personal successes and failures. In addition to the appraisal dimensions of effort, ability, and stable causes, we included a measure of the degree to which participants attribute their successes and failures to external circumstances or causes outside of the self. If HP is a measure of excessive display rather than pride, then HP should be related to external attributions for achievements, insofar as appraisals of overclaiming imply that other factors beyond the self actually contributed to success.

In addition to exploring the appraisal correlates of AP and HP a third time, in Study 3 we explored the tendency for individuals to appraise their status as genuinely merited. In the A/H model, both facets of pride should link to feelings of genuine merit, albeit for different reasons: hard work (AP) or natural ability (HP). In contrast, the M/U model asserts that HP, being a measure of perceptions of excessive pride display, should be *negatively* linked to perceptions that one's status is merited, whereas AP should be *positively* linked to merited status, reflecting the appraisal that successes stem from both hard work and genuine intrinsic talent. We, therefore, included a measure assessing the tendency to view one's status as merited.

Several antisocial features of personality associated with dominance (achievement of status through force or the threat thereof) have been positively linked to HP, and negatively linked to AP, including Machiavellianism, psychopathy, and self-entitlement (Cheng et al., 2010; Tracy et al., 2009). According to Tracy et al., HP is linked to these antisocial features of personality because HP mediates dominance-based status striving, whereas AP is thought to correlate negatively with these traits because AP mediates striving for status through prestige (see especially Cheng et al., 2010), that is, social position granted in light of success in culturally valued activities (Barkow, 1975; Henrich & Gil-White, 2001). From our perspective, antisocial aspects of personality may be linked to HP because such traits are linked to extravagant, and at times unmerited, displays of achievement. Individuals who are high in Machiavellianism or psychopathy endorse the use of duplicitous tactics to gain the rewards and power of achievement even if unmerited by their personal skill or effort, and are willing to admit as much in psychological assessments. Thus, our predictions with regard to HP and these antisocial dimensions converge with those of Tracy et al., albeit for different reasons. Nevertheless, we are not committed to Tracy et al.'s proposal that AP scores track prestige- but not dominance-based forms of status striving; rather, if AP measures pride, and pride retains elements of an earlier dominance-related proto-pride from which it evolved (see Fessler, 1999, 2001, 2004, 2007), then AP scores should correlate with coercive, dominance-related behaviors. However, the self-enhancing AP signature observed in the previous studies led us to suspect that assessments of dominance-related behaviors framed in nonpejorative language would be more likely to elicit affirmative responses. We, therefore, employed a measure—the Success in Conflict Scale (Sell,

Tooby, & Cosmides, 2009)—which, at face value, taps coercive approaches to resolving interpersonal conflict, and has been previously related to dominance, but is made up of relatively mild, socially acceptable statements.

#### Method

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**Participants.** Participants were 364 adult U.S. residents recruited via mturk.com in exchange for \$1.75. Participants from Studies 1a and 2 were excluded from participation. Participants were also screened prior to analysis according to the same criteria used in Study 2, leaving a sample of 348 (148 female) with a mean age of 27.59 years (SD = 9.82).

#### Materials and measures.

**Authentic and Hubristic Pride.** We used the same version of the AHPS employed in Study 2. Both the AP and HP scales were internally reliable ( $\alpha = .92$ , and .89, respectively).

Recall task and appraisals of success and failure. Next, participants completed the same writing tasks used in Study 2, again presented in a random order and followed by appraisal ratings. The same appraisal items and scales used to assess appraisals of effort, ability, and stable causes employed in Study 2 were used (all  $\alpha s > .70$ ). In addition, we added three items to assess attributions of external causes for success/failure ("My achievements/failures were the result of forces external to me"; "My achievements were the result of fortunate circumstances, and not really caused by me/My failures were the result of unfortunate circumstances, and not really caused by me"; "My achievements/failures may be attributed to causes that are out of my control"; both success and failure  $\alpha s > .75$ ).

*Self-perceived status.* As in Study 2, self-perceived social status was measured using the MacArthur Scale of Subjective Social Status (Adler et al., 2000).

Merited status. We measured participants' endorsement of whether they deserve the level of social status they have experienced in life using our novel 7-item Status Merit Scale (SMS). On a 1–7 Likert scale (1 = Strongly disagree; 7 = Strongly agree), participants rated their agreement with the statements: "I act like a big deal, but I'm really a phony"; "I'm not especially talented"; "Deep down, I don't feel responsible for the successes people give me credit for"; "I've genuinely earned my place in society through hard work"; "When I think about friends or coworkers who view me as successful, I feel I deserve it"; "My social status reflects my true ability"; "I truly deserve credit for my successes in life." The first three items are reverse scored, with increasing scores representing a belief that the level of one's social status is truly deserved. The scale was internally reliable ( $\alpha = .78$ ).

Success in conflict. The propensity to experience success in conflict with others, which has been linked to dominance-based pursuit of social status, was measured using the 7-item Success in Conflict Scale (Sell et al., 2009). Participants rated their agreement using a 7-point scale ( $1 = Strongly\ disagree$ ;  $7 = Strongly\ agree$ ) with statements such as "Other people know not to get in my way"; "If I want something, I can usually get it even if others don't want me to have it." The scale was internally reliable ( $\alpha = .87$ ).

**Procedures.** The procedures were similar to Study 2. The measures were presented in the order listed above (followed by three other scales related to a separate research question), whereafter participants were debriefed and paid.

# **Results and Discussion**

**Preliminary analyses.** Participants again reported significantly greater AP scores (M = 4.40, SD = 1.17) than HP scores (M = 2.25, SD = 1.03), t(348) = 26.14, p < .001.

Authentic and Hubristic Pride and appraisals for success and failure. The two AHPS scales did not correlate, r(348) =.05, p = .37. Thus, partial correlations were deemed unnecessary. Our first set of correlations included AP, HP, and the causal appraisals for success and failure (see Table 7). Consistent with T7 our M/U model, AP was positively associated with self-enhancing appraisals for success, including appraisals of effort, ability, and stable causes, and was negatively associated with attributing success to external causes. Also consistent with our perspective, AP was negatively associated with appraisals of lack of effort, ability, and stable causes for failure (though the negative correlation for lack of effort did not reach significance). AP was unrelated to external attributions for failure, though it trended in the negative direction. Inconsistent with the A/H model, HP was not related to appraisals of ability for success (though it was marginally correlated with stable causes). Consistent with a self-deprecating appraisal style, HP was negatively correlated with appraisals of effort for success. As in Study 2, HP was not significantly negatively correlated with attributions of success to personal ability or stable inner traits. However, the results of Study 2 suggest that, had we measured and controlled for narcissism in Study 3, HP might indeed have negatively correlated with ability and stability appraisals of the causes of success. Although we cannot test this supposition in the dataset for Study 3, the present null results between HP and these two success appraisal dimensions are nonetheless consistent with the M/U model. Crucially, HP was positively associated with external attributions for success, suggesting that HP does not measure pride (i.e., an affective response to internally caused successes). Additionally, HP was positively associated with appraisals of lack of ability and stable causes for failure, but unrelated to external attributions for failure.

**Personality correlates of Authentic and Hubristic Pride.** Table 8 presents correlations of AP, HP, and the personality dimensions. AP correlated with self-perceived status, status merit, and success in conflict. As predicted by our M/U model, HP was positively correlated with self-perceived status and negatively cor-

Table 7

Correlations of Trait Authentic and Hubristic Pride, and Causal Appraisals for Success and Failure (Study 3)

	Authentic Pride	Hubristic Pride
Success		
Effort	.33***	$12^{*}$
Ability	.23***	03
Stable causes	.24***	$.09^{\dagger}$
External attributions	12*	.15**
Failure		
Lack of effort	07	$.10^{\dagger}$
Lack of ability	17**	$.10^{\dagger}$
Stable causes	26***	.14*
External attributions	07	02

Note. N = 348.

 $<sup>^{\</sup>dagger} p < .10. \quad ^{*} p < .05. \quad ^{**} p < .01. \quad ^{***} p < .001.$ 

Table 8 Correlations of Trait Authentic and Hubristic Pride With Self-Perceived Status, Status Merit, and Success in Conflict (Study 3)

	Authentic Pride	Hubristic Pride
Self-perceived status Status merit	.41*** .60***	.11* - 11*
Success in conflict	.44***	.25***

Note. N = 348. p < .05. \*\*\* p < .001.

related with status merit. In addition, HP correlated positively with success in conflict.

Personality variables and appraisals for success and failure. As in Study 2, we sought to explore the relationship between some of our theoretically relevant personality variables and appraisal styles. If AP reflects perceptions of genuine success and status, and HP reflects excessive display, then individuals who believe that they genuinely earned their status should evince an appraisal style closely approximating the appraisal patterns for AP. The same assertion might also be made for our measure of success in conflict, which reflects the perception that one is genuinely capable of winning conflicts when they arise. As illustrated in Table 9, these predictions were largely borne out. Status merit correlated with a self-enhancing appraisal style similar to that associated with AP. The attributions associated with success in conflict also closely resembled those of AP, although success in conflict was not correlated with attributing success to internal causes (i.e., the inverse of attributing success to external causes). As success in conflict highly correlated with both AP and HP, we conducted follow-up partial correlations controlling for AP and HP. When AP was controlled for, the correlation between success in conflict and attributing success to external causes remained nonsignificant, p =.70. When HP was controlled for, the negative correlation between success in conflict and attributing success to external causes became significant, r(348) = -.11, p < .04, indicating that success in conflict does correlate with attributing the causes of success to oneself once shared variance with HP scores (i.e., viewing oneself as not entirely meriting credit for success) is accounted for.

Thus, closely replicating the findings of Study 2, in Study 3 the AP scale predicted a self-enhancing pattern of appraisals of the causes of success and failure, whereas the HP scale predicted a self-deprecating appraisal style. Further, HP scores were linked with perceptions of not genuinely meriting one's achievements, consistent with our construal of the HP scale as measuring the belief that one engages in excessive or unwarranted pride display. In addition, both the AP and HP scales correlated with the use of coercive strategies to resolve interpersonal conflict, calling into question the A/H model's portrayal of AP as a distinctly prestigeoriented emotion, and suggesting that elements of proto-pride persist within human pride. Importantly, whereas the negative correlation between AP and attributions of success to external factors was in the predicted direction but nonsignificant in the relatively small sample of Study 1b, the negative correlation reached significance in Study 3, indicating that the AP scale meets the minimal criteria as a measure of pride. Crucially, replicating Study 1b, HP predicted attributions of personal success to external circumstances (e.g., luck, other people), a finding that poses perhaps the most glaring challenge to the claim that the HP scale measures a facet of pride.

# **General Discussion**

In four studies, we found unambiguous confirmation of our concerns regarding both the AHPS instrument and the causal attribution signatures ascribed to the AP and HP scales. Our results reveal the AP scale to be a measure of the affective state evoked by genuinely earned achievements, which are attributed to inner effort, natural ability, and a stable tendency to succeed. Consonant with this self-enhancing tendency, AP is also associated with assessments of the self as relatively high in status. In short, the AP scale reliably measures factors consistent with pride as it has generally been conceived by emotion theorists (e.g., Fessler, 1999; Lewis, 2000; Roseman, 1991; Russell & McAuley, 1986; Weiner, 1985; Williams & DeSteno, 2009). In contrast, the HP scale predicted a self-deprecating appraisal style that declines credit for successes, accepts blame for failures, and thus, bears no resemblance to pride. Instead, HP scores reflect perceptions that pride has been displayed in an excessive manner-in at least some instances due to overclaiming credit for a positive outcome (Studies 1a and 1b). Like the AP scale, the HP scale is associated with perceiving oneself as possessing elevated social status, but, unlike the AP scale, the HP scale correlates with perceiving oneself as undeserving of credit for achievements. This may explain why participants having low self-esteem may rate themselves as "hubristic"—they regard their accomplishment and status as unwarranted in light of their perceived shortcomings. Narcissism appears to correlate with HP for a different, more straightforward reason. Narcissistic individuals, who are both high in public selfconsciousness and relatively unconcerned about appearing immodest, evidently rated themselves as "hubristic" because they recognize that their extravagant displays of pride exceed social display norms (Study 2; see Carlson, 2012; Carlson et al., 2011).

To thoroughly assess the A/H model of causal appraisals, we employed converging methods. In Study 1a, the AHPS was applied to retrospective feelings experienced upon either being recognized for or boasting over an important accomplishment; in Study 1b, the AHPS was applied to another person who either did or did not deserve credit for a claimed accomplishment; in Studies

Table 9 Correlations of Status Merit and Success in Conflict, and Appraisals of the Causes for Success and Failure (Study 3)

	Status merit	Success in conflict
Success		
Effort	.43***	.16**
Ability	.26***	.16**
Stable causes	.18**	.24***
External attributions	28***	07
Failure		
Lack of effort	15**	05
Lack of ability	$37^{***}$	22***
Stable causes	$27^{***}$	13*
External attributions	02	01

Note. N = 348. p < .05. \*\* p < .01. \*\*\* p < .001. 2 and 3, the AHPS was applied as a trait measure of personality, without priming thoughts of success. The consistency of our findings across studies is particularly noteworthy given the variety of approaches taken. Without exception, for example, AP positively correlated with attributions of success to effort, ability, and stable inner traits. Likewise, the HP scale consistently correlated positively with attributions of success to external causes, and correlated negatively with appraisals of effort as having caused success. However, there were also inconsistencies. In particular, Studies 1a and 1b found negative correlations between HP and attributions of nature of our present findings. success to ability, whereas the correlations were null in Studies 2 and 3, only emerging as significantly negative in Study 2 after controlling for narcissism. Such fluctuations in the significance of certain correlations across the four present studies may owe to relevant differences between the designs, particularly concerning the applications of the AHPS. With respect to HP and appraisals of ability, it may be that priming a salient success for oneself (as in Study 1a) or another (as in Study 1b) negates the countering effects of narcissism on the negative correlation between HP and ability. The differing results may alternately (or also) owe to variations in

# **Reconciling the Present Findings With Prior Support** for the A/H Model

sample size or other factors. Whatever the reasons, the bottom line is that, contrary to the predictions of the A/H model, the HP scale

showed either null or negative correlations with appraisals of

ability across convergent studies. Similarly, AP negatively corre-

lated with attributions of failure to personal effort in Study 2, but

a null correlation between these variables was observed in Study 3.

Neither result is compatible with the A/H model; both are com-

patible with the M/U model.

Proponents of the A/H model may object that our interpretations and findings are inconsistent with previous research. For example, we have cited the pejorative nature of the HP scale items as an indication that, at least for non-narcissistic individuals, endorsing these terms indexes a psychological state other than the hedonic emotion pride. However, Tracy and Robins (2007a, Study 3) found that the two-factor structure persisted even after controlling for the differences in affective valence experienced by the participants (i.e., how happy they typically feel; AP scores correlated with greater happiness). This result has been advanced as proof that the negative emotional connotation of the HP terms relative to the AP terms does not entirely explain the two-factor structure. However, the likelihood persists that constructs that decouple from valence, such as those related to perceived merit, norm adherence, or intensity of display, may contribute to the two-factor structure. Our M/U interpretation does not require the AP and HP scales to form distinct factors based simply on valence.

With respect to the appraisal structure of AP and HP, Tracy and Robins (2007a, Study 7) also found small but significant correlations between AP and appraisals of effort (but not ability), and between HP and appraisals of ability (but not effort), as measured by the 48-item Multidimensional-Multiattributional Causality Scale (Lefcourt, von Baeyer, Ware, & Cox, 1979). However, these analyses collapsed appraisals of the causes of successes and failures. Recall that we found AP scores to positively correlate with both effort and ability appraisals for successes (Studies 1–3), but to negatively correlate with appraisals of self's (lack of) effort and

ability as causing failures (Studies 2 and 3). Conversely, HP scores were not positively correlated with appraisals of effort or ability for successes (Studies 1–3), but were when assessing the causes of failures (Studies 2 and 3). Tracy and Robins' results are, therefore, difficult to interpret, as collapsing attributions of success and failure obscures important distinctions between the two. Whether or not this analytic strategy ultimately explains the incommensurability between their results and ours, the burden of proof lies on defenders of the A/H model, given the unambiguous, replicable

In another test of the appraisal correlates of the AP and HP scales, Tracy and Robins (2007a, Study 3) had undergraduate judges content-code autobiographical narratives written by participants along the appraisal dimensions of permanence, ability, and effort. In partial support of the A/H model, they found that AP correlated positively with attributions to temporary factors, whereas HP correlated positively with ability attributions and negatively with effort attributions. However, against the predictions of the A/H model, there was no link between AP and effort attributions, suggesting that this method may have been noisy given the strong correlations between AP and effort attributions that we observed in Studies 1–3, using a method where participants themselves appraised their experiences of success and failure. Another potential limitation of their judge-coded study is that participants were not explicitly directed to write about the causes of their successes. Instead, they were instructed to "think about a time when you felt very proud of yourself . . . describe the events that led up to your feeling this way in as much detail as you can remember" (Tracy & Robins, 2007a, p. 514). This prompt directs participants to recount events that led to proud feelings, rather than to identify the causes of the relevant achievement outcome itself. Participants may, therefore, have been led to stress the personal contributions they made to the pride-eliciting circumstance, as these contributions may have been more relevant to their later feelings of pride than other causal antecedents they would have cited as contributing to the successful outcome. Studies 1a (in the control achievement condition), 2, and 3 of the present article directly probed the causes of successful outcomes rather than the causes of feelings. Additionally, compared with our tactic of explicitly asking participants to appraise the causes of their successes (Studies 1a, 2, and 3), the content-coding method utilized by Tracy and Robins provides a less direct window into participants' causal attributions.

Finally, in a follow-up study Tracy and Robins (2007a, Study 4) manipulated causal attributions (e.g., effort vs. ability) for hypothetical successes, then measured the extent to which these successes would be expected to produce feelings of AP and HP. The prompt addressing ability read: "You've always been naturally talented (i.e., smart). You recently had an important exam and you didn't bother studying much for it, but it still seemed very easy to you. You just found out that you did very well on the exam." This ability-related prompt elicited greater HP scores than the effortrelated prompt, which read: "You recently had an important exam and you studied hard for it. You just found out that you did very well on the exam." Note that, in our model, it is irrelevant whether the vignette highlights natural ability versus effort—what matters is whether the behaviors described index a propensity for excessive displays of pride. Accordingly, this study may be viewed as having demonstrated that participants associate extraordinary con-

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fidence in one's genuinely extraordinary abilities with the propensity to display pride in an extravagant fashion. Such an intuition on the part of participants would be orthogonal to assessments of ability, and would complement our finding that HP scores correlate neither with appraisals of ability (Studies 1–3) nor with accrediting the self as having caused success (Study 3).

# Toward a New Search for "Dominance Pride" and "Prestige Pride"

Building on Henrich and Gil-White's (2001) distinction between the pursuit of status via dominance (position achieved through force or the threat thereof) and prestige (position achieved through deference that others grant in light of one's accomplishments in culturally defined activities), Tracy, Shariff, and Cheng (2010; see also Cheng et al., 2010; Shariff et al., 2010a) propose that pride encompasses two systems, one that mediates dominancebased status seeking, and one that mediates prestige-based status seeking. We concur that the human motivational system likely coevolved with human social structures such that discrete emotions or facets thereof underlie these two strategies. Indeed, one of us developed a similar theory with regard to the evolution of pride and its opposite, shame, having demonstrated that the latter emotion is characterized by two distinct eliciting conditions, one concerning subordinance in a dominance hierarchy, the other concerning failure to conform to cultural standards for behavior (Fessler, 1999, 2001, 2004, 2007).

Given that there are sound theoretical grounds for the basic assertion that one facet of pride undergirds the desire to dominate others, and a second facet of pride undergirds the desire to be admired and elevated by them, how might we advance work in this area? First, we advise abandoning the AHPS as a measure of either postulated facet. As we have shown, the AP scale correlates with narcissism (Study 2) and dominance-related coercion (Study 3; see also Cheng et al., 2010), and thus, appears ill-suited to individuate a distinctly prestige-oriented aspect of pride should such an emotion exist. Worse yet, the HP scale does not intelligibly measure pride feelings of any sort (Studies 1-3), though it does seem to measure appraisals of having excessively or undeservedly expressed pride. In light of the intrinsic limitations of the AHPS, we suggest that it is time to go back to the methodological drawing board, beginning with the postulated ultimate functions of the two hypothesized facets. For example, dominance pride ("hubris" being no more an emotion than is "surliness") should be elicited by achieving coercive power over others, whereas prestige pride should be elicited by receiving their accolades.

Consideration of the potential evolutionary origins of dominance pride and prestige pride inspires further testable predictions. Somewhat paralleling the position that Fessler (1999, 2001, 2004, 2007) outlined primarily with regard to shame, Clark (2010) argues that (what we term) dominance pride is an ancestral trait equivalent to primate proto-pride, whereas prestige pride is a derived trait unique to humans, with the simultaneous presence of the two traits in a single organism constituting a case of what biologists term "serial homology" (see also Clark & Fessler, 2012). The Tracy school (Shariff et al., 2010b; Shariff, Tracy, & Cheng, 2010) disagrees, arguing that both facets of pride are derived traits that evolved from proto-pride. These two views produce distinctly different predictions regarding the functioning

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of pride. Tracy et al.'s model predicts a precise functional fit between the behavioral tendencies associated with prestige pride and the task demands of prestige-based status, namely leadership, pedagogy, and prosociality (see Cheng et al., 2010); in contrast, given the kludge-like nature of coopted emotional adaptations (see Clark & Fessler, 2012; Fessler & Gervais, 2010), Clark's model predicts that prestige pride will be associated with dominant behavioral tendencies, such as self-interested appropriation of resources, that are antithetical to prestige. If Clark's serial homology account is correct, and evolutionary constraints on optimality indeed require prestige pride to share behavioral tendencies with the dominance (proto-) pride from which it derives, then individuals who achieve and maintain prestige should evince symptoms of dominance pride as well, and will only succeed in maintaining their prestige by virtue of their ability to regulate these dominancerelated impulses. This dynamic could be empirically investigated by, for example, inducing prestige pride before a manipulated depletion of executive control, then testing for behavioral outcomes related to dominance.

# Conclusion

Research on pride is rapidly expanding, and success in this enterprise will importantly depend on the quality of the methods employed. Because of the seminal role that Tracy et al. have played, much of the empirical work in this literature is based on an instrument and a related model of causal appraisals that, we assert, are fundamentally flawed. Williams and DeSteno (2010) have argued that the law of parsimony favors viewing pride as a single emotion pending compelling evidence to believe otherwise; it would be understandable, given our methodological critique, if readers were to assume that we hold a similar deflationary view. However, methods and theories can develop along separate trajectories. Whether human pride decomposes into prestige-oriented versus dominance-oriented mechanisms remains an important open question. Indeed, our concern regarding the inadequacies of the AP and HP scales stems mainly from enthusiasm for the line of inquiry that these instruments were intended to illuminate. Tracy et al. have proposed an intriguing evolutionary theory that merits consideration independent of the imperfect nature of the AHPS.

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Received September 1, 2012
Revision received November 19, 2012
Accepted November 30, 2012