Pride and Perseverance: The Motivational Role of Pride

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Perseverance toward goals that carry short-term costs is an important component of adaptive functioning. The present experiments examine the role that the emotion pride may play in mediating such perseverance. Across 2 studies, pride led to greater perseverance on an effortful and hedonically negative task believed to be related to the initial source of pride. In addition, the causal efficacy of pride was further demonstrated through dissociating its effects from related alternative mechanisms. Study 1 differentiated the effects of pride from self-efficacy. Study 2 differentiated the effects of pride from general positive affect. Taken together, these findings provide support for the proposed motivational function of pride in which this emotion serves as an incentive to persevere on a task despite initial costs.

Keywords: pride, emotion, motivation, self-efficacy

On a regular basis, individuals work to achieve various goals despite short-term costs. Such goals can be quite disparate in nature, including the personal, academic, and physical domains. For example, individuals may strive to attain skills related to musicianship or sports, they may work long hours to receive recognition and promotions at their jobs, and they may even work diligently to modify their behaviors in order to form and solidify interpersonal relationships. Pursuit of such goals, however, can sometimes be quite difficult, often resulting in short-term costs such as tedium, high-effort expenditure, or embarrassment due to initial failures. Yet, it remains clear that meeting goals and developing and using skills stand as central pillars of adaptive functioning (Gollwitzer & Moskowitz, 1996). A question of interest, then, involves illuminating the mechanisms that allow individuals to persevere in the face of short-term hedonic costs, for without such mechanisms, long-term goals that inherently include short-term costs might never be realized.

In this vein, many theorists have identified psychological mechanisms that shape effort (Gollwitzer, Fujita, & Oettingen, 2004; Gollwitzer & Moskowitz, 1996). For example, self-efficacy and expectations of success (Bandura, 1989; Bandura & Wood, 1989), the ability to self-regulate (Muraven & Baumeister, 2000; Vohs, Baumeister, & Ciarocco, 2005), and differences in the form and implementation of intentions (Gollwitzer et al., 2004) all have been demonstrated to influence efforts aimed at specific outcomes. The purpose of the present experiments was to suggest a new mechanism that might also impact perseverance on tasks, especially in the face of initial costs: the emotion *pride*. Given that a primary function of emotions is to initiate and guide goal-directed behavior (Barrett & Campos, 1987; Cosmides & Tooby, 2000; Frijda, 1986; LeDoux, 1996), we believe that pride may function to mediate perseverance. If true, then such findings would identify pride as a unique positive emotion capable of motivating efforts aimed at developing difficult skills and status (cf. Tracy & Robins, 2004a, 2004b; Webster, Duvall, Gaines, & Smith, 2003).

For several reasons, we believe that pride stands as an excellent candidate for such a motivational role. Much as emotions have been shown to guide decisions and behaviors related to confronting challenges posed by the physical environment (e.g., LeDoux, 1996; Öhman & Wiens, 2003), emotions have also been shown to shape decisions and behaviors related to intra- and interpersonal social goals (e.g., Bartlett & DeSteno, 2006; DeSteno, Valdesolo, & Bartlett, 2006; Keltner, 1995; Keltner, Haidt, & Shiota, 2006; Tangney, 1999). High ability for valued skills stands as both an adaptive end in and of itself as well as a marker for admiration and elevated status (cf. Algoe & Haidt, 2006; Fiske, Cuddy, Glick, & Xu, 2002; Tracy & Robins, 2004a, 2004b). Given the importance of possessing valued attributes for maintaining bonds to others (Baumeister & Leary, 1995; Leary, Tambor, Terdal, & Downs, 1995), efforts aimed at achieving abilities and associated recognition might well be expected to represent a social challenge and, thereby, be influenced by a specific emotional response involving social acclaim.

Although some debate surrounding the exact appraisal and experiential characteristics of pride exists, most psychologists agree that pride is a positive, self-conscious emotion arising from achievements that can be attributed to one's abilities or efforts (Lewis, 1997; Tangney, 1999; Tracy & Robins, 2004a, 2004b). Mascolo and Fischer (1995) concisely defined pride as, "[An emotion] generated by appraisals that one is responsible for a socially valued outcome or for being a socially valued person" (p. 66). Consistent with the view that pride involves public evaluations of the self (i.e., a situation in which one is conscious of one's evaluation by other social beings), Webster et al. (2003) demonstrated that pride was most strongly evoked in situations of publicly praised accomplishment.

Pride, of course, is not always viewed as adaptive. One dimension along which pride experiences vary is *globality*, which refers

to whether the emotion is generalized and nontargeted or occurs in response to a specific event. The more specific type of pride, usually termed *achievement-oriented* or *authentic pride*, stems from a specified event (e.g., mastering a skill, receiving a high academic mark; Tangney, 1999; Tracy & Robins, 2004a). Hubristic pride, however, has no particular target and in essence is an unconditional positive view of one's self as a whole that may lead to negative social consequences (Lewis, 1997; Tangney, 1999). Thus, whereas hubristic pride may produce poor social outcomes and be responsible for the often negative view of this emotion, specific or achievement-oriented pride may be theorized to serve an important, adaptive role. Given this difference, the present experiments focus on pride occurring in response to performance on specific tasks.

We believe that the experience of pride serves a crucial role in providing incentive to pursue success despite short-term losses, a belief that we call the *motivational hypothesis of pride*. Put simply, when feeling proud about a recognized accomplishment, an individual might feel an incentive to pursue further action in that valued domain. What constitutes a valued domain will, of course, show variability both within and across individuals. Although certain domains may be of great and long-standing value (Markus, 1977; Markus & Wurf, 1987), it is also true that individuals often base their opinions regarding what events or abilities are of high import on the views of others (Anthony, Holmes, & Wood, 2007; Cooley, 1902/1956; Festinger, 1954). Therefore, pride stemming from acclaim provided by others might function as a social marker of one's value (cf. Anthony et al., 2007; Leary et al., 1995). On a very basic level, being a valued member of a group increases adaptive outcomes (Brewer & Brown, 1998; Leary et al., 1995). Thus, it is in each group member's best interest to engage in behaviors that are viewed positively by others to ensure or enhance his or her place in the group hierarchy. In this vein, if pride impels one to pursue valued successes despite short-term costs, then its role in motivating social behavior is certainly adaptive, both with reference to building skill sets and social status. Therefore, pride, whether experienced in response to events of the moment or through simulation of future performance-dependent outcomes, stands as a potential motivational force of high import.

This conception of pride is consonant with the growing view that discrete positive emotions are designed to facilitate distinct types of adaptive behaviors and social outcomes. Indeed, several psychologists have specifically suggested that positive emotions are intricately tied to meeting challenges integral to social functioning (Fredrickson & Losada, 2005; Shiota, Campos, Keltner, & Hertenstein, 2004). For example, Fredrickson and Branigan (2001) viewed pride in terms of the broaden-and-build model of positive emotions. They argued that discrete, positive states aid in expanding cognitive repertoires and, in so doing, help to build various resources, such as social currency or intellect. As Fredrickson and Branigan suggested, pride might spur an individual to dream of further achievement (i.e., broadening) and in fact provide the necessary motivation for future success (i.e., building). The motivational hypothesis of pride makes a similar argument, yet adds the corollary that pride's functional role, as opposed to that of other positive emotions, comes into play most fittingly when the motivation is directed toward a goal that incurs short-term costs. As such, this view seeks to differentiate the effects of pride from that of a generalized positive state, as positive mood has been demon-

strated to reduce efforts aimed at tasks possessing immediate hedonic costs (Bartlett & DeSteno, 2006; Wegener & Petty, 1994; Wegener, Petty, & Smith, 1995; but see Raghunathan & Trope, 2002; Trope & Neter, 1994).

The studies reported here represent the first empirical effort to establish support for a motivational hypothesis of pride. In so doing, we present a methodology to induce pride in vivo in a laboratory setting and then examine pride's influence on actual perseverance on an effortful task. For social emotions such as pride, we believe that true interpersonal inductions possess higher internal validity than ones relying on considerations of hypothetical or past events (cf. DeSteno et al., 2006; Herrald & Tomaka, 2002; Webster et al., 2003); therefore, we used staged interactions and manipulated feedback to induce pride in the two present experiments. In short, the experiments were designed to determine whether increased pride produces greater perseverance on tasks related to the source of the initial pride experience and, if so, to differentiate such effects from alternative mediating mechanisms. Accordingly, Study 1 was designed not only to examine the motivational effects of pride but also to dissociate such effects from any influence of simple self-efficacy. Study 2, in turn, was designed to provide a replication of any motivational effects of pride while also exploring differences between pride and general positivity (i.e., positive mood) with respect to shaping perseverance.

Study 1

The goals of Study 1 were twofold. We sought to evaluate the motivational hypothesis of pride by measuring perseverance on an effortful task and to differentiate any effects from those stemming from simple expectancies of efficacy or success. To accomplish these goals, we used a framework in which participants believed we were measuring their performance on two tests of related cognitive abilities. After completing a primary task, participants received different types of feedback, one of which was meant to induce pride through receipt of interpersonal acclaim. We expected that increased pride would result in greater effort aimed at completing a second effortful, tedious task that assessed similar abilities for which individuals initially received acclaim.

As noted, we also sought to differentiate any effects of pride on task perseverance from those resulting from expectations of success. As noted by Bandura (1982), knowledge of previous success often translates into judgments of self-efficacy on identical or related tasks. Thus, when an individual feels particularly self-efficacious in a given domain, he or she may expend more effort and persist in the face of obstacles (Bandura, 1989; Bandura & Wood, 1989). For Bandura (1997), self-efficacy is defined as beliefs in one's ability to execute the actions required to successfully complete a task or achieve a goal. Of import, this knowledge is separate from affective states related to goal achievement (Bandura, 1997; Bandura & Cervone, 1989). Consequently, self-efficacy and pride, though related, are theoretically dissociable.

Differentiating pride from simple expectancies of success can be difficult, however, as acclaim can conflate knowledge of success, which is inherently accompanied by expectations of future success, with social recognition. Therefore, Study 1 included a control condition in which performance feedback, yet no acclaim, was provided to the participants. Given that the initial task was some-

what ambiguous in nature (i.e., it assessed abstract spatial–cognitive-processing ability), superior performance on it was unlikely to foster much pride on its own, though some increase in satisfaction levels might well appear due to the simple presentation of relative performance information (Gaines, Duvall, Webster, & Smith, 2005). We expected that heightened pride would only be experienced in the face of public recognition for superior performance (Webster et al., 2003). Yet, by providing identical feedback on performance to some participants in the absence of acclaim, we could provide them with equivalent expectancies for future success. Consequently, we expected that although knowledge of past success might influence expenditure of effort in some circumstances, it is the experience of pride in particular that will lead to perseverance on a secondary task when such a task possesses hedonic costs.

Method

Participants

Eighty-seven undergraduates (51 women, 36 men) participated in partial fulfillment of a course requirement. Only data from participants who had normal color vision were used, as one task required the estimation of colored objects. As is noted later, 4 participants were removed from analysis; 3 were removed due to a failure to follow directions, and 1 for highly aberrant data.[1] Participants were randomly assigned to one of the three experimental groups and run individually.

Procedure

Upon arriving at the lab, participants were greeted by an experimenter of the same gender and seated in front of a personal computer (PC). The experimenter announced that they would be participating in an experiment on cognitive abilities, which would consist of several parts, all of which were to be completed on the PC. More specifically, they were told that they would complete tasks meant to assess individual differences in cognitive abilities involving visual perception and mental rotation. Because participants were college students, we believed that assessment of cognitive abilities would be viewed as a somewhat relevant domain for self-conceptions. Participants were also informed that their performance on the first task would be predictive of their performance on the second.

After the experimenter left the room, participants completed a dot estimation task, which consisted of 10 screens of arrays of multicolored dots. Participants believed the goal was to report the number of red dots contained in each image before it disappeared after 2 s. Because the task was designed to disallow confident evaluations of one's performance, the 2 s allotted for each screen required participants to provide estimates; the number of dots could not actually be counted in 2 s, yet they did not appear so numerous as to make estimates seem arbitrary. To make subjective estimation of performance even more ambiguous, participants were told that scoring was dependent on both accuracy and response time. Pretesting confirmed that individuals did not hold strong views about their exact level of performance on the task. Following this task, the experimenter entered the room and provided participants with one of three feedback manipulations: pride,

control without performance information (hereafter termed the *control condition*), and control with performance information (hereafter termed the *control + score condition*).

Immediately after the manipulations, participants were instructed to move on to the mental rotation task, which consisted of a long series of onerous mental rotation exercises taken from Shepard and Metzler (1971). Pretesting confirmed the tedious nature of this task. Via the PC, participants were given introductory instructions, shown an example test item, and presented with the following instructions:

> Please work on this task as long as you like. Do not feel as if you must finish all of the exercises provided. In fact, it is not possible to complete the entire set in the time provided for this experiment, so please continue doing this task until you feel as if you would like to stop.

The computer recorded the exact amount of time that each participant spent on this task, starting with the first image and ending when the participant decided to stop by clicking a *quit* key. Time spent on this task served as the primary dependent variable. This task was designed to be completed solely on the PC. Moreover, to further reduce any demand expectancies on the part of the participants, they were told, prior to beginning the task, that all further instructions and tasks would come from the PC only; no further meaningful interactions with the experimenter were expected.

Upon ending the mental rotation task, participants completed a manipulation check designed to assess the success of the pride manipulation. We placed the manipulation check after completion of the dependent measure in order to ensure that the manipulation check itself did not bias the effect of induced pride on the mental rotation task. Given certain contingencies, completion of a manipulation check in and of itself can serve to highlight the association between a sudden change in emotion and subsequent actions, thereby obscuring any true relation (cf. DeSteno, Petty, Wegener & Rucker, 2000). That is, it might serve to highlight the fact that participants were just made to feel proud and then lead them to consciously "correct" for any influence of this meta-awareness on subsequent choices of action. Given this possibility, we chose to measure pride after the primary dependent measure. Because the time lapse between the emotion induction and the manipulation check was only 5 min on average, we believed that memory for the initial emotional response should be relatively intact and accurate (see DeSteno, Petty, Rucker, Wegener, & Braverman, 2004; DeSteno et al., 2000, for similar strategies). Following the manipulation check, participants completed a self-esteem measure and answered a series of demographic questions. Participants were then debriefed and asked to notify the experimenter that they had finished.

Postexperiment interviews suggested that 3 participants did not remember or understand the instructions for the mental rotation task. These participants, who were spread across experimental conditions, did not report knowing that they could end the mental rotation task at a time of their choosing. Therefore, they continued

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[1] Data from 1 participant in the pride condition were removed due to a clearly aberrant low score on the pride measure; a substantial gap existed between this participant's score and the remainder of the distribution. Dixon's *Q* test was used to verify that this point was a statistical outlier from the remainder of the distribution.

working on the mental rotation task until the experimenter finally stopped them at a set time limit of 35 min. As noted, data from these participants were removed from further analysis. Piloting of this paradigm and extensive debriefing also revealed that there was virtually no suspicion among participants regarding the relationship between emotional states and their performance on the tasks. They also expressed no suspicion regarding the nature of the feedback they received.

Manipulations and Measures

Pride manipulation. As stated above, we used three conditions in this experiment: induced pride and two control conditions that differed in the feedback provided to participants after their completion of the dot estimation task. The regular control condition included no feedback from the experimenter regarding performance on the dot estimation task. A metric was used purposefully in the feedback conditions that, although providing an index of relative performance, would not be readily translatable into one closely tied to the number of screens or dots viewed. This same metric, however, would easily allow an assessment of performance, as the endpoints were defined at 0 and 147. In addition, participants who did receive feedback were also provided with percentile information indicating their level of performance in comparison to others. In the pride condition, the experimenter announced, "You received a score of 124 out of 147, which is the 94th percentile. Great job on that! That's one of the highest scores we've seen so far!" The experimenter also used scripted nonverbal cues, such as voice intonation and smiling, to convey that she was impressed with the participants' performance. As we wanted to differentiate pride from self-efficacy, we also used a control condition with only performance feedback. In this condition, the control + score condition, the experimenter entered the experimental room just as in the pride condition and announced, "You received a score of 124 out of 147, which is the 94th percentile." The tone with which this statement was made was not as enthusiastic as in the pride condition; however, it was not so neutral as to indicate any censure. This feedback included the same bogus score and percentile as in the pride condition, thereby indicating that the participant's performance was near the highest possible score and superior to that of a majority of others but did not include any indication that the experimenter was particularly impressed in any way.

Manipulation checks. Participants reported how *satisfied* and *proud* they felt with their performance on the dot estimation task using 7-point scales ranging from 1 (*not at all*) to 7 (*extremely*). Before completing these measures, participants were specifically asked to recall how they felt after completing the dot estimation task. Pride was calculated as the mean response to these two items (Cronbach's α = .73). Participants also rated how well they thought they did *compared with others* on the dot estimation task using a 7-point scale, with higher numbers indicating superior performance. This item was included to check whether the control + score condition and the pride condition created equivalent perceptions of relative standing as intended. As one might expect, the manipulation of pride often occurs with alterations in perceptions of relative standing, thereby necessitating a quantitative means for assessing such perceptions across our experimental groups.

Self-esteem. Self-esteem was assessed using the Performance subscale of the State Self-Esteem Scale (Heatherton & Polivy, 1991). Items asked participants to rate their agreement with statements such as "I feel confident about my abilities," and "I feel like I'm not doing well" (reverse scored).

Perseverance. Perseverance on a taxing task (i.e., mental rotation task) believed to be related to performance on the initial estimation task served as the primary dependent measure. We operationalized perseverance as the amount of time that each participant spent working on the mental rotation task.

Results and Discussion

If the pride manipulation worked successfully, then participants in the pride condition should report heightened levels of pride relative to the other two groups.[2] In accord with this prediction, a planned contrast confirmed that the intensity of pride was higher in the pride condition (M = 5.76, SD = 0.98) in comparison to the others ($M_{control}$ = 4.45, $SD_{control}$ = 1.15; $M_{control + score}$ = 5.19, $SD_{control + score}$ = 1.08), $F(1, 84)$ = 14.68, $p < .001$, d = 0.99.[3]

Having induced pride, we next turned to the primary purpose of the study: an initial test of the motivational hypothesis of pride. If the motivational hypothesis is true, then participants in the pride condition should evidence increased perseverance on the mental rotation task. In support of this prediction, a contrast analysis confirmed just such a pattern. As depicted in Figure 1, participants in the pride condition spent more time working on the mental rotation task than did participants in the other conditions, $F(1, 84)$ = 6.94, $p < .01$, d = 0.69; contrast residuals were not significant. Moreover, although there was a slight but nonsignificant trend for increased pride to be associated with increased self-esteem (r = .16, p = .13), heightened self-esteem was not associated with increased perseverance (r = −.06, p = .56). Manipulation-induced differences in state self-esteem also did not reach significance.

These findings are noteworthy, as they provide some of the first evidence supporting a functional influence of pride on behavior. As predicted, pride appears to have motivated individuals to exert greater effort on a taxing task due to their receiving social acclaim. Of import, simple knowledge of superior performance, or self-efficacy, did not produce similar perseverance. Examination of perceptions of subjective relative performance confirmed not only that participants in the pride (M = 5.83, SD = 0.89) and control + score (M = 5.42, SD = 1.33) conditions held higher views of their performance than did those in the control condition (M = 4.56, SD = 1.08), $t_{pride}(59)$ = 4.98, $p < .001$; $t_{control + score}(56)$ = 2.72, p = .01, but also that their perceptions of performance did not

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[2] We did not expect that these effects would differ substantially as a function of gender. Subsequent analyses supported this view by revealing no significant moderation of the predicted effects by gender.

[3] The provision of superior relative performance information in the absence of praise or acclaim has been shown to produce mild increases in performance satisfaction in comparison to fuller and more intense experiences of pride that also involve public acclaim (Gaines et al., 2005). In accord with this view, analysis of contrast residuals showed a small elevation in reported pride among participants in the control + score condition relative to participants in the control condition. Nonetheless, reported pride in the pride condition exceeded that in the control + score condition, $t(53)$ = 1.97, p = .05.
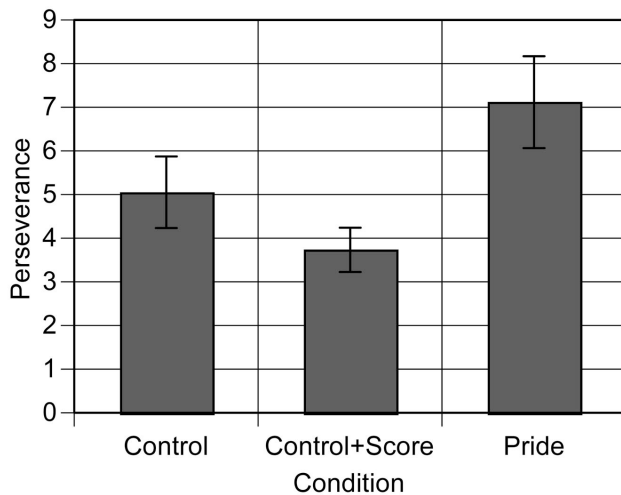
Figure 1. Perseverance in minutes on the mental rotation task as a function of experimental conditions in Study 1. Error bars reflect ± 1 standard error.

differ from each other, $t(53) = 1.34$, .19. Consequently, knowing one's abilities were superior to others and/or that one could expect to do well on a subsequent task did not result in greater expended effort in the absence of pride. Additionally, our manipulations demonstrated that subjective relative performance and pride could be dissociated ($r = .12$, $p = .28$), thereby demonstrating pride's distinctive experience. Although quite suggestive, these findings, given their novelty, require replication before strong confidence can be placed in the motivational hypothesis we propose. Moreover, given some similarities in the positive affective experiences of pride and positive mood, clarification of the unique ability of pride, as opposed to that of simple positive affect, to engender perseverance needs to be demonstrated as well.

Study 2

Study 2 was designed to replicate and extend the findings of the previous study. Therefore, in addition to again examining whether pride leads to increased perseverance, we also sought to differentiate the effects of pride from general positivity. To accomplish these goals, we altered the design of the experiment in two ways. The first change would allow conduct of a valid mediational analysis of pride's causal efficacy in guiding perseverance. The second alteration would allow a comparison of the influence of pride to that of positive mood.

To afford a valid test of mediation, measurement of the proposed mediator (i.e., pride) was moved from the end of the experiment to a position before completion of the primary dependent variable (i.e., task perseverance) (cf. Shrout & Bolger, 2002). As noted, we had originally assessed pride after task perseverance to minimize participants' attention to any alteration in their emotional state prior to their efforts on the mental rotation task. The downside of this tactic was that it provided an index of pride subsequent to participants' performance on the taxing mental rotation task. Thus, although it still reflected ordinal differences in pride stemming from the earlier induction, it may also have been partially influenced by participants' perceptions of how well they were performing on the secondary, related task. In order for a more accurate and nonrecursive mediational analysis to be made, we had participants complete measures of their affective states prior to beginning work on the primary dependent variable (i.e., mental rotation task). Consequently, if a similar effect of pride was found using this ordering (as opposed to the reverse ordering used in Study 1), then we could not only conduct a valid mediational analysis but also have confidence that any emotion-induced effects were not biased by drawing participants' attention to the direct manipulation of their emotional states.

With regard to the second principle change, although Study 1 demonstrated that the effects of pride on behavior are distinct from those resulting from simple self-efficacy, an alternative explanation of the results could be that it was not pride per se but the inherent positivity induced along with social acclaim that was responsible for increased perseverance. For example, work by Martin and colleagues (Martin, Ward, Achee, & Weyer, 1993) has shown that positive mood can lead to increased effort on tasks if individuals misperceive their mood state as a signal that they are enjoying the task and that they should not stop, in essence using current mood state as a stop rule. Similarly, other findings suggest that positive affect can function as a resource to support effortful or hedonically costly activities. For instance, individuals experiencing positive moods have been shown to demonstrate a greater willingness to accept and contemplate negative self-relevant information if such an activity is perceived to hold the potential to lead to self-betterment (Raghunathan & Trope, 2002; Trope & Neter, 1994).

Because we did not take a measure of positive affect in Study 1, we could not rule out such alternative explanations statistically. Yet, there is reason to expect a differentiation in the effects of pride and positive mood. In contrast to the above findings, Wegener and Petty (1994) have shown that individuals in a positive mood state will scrutinize the potential hedonic consequences of possible behaviors and will, in fact, only engage in behaviors that prolong or intensify their positive states (i.e., the hedonic contingency hypothesis). In accord with this view and similar findings from our own lab (Bartlett & DeSteno, 2006), we expected that feelings of generalized positivity, in the absence of specific stop-rule framings or motivations for self-realization, would not lead individuals to persevere on tedious and taxing tasks. We did expect, however, that pride would function to mediate increased perseverance on just such tasks and, thereby, again demonstrate a unique functional role for this positive emotion.

Method

Participants

Seventy-eight undergraduates (56 women, 22 men) participated in the experiment in partial fulfillment of a course requirement. Participants were randomly assigned to one of three emotion groups: pride, positive mood, or control. As in Study 1, data from 4 individuals were excluded from analyses due to a failure to follow directions; these participants were spread across experimental conditions.

Procedure

The procedure mirrored that of Study 1 with the following exceptions: (a) The control + score condition was replaced by a positive mood condition, (b) participants in all conditions completed an image-viewing task subsequent to the dot estimation task in order to accommodate a positive mood manipulation, and (c) emotional states were measured before participants completed the mental rotation task. In addition, experimenters were always women. Participants also completed other measures that were not relevant to the goals of the present study; these measures are not referenced further.

Manipulations and Measures

Emotion manipulations.   The manipulation of emotional states occurred in a two-step process immediately following the dot estimation task. This multistep protocol was needed, as our induction of pride required interpersonal interaction. However, induction of positive mood using such interactions would be quite difficult and does not constitute the usual framework through which general positive affect is induced. Rather, positive mood is often induced through the viewing of images of high positive valence (cf. Forgas, 2001; Lang, Greenwald, Bradley, & Hamm, 1993). Accordingly, we integrated an image-viewing component across experimental conditions. Participants were told that the task consisted of viewing images and that they would be asked questions regarding the content of these photos later in the session; in this way, participants were led to believe that this task represented yet another cognitive-processing assessment. In the pride and control conditions, participants viewed affectively neutral images. In the positive mood condition, participants viewed images selected to generate positive feelings. The neutral images depicted household items such as a chair, a clock, and a pen, whereas the positive images depicted hedonically positive items or events such as a wedding and a tropical landscape. Images were selected from the Internet as well as the International Affective Pictures System (Lang, Bradley, & Cuthbert, 1999). The six hedonically positive images were shown via pretesting to induce a state characterized by general positivity.

Following the image viewing, participants in the control and positive mood conditions received no feedback about their performance on the dot estimation task. Participants in the pride condition received feedback similar to that used in Study 1. However, in addition to social acclaim, the experimenter handed participants an official-looking printout that informed them that they scored 124 out of a possible 147 and that this score placed them in the 94th percentile. This printout was included both to provide a visual aid and to increase the sense of an "official" scoring of their performance. The experimenter noted that she was impressed with the participants' performance when handing them the slip of paper by commenting, "Great job!" In this way, the two methods of emotional induction were crossed. Participants in every condition viewed images, whereas the pride induction occurred as it had in Study 1.

Emotion measures.   The pride measure was slightly modified from that of Study 1 in order to increase the number of items and reliability of the measure. Using 7-point scales ranging from 1 (*not at all*) to 7 (*extremely*), participants reported how *satisfied, ful-*

filled, confident, and *proud* they currently felt. These items included no tag to reference performance on the dot estimation task because no time had elapsed between this assessment and the completion of the task. Responses to these items were averaged to form an index of pride (Cronbach's $\alpha = .81$).[4] Participants also indicated the extent to which they felt *good, happy, pleasant,* and *content.* These items have been shown to reliably assess current moods of participants (e.g., Bartlett & DeSteno, 2006; DeSteno et al., 2004). Responses to these items were combined to form an index of positive mood (Cronbach's $\alpha = .88$). In addition, participants rated how well they thought they performed *compared with others* on the dot estimation task.

Self-esteem.   As in Study 1, all participants completed the Performance subscale of Heatherton and Polivy's (1991) State Self-Esteem Scale.

Perseverance.   Perseverance was again operationalized as the amount of time each participant chose to spend on the mental rotation task.

Results and Discussion

Given that pride and positive mood are both positive states, we expected that participants in both these conditions would show elevations from the control group with respect to positive affect. Differentiation of these states with respect to positive emotion phenomenology would be demonstrated by heightened pride among participants in the pride condition in comparison to participants in the positive mood condition (see Bartlett & DeSteno, 2006, for a similar strategy). Analyses confirmed the expected pattern. Participants in the positive mood ($M = 5.05$, $SD = 0.80$) and the pride ($M = 4.86$, $SD = 0.74$) conditions reported similar levels of positive mood that significantly exceeded that reported by control participants ($M = 4.46$, $SD = 1.08$), $F(1, 75) = 5.03$, $p = .03$, $d = 0.66$; contrast residuals were not significant. However, participants receiving social acclaim reported more intense pride ($M = 4.71$, $SD = 0.92$) in comparison to participants in the other two conditions ($M_{control} = 3.99$, $SD_{control} = 1.17$; $M_{positive\ mood} = 4.36$, $SD_{positive\ mood} = 0.92$), $F(1, 75) = 5.24$, $p = .03$, $d = 0.64$; contrast residuals were not significant. Thus, although participants in the pride condition were feeling positively, their emotional state clearly constituted one of pride. Similarly, although participants in the positive mood condition felt positively, they were not experiencing heightened levels of pride.

Of primary import, participants in the pride condition again evidenced greater perseverance on the mental rotation task as compared with participants in the positive mood and control conditions (see Figure 2), $F(1, 75) = 3.92$, $p = .05$, $d = 0.54$; contrast residuals were not significant. These findings confirm that although pride is experienced as a positive emotional state, it has a distinct functional outcome as compared with general positive affect. Whereas positive mood did not produce greater perseverance on a taxing task, pride did.

Additionally, in confirmation of the trend found in Study 1, self-esteem covaried positively with pride ($r = .33$, $p = .004$).

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[4] It is worth noting that although the pride scales developed by Tracy and Robins (2007) were not available at the time these studies were conducted, our pride measure possesses significant overlap with their recently well-validated measures as well as with other instruments used to assess pride in previous research (e.g., Gaines et al., 2005).

However, also mirroring Study 1, no direct relation between self-esteem and perseverance was evident ($r = .13$, $p = .25$). Moreover, regressing perseverance on both felt pride and perceptions of subjective relative performance revealed that although, as expected, social acclaim was associated with an increased sense of performance ($r = .48$, $p < .001$), only pride remained a viable predictor ($\beta = .25$, $p = .05$) of effort; perceptions of relative performance were not associated with perseverance after controlling for pride ($\beta = .17$, $p = .17$).

Mediational Analysis

In order to make a strong case for our hypothesis, we needed to demonstrate that variation in pride could account for the variance in perseverance that was attributable to our experimental manipulations. Therefore, we conducted a mediational analysis following the usual procedures (cf. Kenny, Kashy, & Bolger, 1998). Given that, as predicted, neither heightened pride nor perseverance occurred in the two control conditions (i.e., control and positive mood), participants in these two conditions were combined for purposes of the mediational analysis; condition, consequently, was dummy coded (i.e., control/positive mood = 0, pride = 1). As shown in Figure 3, all bivariate regressions were significant, thereby fulfilling the standard prerequisites for mediation. However, when perseverance was regressed on pride and condition simultaneously, only pride remained a reliable predictor. The reduction in the direct effect of condition on perseverance was significant, thereby confirming pride's role as the primary mediator of perseverance in this paradigm, Freedman-Schatzkin $t(77) = 2.59$, $p < .05$ (cf. MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). Further attesting to distinct effects of pride, an analysis of the relation between positive affect and perseverance revealed that the two were not associated ($r = .13$, $p = .33$).

General Discussion

The presented studies establish strong initial support for the motivational hypothesis of pride. Across both experiments, height-
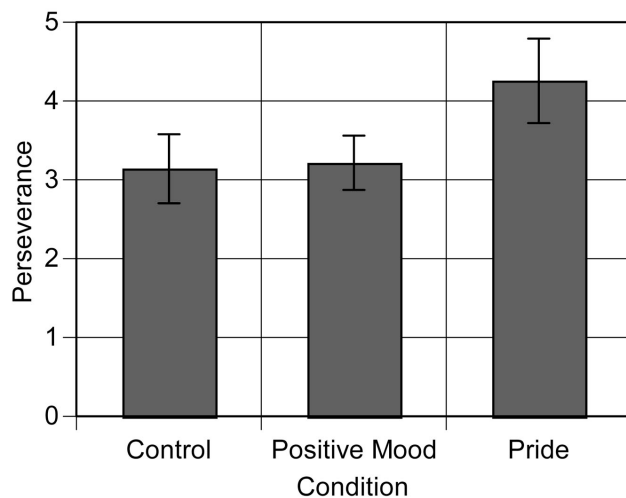
Figure 3. Path model specifying pride as the mediator of perseverance. Parameters in parentheses represent zero-order correlations. Condition is coded as follows: nonpride conditions = 0, pride = 1. $^*p < .05$. $^{**}p \le .01$.

ened pride led to greater perseverance on a difficult and tedious task when compared with control conditions. In addition, these studies ruled out two alternative explanations for this increased perseverance. Study 1 demonstrated that simple expectancies of efficacy or success were not sufficient to engender increased effort. Similarly, Study 2 revealed that positive mood was not a viable mechanism for producing increased perseverance in this paradigm. Of import, Study 2 also provided clear evidence that the intensity of pride directly mediated perseverance. Taken together, these studies are unique, as they constitute some of the first empirical evidence documenting the functional role of pride in shaping goal-directed behavior, and, thereby, identify a new emotional mediator of perseverance.

Having provided support for pride as a mediator, questions concerning its fit with other mechanisms relevant for perseverance necessarily arise. As noted, neither self-efficacy nor positive mood led to greater perseverance in these studies. These findings should not be taken to imply a questioning of whether such phenomena can mediate goal-directed behavior. To the contrary, much research has shown that self-efficacy (Bandura, 1982, 1989, 1997) and positive affect (Raghunathan & Trope, 2002; Trope & Neter, 1994) can engender perseverance or acceptance of short-term hedonic costs given certain contingencies. Therefore, the failure of self-efficacy or positive mood to predict perseverance in the present studies might, at first glance, appear somewhat perplexing.[5]

We believe that any confusion can be dispelled by consideration of the nature of the tasks used in the present study. Previous research demonstrating positive mood's effects on willingness to accept and contemplate negative self-relevant information focused on information processing related to self-betterment (Ragunathan & Trope, 2002). That is, unlike the present case, engaging in the task was likely to lead to the acquisition of self-knowledge, which would engender more positive outcomes in the future. In the present paradigm, completion of the onerous task did not imply any measure of knowledge acquisition. Similarly, self-efficacy has been shown to increase efforts toward completion of desired goals (Bandura, 1989; Bandura & Cervone, 1986). In the present case, completion of the mental rotation task was difficult. Hence, in the absence of a strong motivation to continue working, increased self-efficacy would not be expected to result in greater perseverance. For example, just because one is good at typing does not mean that one will choose to type for hours on end. Rather, some

Figure 2. Perseverance in minutes on the mental rotation task as a function of experimental conditions in Study 2. Error bars reflect ± 1 standard error.

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[5] It should be noted that the majority of previous research examining self-efficacy did not contain any assessments of pride or other discrete emotional states. Consequently, it is difficult to ascertain what role pride or other emotional states may have played.

other rewarding motivation must be present. We believe that pride stemming from social acclaim serves that motivational role.

Self-Efficacy, Self-Esteem, and Pride

Conceptual and operational definitions of the constructs of pride, self-efficacy, and self-esteem have frequently possessed some level of overlap in the literature. Although such overlap is understandable, this lack of precision can inhibit development of a clear perspective regarding the causal agency of each construct. Given this situation, we feel that it is quite useful to consider the boundaries defining these constructs as an important precursor to further examination of the motivational function of pride.

Judgments of self-efficacy involve recognizing that the self is capable in a certain domain; thus, self-efficacy deals with cognitive appraisals of ability (Bandura, 1997). Pride, however, is an emotional response to success or goal achievement. Thus, although pride and self-efficacy often co-occur in everyday experience, they are theoretically and phenomenologically separable. Indeed, Bandura (1997) pointed out that an individual can feel that he or she is particularly able in a certain domain, yet glean no sense of self-worth, or pride, from those abilities. For example, a divorce lawyer who is exceptionally apt at getting his or her clients the better half of a settlement might judge him- or herself to be efficacious but may not derive pride from his or her ability to cheat others out of their fair share. The failure of pride to enter in such a situation could be due to the fact that cheating is not a socially valued behavior. Hence, pride and self-efficacy are related, yet inherently distinct phenomena. The motivational hypothesis of pride presented here argues that it is the emotion in particular that drives motivation. This is not to say that judgments of personal capability never impel one to pursue goals; rather, pride adds an independent component of motivation above and beyond those stemming from appraisals of ability that will come into play given certain contingencies.

Self-esteem and pride are also dissociable, though often conflated. Self-esteem is widely considered to be an attitude toward oneself (Banaji & Prentice, 1994; Baumeister, 1998). As with all attitudes, the structure of this representation contains both cognitive and affective components (Eagly & Chaiken, 1998). Thus, self-esteem consists of the attributes ascribed to the self at a given moment and the positive or negative evaluations stemming from these attributes. Thus, the affective component of self-esteem reflects a generalized positive or negative valence toward the self. Authentic pride, however, is a specific emotion that derives from an appraisal of recognition for increasing self-mastery within a given context (cf. Tracy & Robins, 2004a). Like all emotions, it is temporally limited and tied to specific events in the internal or external environment. Consequently, one can feel pride about one's self or one's abilities, but this is distinct from the global valence-based attitude one holds toward oneself (i.e., self-esteem). Of course, changes in self-esteem and pride will often track one another in given situations (i.e., achieving a goal or receiving public recognition; cf. Herrald & Tomaka, 2002), but heightened pride resulting from a given event does not necessarily indicate high self-esteem; an individual who has chronically low self-esteem in a given domain may experience intermittent pride as he or she makes strides toward gaining skills.

Nonetheless, some theoretical discussions of pride and self-esteem often blend the two, thereby leading to understandable confusion in the literature. For example, pride has been described as a self-esteem-relevant affect (McFarland & Ross, 1982) and a feeling of self-worth (Brown, Dutton, & Cook, 2001). Furthermore, there is a growing trend to equate self-esteem and affective experience (Brown & Marshall, 2001; Hewitt, 2002). Indeed, Bandura (1997) discussed the two as if they are interchangeable and nondistinct concepts. Such views do suggest that, as we have noted, the two constructs are inherently related. The question then becomes how the present theory and findings are to be integrated with the present understanding of the role played by self-esteem with respect to motivation to persevere.

One view of self-esteem has clear relevance to the motivational hypothesis of pride. Leary and colleagues (1995) promoted the sociometer hypothesis, in which self-esteem is not an end in and of itself, but is instead a proxy for an individual's social standing. High self-esteem signals inclusion, whereas low self-esteem warns of exclusion. The sociometer hypothesis proposes that such signals help direct socially accepted behavior while at the same time deterring undesirable behavior. At first glance, the present studies appear to be somewhat inconsistent with the sociometer view because state self-esteem failed to predict perseverance in a valued domain. Further consideration, however, reveals that the two approaches might be easily reconcilable. In assessing experimentally manipulated self-esteem, Leary and colleagues (Leary, Haupt, Strausser, & Chokel, 1998; Leary et al., 1995) often use scales largely composed of affective or feeling-state items, including many that are quite similar to those used to assess pride in the present studies (e.g., *proud*). Other self-esteem researchers have used a similar approach to measurement of state self-esteem, using terms such as *proud* and *confident* (McFarland & Ross, 1982).

Given this state of affairs, it would be difficult to determine whether self-esteem or pride was driving the perseverance effects. The present studies, however, allow for a resolution of this issue through the use of distinct measures of self-esteem and pride. Across both of the present studies, despite a positive relation between self-esteem and pride, it was only increased pride, and not elevated self-esteem, that directly mediated greater perseverance.[6] These findings are quite suggestive that although self-esteem is certainly germane to the underlying mental computations that determine situational experiences of pride, it is the emotional experience of pride, or other self-conscious emotions like shame, that impel adaptive behavior.

The Social Nature of Pride

Many theorists, ourselves included, believe that pride is a social, self-conscious emotion (Lewis, 1997; Tangney, 1999; Tracy & Robins, 2004a). As such, pride, like self-esteem, tracks the relative position of the self with respect to the evaluations of others (cf. Anthony et al., 2007). Indeed, public recognition of one's abilities appears to be a central aspect of pride (Gaines et al., 2005; Webster et al., 2003). In this vein, the present studies clearly demonstrated how pride derives from social acclaim and motivates behaviors

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[6] A meta-analytic examination of the correlation between pride and self-esteem across the two studies using Stouffer's procedure revealed the relation to be reliable (Stouffer's $Z = 3.10$, $p = .002$).

aimed at maintaining it. Yet, it is also quite clear that individuals often feel pride for striving toward self-initiated goals. Similarly, pride based on the recognized achievements of close others (e.g., a spouse, child, or student) constitutes an equally valid pride experience often referred to as *vicarious pride* (Tracy & Robins, 2004a). If pride is a self-conscious emotion, then how are such facts to be reconciled?

With respect to self-induced pride, one need simply recognize that considerations of the mental representation of self often occur from a meta-aware viewpoint (Baumeister, 1998; James, 1890). That is, individuals regularly reflect on the self as an object of evaluation and, in so doing, compare its actual state with desired or lamentable ones (Higgins, 1987; Markus & Nurius, 1986; Markus & Wurf, 1987). Indeed, the ability of humans to engage in mental simulations relevant to emotional experience and to view such simulations from the perspective of a "third person" stands as an important evolved adaptation for behavioral decision making (Baumeister, Vohs, DeWall, & Zhang, 2007). Thus, whether the evaluation and comparison criteria stem from other individuals or one's self, the underlying process is the same; pride is experienced when positive acclaim, whether internally or externally derived, is applied to the self.

Similarly, we believe that pride stemming from the actions of close others does not present a contradiction to its status as a self-conscious emotion. As Aron and colleagues (Aron, Aron, & Smollan, 1992; Aron, Aron, & Tudor, 1991) have demonstrated, increasing closeness to others often results in a melding of self-concepts through inclusion of the other in representations of the self. Once another person has been included, their resources, abilities, and perspectives are then considered part of the initial person's self-concept. Given this, any achievements attained by close others would spur similar emotions to a case in which successes had been merited by an individual's own performance. Accordingly, such vicarious pride might be expected to mediate subsequent perseverance behaviors by the individual her- or himself or behavior directed at increasing perseverance of her or his relationship partner. Indeed, anecdotal evidence of the "stage parent" or "pushy coach" abounds.

Conclusion

Although these two studies provide initial confirmation for the motivational hypothesis of pride, much more work with respect to charting the functions of this emotion remains. Indeed, as Tracy and Robins (2004a) have argued, different shades or types of pride may exist, with authentic pride and hubristic pride potentially showing some variability with respect to their behavioral sequelae. At present, however, it seems evident that at a broad level, pride in response to objective achievements on specific events may be understood as a discrete positive state capable of motivating personal development and, thereby, potential for social status and bonding (cf. Fredrickson & Branigan, 2001). Consequently, we believe that the often negative connotations attached to pride may be partially unfounded. Although hubristic pride may in fact produce negative social outcomes, the positive nature of specified pride may function quite well to impel individuals to develop valued skills and abilities and, in so doing, to take their place as a respected member of their social communities. If true, as these initial findings suggest, then the present experiments can be seen as providing increasing evidence that pride, when properly evoked, may represent a discrete positive emotion capable of augmenting human flourishing at many levels (cf. Fredrickson & Losada, 2005).

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