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Pride and Humility: Possible Mediators of the Motivating Effect of Praise

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PRIDE AND HUMILITY:
POSSIBLE MEDIATORS OF THE MOTIVATING EFFECT OF PRAISE

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ABSTRACT

Prior research suggests praise increases motivation. The present research tested pride and humility as mediators of the effect of praise on motivation. I hypothesized that pride may contribute to motivation because it is pleasant to experience and boosts perceived competence. Humility may contribute to motivation by facilitating less inflated self-assessment and greater awareness of one’s room for improvement. In Studies 1a and 1b, participants recalled experiences of receiving praise or non-praise experiences and reported how proud, humble, and motivated they had felt. Participants recalled feeling more proud, humble, and motivated after praise than after non-praise experiences. Both pride and humility mediated the effect of praise on motivation. Study 2 was conducted to develop better ways of assessing humility for use in Study 3. In Study 2, participants watched a video intended to induce humility or a neutral video. Participants who watched the humility induction video compared to participants who watched the neutral video self-reported greater humility and made less inflated self-evaluations. Narcissism correlated negatively with self-reported humility and correlated positively with inflation of self-evaluations. In Study 3, participants received praise versus no feedback from a friend and an expert on an essay they had written. Participants provided self-report measures of pride, humility, and motivation, as well as behavioral measures of effort/motivation. Results were consistent with hypotheses that praise increases pride, humility, and motivation. Study 3 produced no evidence of simple mediation. However, humility showed a marginal pattern of interactional mediation, such that, after receiving praise humility was associated with greater motivation, but after receiving no feedback humility was associated with less motivation. Differences in the praise situation, including the meaningfulness and unexpectedness of the praise, may have produced the divergent findings across studies. Study 3 yielded suggestive evidence that praise may be more motivating for people with high than with low self-esteem. Humility was positively associated with gratitude across studies and tended to be negatively associated with inflated self-evaluations in Studies 2 and 3.
INTRODUCTION

Praise is widely regarded not only as an effective way to gain others’ liking but also as an effective way to motivate effort in others. Praise is a “positive evaluation made by a person of another’s product, performance, or attributes” that is communicated to the other (Kanouse, Gumpert, & Canavan-Gumpert, 1981, p.98; see also Delin & Baumeister, 1994, and Henderlong & Lepper, 2002). Although praise is sometimes viewed as a reinforcer, some researchers have noted that praise also differs in important ways from tangible reinforcers. Numerous studies have found evidence that praise can increase intrinsic motivation (e.g., Deci, 1971, 1972; Ryan, Mims & Koestner, 1983; Blanck, Reis & Jackson, 1984; Deci & Ryan, 1987; Hancock, 2002). A recent meta-analysis concluded that positive feedback compared to no feedback increases intrinsic motivation as measured by amount of time spent on the task during a “free time” period and self-reported interest in the task (Deci, Koestner, & Ryan, 1999; also consistent with conclusions from Tang & Hall, 1995; Eisenberger & Cameron, 1996; Cameron & Pierce, 1994). Much research on the effects of praise has been conducted in school settings. For example, Hancock (2002) found that graduate students who received verbal praise from their professor performed better on an exam in the course and reported spending more time on homework than students who did not receive praise. Praise does not always show beneficial effects; for example, research by Dweck and colleagues has demonstrated that praise for effort (“process praise”) is more effective than praise for ability (“person praise”) at promoting perseverance after subsequent setbacks (e.g., Kamins & Dweck, 1999; Mueller & Dweck, 1998). Yet overall, the evidence indicates that praise can motivate.

It is somewhat less clear how praise accomplishes this motivating effect. Researchers have proposed that factors such as self-efficacy (Bandura, 1977), competence and autonomy (Deci & Ryan, 1985), and positive feelings (Blumenfeld et al, 1982) may account for the effect of praise on motivation (summarized by Henderlong & Lepper, 2002). However, research investigating whether and when they may pertain is lacking. In the current research, I tested two possible mediators of the motivating effect of praise: pride and humility. Determining whether pride and humility mediate the effect of praise on motivation may benefit people seeking to apply praise effectively and would also contribute to theory on pride and humility, both of which have small but growing literatures within psychology.

Pride

**Definition**

Pride is a positively valenced emotion (Fredrickson & Branigan, 2001; Dunn & Schweitzer, 2005) closely associated with high or increased self-esteem (Tracy & Robins, 2007; in press; also see Weiner, 1985; Crocker & Park, 2004). Circumstances in which pride is thought likely to arise include when one attributes a positive outcome to the self (Weiner, 1985), such as a personal achievement (Fredrickson & Branigan, 2001; Dunn & Schweitzer, 2005), or when one outperforms another in a self-relevant domain (Tesser & Collins, 1988). Empirical research focusing specifically on pride is limited. However, recent research suggests that pride may be categorized into “authentic” and “hubristic” types, with authentic pride being more beneficial than hubristic pride (Tracy & Robins, 2007).
Pride as response to praise

Experimental research has found praise to increase self-reported pride (Herrald & Tomaka, 2002; Webster, Duvall, Gaines & Smith, 2003). In other studies, praise has been used to manipulate pride (e.g., Verbeke, Belschak & Bagozzi, 2004). Pride may arise in response to praise because other people’s appraisals contribute significantly to a person’s sense of self (e.g., Baumeister, 1999; Gaines, Duvall, Webster & Smith, 2005). Praise can confirm a person’s good opinion of him or her self or contribute a new positive view of the self.

Pride as mediator of praise’s motivating effect

Two possible explanations for why pride might mediate the effect of praise on motivation are that pride feels good and that pride enhances perceived competence. Tracy and Robins (2007; in press) suggest that pride is motivating because it is pleasurable to experience. Similarly, Delin and Baumeister (1994) previously argued that positive affect may account for the motivating effect of praise. Specifically, they suggested that because positive affect and positive emotions such as pride feel good, people are motivated to do what seems likely to produce more of these feelings, that is, to continue to do that which earns them praise. Pride may be one of the dominant emotions in response to praise and may have a potent effect. However an alternative hypothesis is that praise motivates simply because it produces generalized positive affect and not because it produces pride specifically.

Another possibility is that pride increases motivation to the extent that it contributes to people’s sense of competence. Because pride involves high self-assessment, it may enhance a person’s sense of competence and self-efficacy. Deci and Ryan (1985; Ryan & Deci, 2000) suggest that people are more intrinsically motivated when their basic needs of competence and autonomy are fulfilled. Thus, pride may also lead indirectly to motivation by increasing perceived competence.

There is insufficient evidence currently available to evaluate the prediction that pride mediates motivation. Studies testing the effects of praise have usually not measured pride or positive affect. One exception is a study by Herrald and Tomaka (2002), in which participants received praise or no feedback for their responses to interview questions. Praised participants reported feeling more pride and also showed improved performance during the praise and post-praise phases of the study. However self-reported pride was not tested as a mediator of improved performance. In a study by Kamins and Dweck (1999), measures of affect, motivation, and performance were collected after participants received person praise or process praise. However the study did not include a no-praise control condition, so it is unclear whether affect may have mediated the effects of praise on motivation or performance. Thus, existing research has not directly examined pride or positive affect as mediators of the effects of praise.

Studies that have manipulated praise and measured perceived competence and motivation have produced suggestive but inconclusive evidence regarding competence’s mediating role. In a study by Dollinger and Thelen (1978), verbal praise compared to no feedback was found to increase participants’ perceived competence. However, because verbal praise did not influence the amount of time participants spent on the activity during a “free time” period (a measure of intrinsic motivation), competence could not be tested as a mediator of motivation. The clearest test of the mediating role of competence was performed by Vallerand and Reid (1984). They selected males who were moderately to highly intrinsically motivated on the task (a stabilometer task which involves maintaining balance) to participate. They administered positive feedback, negative feedback, or no feedback while participants performed the task. Then they assessed participants’ self-reported intrinsic motivation and perceived competence. Participants who received positive feedback compared to participants who received no feedback reported greater increases from
pretested levels in intrinsic motivation and perceived competence. The researchers also conducted multiple regression analyses to test whether competence mediated the effect of feedback on motivation and found evidence of partial mediation. However, they entered feedback into the regression equation coded as 1 = negative feedback, 2 = no feedback, and 3 = positive feedback. They did not report a separate analysis testing competence as a mediator comparing only the positive feedback and no feedback conditions. Thus, while it appears likely that perceived competence mediated the effect of praise versus no feedback on motivation, this cannot be determined with certainty from the information presented.

Vallerand and Reid (1988) conducted a similar study including both male and female participants which replicated the finding that perceived competence mediated the effect of feedback on motivation. However, in this study they utilized only positive feedback and negative feedback conditions, making it even more difficult to determine to what extent effects were due to positive feedback increasing perceived competence versus being due to negative feedback decreasing it. Vallerand and Reid’s (1984) study represents the clearest available test of the hypothesis that competence may mediate the effect of praise on motivation, and their findings indeed seem consistent with that hypothesis, despite ambiguities in their reported analyses. The present research was designed to address these limitations by testing whether pride, competence, and positive affect mediate the effect of praise versus no feedback (rather than versus negative feedback) on motivation.

Humility

Definition

Humility refers to “a nondefensive willingness to see the self accurately, including both strengths and limitations” (Exline, Campbell, Baumeister, Joiner, Krueger & Kachorek, 2004, p.463; consistent with Morris and Urbanski, 2005). Although there is as yet little empirical research on the characteristics of humility, theory has begun to accumulate. For example, Tangney (2000, 2002) suggests that humility is marked by accurate estimations of one’s self and abilities, willingness to acknowledge one’s faults and limitations, openness to new ideas, and a tendency to appreciate benefits attributed to sources external to the self. Humility is expected to be associated with being low in narcissism and defensiveness (Exline et al, 2004; Tangney, 2000). This is consistent with findings that self-rated modesty (defined as unassuming versus pretentious) correlated negatively with narcissism (Lee & Ashton, 2005). However, I view modesty not as synonymous with humility but as a component of humility (consistent with Tangney, 2000).

Pride and humility are sometimes thought of as opposites, with pride reflecting positive self-views and humility reflecting low self-views. However, recent theory associates humility with balance (e.g., Bacon, 2005) rather than with negativity of self-views. Since people generally self-enhance, humility in practice may typically involve lowering self-evaluations (Exline et al, 2004). However, in a hypothetical example, people may accurately recognize that they have done well on a task, feel pride in the accomplishment, yet also be humble if they simultaneously acknowledge how others have contributed to their success or how they still have room to improve. Thus, humility is expected to temper pride, but humility is not the opposite of pride nor is it wholly incompatible with pride (Exline et al, 2004). In certain situations, such as receiving praise, pride and humility may arise together. If part of the function of humility is to moderate pride and help people to stay within (or below) the optimal margin of illusion (Baumeister, 1989), then pride-eliciting experiences might be especially likely also to elicit humility.
Humility as response to praise

Preliminary evidence suggests that praise sometimes elicits feelings of humility. Exline and Geyer (2004) asked participants to describe a time when they felt humble. Sixty-one percent of participants described an experience of achievement or success, commonly mentioning receiving praise for their achievement. Geyer (2006) asked participants to describe a past experience in which they were praised and found that participants recalled experiencing both pride and humility. In a follow-up study, participants were more likely to report feeling humble in response to praise if they were instructed to recall an experience in which praise was deserved and the source of the praise was a person they respected.

There are several possible explanations why praise may increase reported humility, including humility’s possible connections to secure self-esteem, accuracy, and gratitude. First, praise may facilitate feelings of humility because it satisfies the recipient’s need for esteem. Exline (2006) has suggested that secure, stable self-worth may be required for a person to be humble. Praise may temporarily give people a sense of secure self-worth, lessening their need to self-enhance further. This would be consistent with research suggesting that secure high self-esteem reduces defensiveness and self-enhancement (Jordan, Spencer, Zama, Hoshimo-Browne & Correll, 2003). Thus, after praise people may be more open to humility because their increased pride and self-esteem causes them to feel that they are secure and do not need to defend themselves against ego threat.

A second way that praise might promote humility is by prompting a motive for accuracy. Although the desire to gain accurate understanding of the self seems generally weaker than the desire for self-enhancement or even the desire for self-verification (Sedikides, 1993), in certain situations people may be particularly motivated to seek accuracy. For example, Loiselle (1995) found that participants displayed stronger self-assessment motive than self-protection motive regarding health information. When accuracy matters, perhaps people are more motivated to seek objective information. Accuracy may also be especially important after praise. Praise produces pride, an emotion which leads people to want to “dream big” about the future (Fredrickson & Branigan, 2001, p 143). However, dreaming too big can be costly, and seeking to maintain an inflated estimate of one’s abilities can lead one to make risky, maladaptive choices (Zhang & Baumeister, 2006). Thus, after receiving praise, a safer path may be to moderate one’s self-evaluations, to ensure that they do not become excessively inaccurate. Therefore, after being praised, people may be motivated to seek accuracy in order to avoid making foolish decisions or behaving in ways that are obnoxious to others. People may derive a sense of humility from their desire for accuracy and their restraint of self-enhancement.

Praise may also elicit humility through humility’s association with gratitude. Theory suggests that gratitude requires a measure of humility or that gratitude may induce humility (Exline et al, 2004). Gratitude entails acknowledging that one has received some benefit from others. This implies that one is not self-sufficient and is dependent upon others, not superior to them (Solomon, 2004; Roberts, 2004). Thus, the gratitude commonly experienced in response to praise may promote a more realistic view of the self and a fuller awareness of one’s context of interdependence, perspectives associated with humility. Therefore, humility in response to praise may be facilitated by factors such as secure self-esteem, motive for accuracy, and gratitude. While these proposed explanations are merely speculative, it seems clear that various theoretical perspectives could plausibly predict that people sometimes feel humbled by praise.
Humility as mediator of praise’s motivating effect

Thus far, research on the effects of humility has focused primarily on topics such as its association with forgiveness (e.g., Exline, Baumeister, Zell, Kraft, Witvliet & Kok, 2006) and has not tested for a relationship between humility and motivation. However, existing theory on humility implies it should be associated with a lack of self-enhancement motivation and decreased emphasis on performance goals. Humble people are presumed to feel less need to perceive themselves or be perceived by others as being better than they truly are (Exline, et al., 2004), to be more willing to acknowledge their weaknesses and faults, and to be open to learning (Tangney, 2000; Exline, 2006). If humility decreases concern with pursuing self-esteem, this may allow a learning and mastery orientation to predominate, consistent with theorizing by Crocker and Park (2004). Research suggests that people who have a mastery orientation also tend to be incremental, rather than entity theorists (e.g., Robins & Pals, 2002). Incremental theorists, or people who believe that ability is not fixed but rather can be developed (Dweck & Leggett, 1988), tend to achieve more positive outcomes, such as progressing more quickly through graduate study (Barner, 2004). Thus, humility may enable a potentially beneficial shift in the type of motivation that predominates, from self-enhancement motivations and performance goals to self-improvement motivations and mastery goals.

A more speculative question is whether humility may actually increase motivation versus merely altering the nature of the motivation. I believe there are reasons that humility could be expected to boost self-improvement motivation. Humility theorists agree that humility should be associated with willingness to hold accurate, balanced self-views (Tangney, 2000, 2002; Exline et al, 2004; Exline, 2006; Exline & Zell, 2006; Morris, Brotheridge & Urbanski, 2005). This greater openness accuracy may entail a broader perspective, in which the self is seen in relation to higher standards. Praise conveys that one has surpassed an evaluative standard, which may sometimes be taken to mean that no further effort is needed (Delin & Baumeister, 1994). However the present investigation predicts that humble people have a greater awareness of their remaining room for improvement than non-humble people. As a result, humble people, when praised, should be less likely than non-humble people to assume erroneously that they have already attained and will easily continue to attain perfect success. It seems possible that greater awareness of higher standards could facilitate more realistic appraisals of what one needs to do to attain them and, perhaps, greater desire to do so. Thus, due to its association with seeing oneself accurately and from a broader, more balanced perspective, humility may not only reduce self-enhancement motivation but also promote effort and self-improvement motivation. The present research predicts that praise will lead to greater humility, which will be associated with less inflated self-evaluations, with greater awareness of room for improvement, and with endorsement of incremental rather than entity theories of writing. Furthermore, humility is expected to contribute to effort and motivation to improve.

Differences Due to Gender

How might gender affect the relation between praise-induced pride and humility and motivation? Research suggests that men and women may differ in levels of pride and humility, at least as self-reported. In comparison to women, men have been found to show more positive illusions and score more highly on narcissism (Gabriel, Critelli, & Ee, 1994) and hubristic pride (Tracy & Robins, 2007). Men have also been found more likely than women to overestimate their performance, and women more likely than men to underestimate their performance (Beyer, 1990). Nevertheless, although women have been observed to behave more modestly than men (Berg, Stephan, & Dodson, 1981; Gould & Slone, 1982), it is not clear whether women are truly more humble than men or are simply outwardly conforming to norms of feminine modesty. Differences between male and female self-evaluations are more likely to be seen in masculine-typed domains
than in feminine or gender-neutral domains. Gender differences in self-ratings seem to appear mainly in masculine gender-typed domains such as mathematical ability, whereas men and women have been found to evaluate themselves similarly on verbal ability (Beyer & Bowden, 1997; Furnham, Hosoe, & Tang, 2002; Lenney, 1977).

Findings regarding gender differences in motivation after praise have been inconsistent, with a few studies finding women to be less motivated by praise than men are (Kast & Connor, 1988; Koestner, Zuckerman, & Koestner, 1987; Deci, Cascio, & Krusell, 1975). This has been attributed to women, more than men, interpreting the praise as being controlling (Deci, Koestner, & Ryan, 1999). The available evidence does not indicate whether gender differences in pride and humility may have contributed to their differing responses to praise. In conclusion, the present study predicted that men may self-report greater pride and women may self-report greater humility. Because the present research does not investigate the effects of praise in masculine gender-typed domains, no gender differences in self-accuracy were expected. There was also not a strong basis for predicting gender differences in motivation following praise.

**Summary**

I have proposed that praise may be motivating because it elicits pride. One possible explanation for this is that pride feels good, causing people to want to do what will earn them further praise. Another possible explanation is that pride signals to the person that she or he is competent; the resulting expectation of future success may increase the likelihood of continued venture. Praise may also be motivating because it elicits humility. Humility is theorized to be associated with accurate self-views and a willingness to recognize that one is not yet perfect. People may be more likely to pursue further progress if they are aware that there is further progress to be made. Thus, both pride and humility are plausible mediators of motivation following praise.

Three studies were conducted to test the hypothesis that praise leads to pride and humility, which in turn lead to increased motivation. Study 1a tested this by manipulating recalled praise experiences versus recalled conversation experiences and measuring self-reported pride, humility, and motivation. Study 1b tested this by manipulating recalled praise experiences versus recalled criticism experiences or recalled neutral experiences and measuring self-reported pride, humility, and motivation. Study 2 was conducted to develop new measures of humility for better testing the primary hypotheses. Study 3 tested the hypotheses of the current investigation by manipulating praise versus no feedback in the lab and measuring self-reported pride, humility, perceived competence, positive affect, entity theory, and motivation, as well as behavioral measures of effort.
THE PRESENT RESEARCH

Study 1a

Procedure & Materials

Study 1a was conducted to test the hypothesis that pride and humility mediate the effect of praise on motivation. In Study 1a, 57 undergraduate participants (28 females) were instructed to write about a time when they received deserved praise from a person whom they respect or a time when they were having a typical conversation with a person whom they respect. Participants then completed a questionnaire reporting their feelings of humility, pride, and gratitude, making all ratings on a scale from 0 (not at all) to 10 (extremely). Participants’ ratings of how humble and modest they had felt were averaged to create a self-reported humility scale, \( r(57) = .42, p = .001 \). Participants’ ratings of how proud, confident, capable, powerful, high in status, bold, superior, and high they had felt were averaged to create a self-reported pride scale, \( \alpha = .89 \). Participants’ ratings of how grateful and appreciative they had felt were averaged to create a self-reported gratitude scale, \( r(56) = .79, p < .001 \). Participants’ ratings of the extent to which the experience made them want to try harder, increase their efforts, and challenge themselves were averaged to create a motivation scale, \( \alpha = .84 \). On all scales, higher scores represent higher levels of the variable.

Results

Participants who described an experience of being praised, compared to participants who described a conversation, recalled greater humility, \( F(1, 55) = 10.59, p = .002 \), greater pride, \( F(1, 55) = 25.67, p < .001 \), greater gratitude, \( F(1, 55) = 7.44, p = .009 \), and greater motivation, \( F(1, 55) = 7.70, p = .008 \). Means by condition for pride, humility, and motivation are displayed in Figure 1. Thus, praise led to increased pride, humility, and motivation. Consistent with the mediation analysis procedure set forth by Baron and Kenny (1986), motivation was verified as correlating with pride, \( r(57) = .50, p < .001 \), and with humility, \( r(57) = .50, p < .001 \). Thus, the proposed mediators—pride and humility—are related both to the independent and dependent variables. Mediation was examined using hierarchical regression analyses to examine mediation with feedback condition dummy-coded treating the praise condition as the control group. The condition code and motivation were entered in the first step of the regression, and pride was added in the second step of the regression. Consistent with mediation, the beta for the condition code was reduced when pride is included. Use of Preacher and Leonardelli’s online Sobel test calculator revealed that pride significantly mediated the effect of praise on motivation, Sobel \( Z = 2.69, p = .007 \). Pride remained a significant mediator while controlling for humility, Sobel \( Z = 2.08, p = .04 \). Using the same procedure, humility was tested as a mediator of the effect of praise on motivation. As expected, humility significantly mediated the effect of being praised on motivation to try harder, Sobel \( Z = 2.35, p = .018 \). This effect remained while controlling for pride, Sobel \( Z = 2.01, p = .04 \). Nevertheless, it is possible that motivation actually mediates the effect of praise on pride, Sobel \( Z = 2.09, p = .04 \), and on humility, Sobel \( Z = 2.14, p = .03 \). This alternative explanation cannot be eliminated with the given data. Testing for effects of gender revealed no significant main effects of gender or significant gender by condition interactions.
Study 1b

Study 1b sought to replicate the findings of Study 1a using two different control conditions: a criticism control condition and a neutral control condition. The same dependent variables of pride, humility, gratitude, and motivation were assessed, using the same measures. It was predicted that participants would recall greater pride and humility after praise than after criticism and neutral experiences, and that pride and humility would mediate the effect of praise on motivation.

Procedure & Materials

In Study 1b, 260 undergraduate participants (150 females) were asked to describe an experience in which they received deserved praise from someone they admire, or an experience in which they received deserved criticism from someone they admire, or an experience of having a typical day at home. As in Study 1a, participants then filled out the same questionnaires as in Study 1a, which reported to what extent they had experienced humility, $r(173) = .61$, $p < .001$, pride, $\alpha = .94$, gratitude, $r(173) = .75$, $p < .001$, and motivation, $\alpha = .90$.

Results

Condition had a significant main effect on self-reported humility, $F(2, 255) = 18.60$, $p < .001$, pride, $F(2, 255) = 124.81$, $p < .001$, gratitude, $F(2, 257) = 84.68$, $p < .001$, and motivation, $F(2, 257) = 33.67$, $p < .001$. Simple contrast tests revealed that, consistent with predictions, participants in the praise condition reported having felt more humble, $t(255) = 6.01$, $p < .001$, more proud, $t(255) = 14.46$, $p < .001$, and more grateful, $t(257) = 10.78$, $p < .001$, than participants in the typical day at home condition or the criticism condition. Participants reported feeling more motivated in the praise condition than in the typical day at home condition, $t(257) = 7.58$, $p < .001$, but not more so than in the criticism condition, $t(257) = .68$, $p = .50$. Means by condition for pride, humility, and motivation are displayed in Figure 2.

Hierarchical regression analyses were conducted to determine whether pride and humility mediated the effect of praise on motivation. Motivation correlated with both humility, $r(258) = .38$, $p < .001$, and pride $r(258) = .21$, $p = .001$. In accordance with the requirements for conducting mediation analyses, the criticism condition was eliminated from the mediation analyses because it did not significantly differ from the praise condition on the dependent variable. As in Study 1a, pride significantly mediated the effect of being praised versus being at home on motivation to try harder, Sobel $Z = 3.13$, $p = .002$. When controlling for humility, pride approached significance as a mediator of the effect of being praised on motivation to try harder, Sobel $Z = 1.90$, $p = .06$. Feeling humble significantly mediated the effect of being praised (versus being at home) on motivation to try harder, Sobel $Z = 3.58$, $p = .0003$. When controlling for feeling proud, feeling humble still significantly mediated the effect of being praised on motivation to try harder, Sobel $Z = 3.32$, $p < .001$. While these resulting are consistent with predictions, it is important to note that the current data do not rule out the possibility that the direction of mediation is actually the reverse – that is, that motivation mediates the effect of praise on pride, Sobel $Z = 3.05$, $p = .002$, and on humility, Sobel $Z = 4.53$, $p < .001$.

Testing for effects of gender revealed that women reported feeling more gratitude than men did, $F(1, 257) = 9.14$, $p = .003$. No other main effects of gender were significant. There were no significant gender by condition interactions.
Studies 1a and 1b supported the hypothesis that receiving praise leads people to feel proud and humbled, and that pride and humility in turn increase motivation. Across two studies, participants recalled feeling prouder and more humble after praise than after three types of control experiences. Pride and humility each accounted for the effects of praise versus having a conversation or being at home on motivation.

The effect of praise on pride is consistent with published theory and research (e.g., Herrald & Tomaka, 2002). By contrast, the finding that praise experiences led to greater self-reported humility is somewhat more surprising and has less precedent in the literature. Confidence in the finding that participants recalled feeling more humble after praise experiences is limited by the fact that humility was measured using a two item scale that has not been validated. Participants may have been using varied definitions for humility, such as associating humility with humiliation (Exline & Geyer 2004). However, in both Studies 1a and 1b, reported humility correlated strongly
with reported gratitude, consistent with theory on gratitude and humility (Study 1a: \( r(56) = .49, p < .001 \); Study 1b: \( r(258) = .52, p < .001 \)). This suggests that participants in general had an understanding of humility at least somewhat consistent with current theory. Furthermore, in Study 1b, participants reported greater humility after receiving praise than after receiving criticism that they felt they deserved from someone they respected and admired. Receiving criticism in these circumstances is likely to be a humbling experience for some people; thus it seems a reasonably stringent comparison condition.

**Study 2**

Study 2 was conducted to enable certain limitations of Studies 1a and 1b to be addressed in a subsequent study. One limitation of Studies 1a and 1b concerns the measure of humility used. The two item (“humble” and “modest”) humility measure used in Studies 1a and 1b allowed participants relative freedom in defining humility. It is possible that participants took “humble” to have a different meaning (e.g., “humiliated”) than the one intended in this research (Exline & Geyer, 2004). Well-validated measures of humility are not yet available. Therefore, one aim of Study 2 was to develop a multi-item self-report measure of humility with descriptive items based on prior theory. This self-report humility measure could then be used to measure more reliably the effects of praise on humility in a subsequent study. A second aim of Study 2 was to develop an indirect measure of humility. Relying solely upon self-report measures makes results especially vulnerable to social desirability biases and limits of participants’ self-knowledge. Thus, an additional, indirect measure of humility would be a valuable supplement to the self-report measure.

Study 2 tested the hypothesis that viewing a video designed to elicit humility versus a neutral video would lead to higher scores on an explicit self-report humility scale, less inflated self-evaluations, and greater interest in upward comparisons. The purpose of Study 2 was to obtain initial validation of the self-reported humility scale and the self-accuracy score as measures of humility and to test interest in upward comparisons as a measure of improvement motivation.

**Procedure & Materials**

Fifty undergraduates (35 females) participated in Study 2. At the start of the study, participants completed measures of narcissism (NPI; Raskin & Terry, 1988) and social desirability (Marlowe-Crowne Social Desirability Scale; Reynolds, 1982). Next, participants were randomly assigned to watch on the computer either a presentation intended to induce humility or a presentation intended to be neutral. The humility induction video began with a picture of the participant (taken on a digital camera by the experimenter, and transferred to the computer). This was followed by a series of pictures, beginning with photographs of Florida State University, then of Florida, then of the whole of the USA, then of the earth, and finally of the solar system. A voice-over prompted participants to shift their attention from themselves to the many other people in the world. The full script of the voice-over can be found in Appendix A (copy of the video available from the author upon request). This manipulation draws upon recent theorizing that a humble perspective may include viewing oneself as a relatively small part of the universe but as basically the same size as other humans, and that humility may be fostered by a sense of similarity to and connection with others (Exline, 2006; Exline et al, 2006). The video was not designed to elicit negative feelings about the self, as that might provoke defensive reactions (Exline & Zell, 2006). For a neutral control condition, another video of equal length (about 2 minutes and 45 seconds) was created. This video presented easy math problems (basic addition, subtraction, multiplication) with their answers against different colored backgrounds. This control condition was chosen because pre-testing suggested that it produced
lower levels of humility than other control condition videos considered (including peaceful nature scenes and art paintings).

After watching the video, participants completed a mood measure (PANAS; Watson, Clark & Tellegen, 1988). Participants were then asked to write an essay for 15 minutes. The essay prompt was taken from a list of practice GRE writing test prompts and concerns the costs and benefits of technology. At the end of that time, participants evaluated their own essay by rating the overall quality of their essay compared to the quality of an essay that a typical student in General Psychology might write. To obtain indexes of inflation and accuracy, these self-ratings would later be compared to objective ratings made by an expert judge. Humility was expected to cause self-ratings to be less inflated and more accurate.

Then participants rated how humble the video made them feel. Participants read the prompt, “To what extent did the picture presentation that you watched make you feel more….?” followed by a list of items, which they rated on an 11 point scale. Five items were averaged to create a measure of self-reported humility: willing to see yourself accurately, including your strengths and weaknesses; able to see yourself in perspective; open to learning from other people; humble; aware of your place in the universe, Cronbach’s $\alpha = .93$. Participants also rated how grateful they felt (single item).

Finally, participants were told that some examples of excellent essays were available for them to look at if they wanted, and were asked whether they were interested in seeing these. Prior research suggests that people sometimes avoid upward comparisons because they can be threatening (Wheeler & Miyake, 1992). I expected that people higher in humility might be more able to tolerate upward comparisons, finding them less ego-threatening, and consequently may be more interested in what can be learned from them.

Results

Inflation Versus Accuracy of Self-ratings

To compose measures of participants’ inflation versus accuracy of self-evaluations, I first asked an expert judge to rate each essay using the same scale on which participants had provided self-ratings. The judge has a M.A. in English and teaches English composition courses for the local community college. The judge was shown only participants’ essays. He was blind to experimental condition and did not see any of the participants’ other responses on the study materials. I subtracted the judge’s ratings from the participants’ ratings. For the resulting inflation index, high scores reflect participants rating their essays more positively than the expert judge rated them, and negative scores reflect participants rating their essays less positively than the judge rated them. Participants in the humility condition inflated their self-evaluations less than did participants in the control condition, $F(1, 48) = 5.65, p = .02$. Participants in the humility condition on average rated themselves very similarly to how the outside judge rated them ($M = -.14, SD = 3.70$), whereas participants in the math condition rated themselves significantly higher ($M = 2.20, SD = 2.98$). This main effect of condition remained significant while controlling for positive affect and social desirability, $F(1, 46) = 4.79, p = .03$. Also as predicted, inflated self-evaluation was positively correlated with narcissism, $r(49) = .28, p = .05$.

Following the method used by Ehrlinger and Dunning (2003), I also tested the effect of condition on self-ratings, while controlling for the actual quality of the essay. Controlling for the expert judge’s ratings of the essays, participants who watched the humility inducing video compared to participants who watched the neutral video showed a slight tendency to rate their own essay less positively, $F(1, 47) = 1.78, p = .19$. The pattern of results was similar when also controlling for narcissism and social desirability – participants tended to rate their essays less highly
after watching the humility video ($M = 5.19, SE = .31$) than after watching the neutral video ($M = 5.70, SE = .37$), while controlling for the objective quality of the essays, $F(1, 45) = 2.18, p = .15$.

The foregoing analyses focus on inflation of self-views. As an alternative, accuracy could be measured by the absolute difference between participants’ self-rating and the expert judge’s rating. With this absolute difference accuracy measure, scores closer to zero reflect greater accuracy, while higher scores reflect a greater discrepancy between self-ratings and the expert judge’s ratings. Using this absolute difference accuracy measure, no difference was found between the accuracy of participants who watched the humility induction video ($M = 3.10, SD = 1.93$) and the accuracy of participants who watched the neutral video ($M = 3.24, SD = 1.70$), $F(1, 48) = .07, p = .80$. Thus, participants who watched the humility-inducing video tended to inflate their self-evaluations less than did participants who watched the neutral video, although the overall accuracy of the two groups did not significantly differ.

**Self-reported Humility**

Participants reported feeling more humbled by the humility video ($M = 6.73, SD = 1.51$) than by the math video ($M = 2.49, SD = 2.61$), $F(1, 48) = 52.75, p < .001$. Furthermore, self-reported humility correlated negatively with narcissism, $r(50) = -.30, p = .03$, but showed no relation to social desirability, $r(50) = -.03, p = .85$. Self-reported humility was positively correlated with self-reported gratitude, $r(50) = .85, p < .001$. Self-reported humility was not significantly related to self-evaluation inflation, although the direction of the correlation was negative, as expected, $r(50) = -.17, p = .24$.

**Interest in Upward Comparison**

Interest in seeing an upward comparison essay did not differ by condition, $F(1, 47) = .83, p = .37$, although the means were higher in the humility condition, as predicted. Interest in seeing an upward comparison essay tended to be negatively correlated with narcissism, $r(50) = -.23, p = .12$, and with inflated self-evaluation, $r(49) = -.20, p = .17$. Interest in seeing an upward comparison essay also tended to correlate positively with self-reported humility, $r(50) = .23, p = .11$. Testing for effects of gender revealed none significant.

**Discussion**

In summary, Study 2 introduced a measure of self-reported humility that showed good internal reliability. Scores on the self-reported humility measure were increased by a video manipulation designed to induce humility. Consistent with prior theory, the self-report humility measure correlated negatively with narcissism and positively with gratitude, although the size of humility’s correlation with gratitude suggests that the measures overlapped more than is ideal. Study 2 also introduced a new way to operationalize humility: having less inflated self-evaluations (as measured by subtracting an expert judge’s rating from the participant’s self-rating). Inflation of self-ratings was decreased by the humility induction video, and inflation of self-ratings was positively related to narcissism as predicted. Interest in upward comparisons proved less satisfactory as a behavioral measure of improvement motivation. Thus, Study 2 provided two measures that could then be used in Study 3 to measure the effect of praise on humility more accurately.

**Study 3**

Study 3 was intended to test pride and humility as mediators of the motivating effect of praise, while incorporating several changes and additions. In Study 3, participants came to the laboratory and wrote an essay on which they then received either praise or no feedback from a
friend and a graduate student. Following this praise manipulation, the dependent measures of pride, humility, and motivation were assessed using self-report measures and behavioral measures of effort on a second essay.

Study 3 incorporated multiple changes intended to strengthen the conclusions that could be drawn from the present research. First, the retrospective method used in Studies 1a and 1b allowed for the possibility that participants’ recollections may have been inaccurate due to forgetting or due to bias by their implicit theories about the effects of praise. Therefore, in Study 3 I limited participants’ responses to praise received in the laboratory. Second, in Studies 1a and 1b, participants were simply instructed to recall an experience in which they received praise from someone they respected and admired. Thus, the source was not further specified, and the domain of the praise was left to the participant’s choice. Study 3 was intended to achieve a greater degree of experimental control by having all participants receive similar praise from the same types of sources for an essay which they wrote.

Third, Study 3 employed different measures than Studies 1a and 1b. The pride scale used in Studies 1a and 1b was replaced with a two factor pride scale recently developed by Tracy and Robins (2007). The humility scale used in Studies 1a and 1b was replaced with the five item humility scale developed in Study 2. The self-reported motivation scale used in Studies 1a and 1b was replaced with a validated self-reported intrinsic motivation scale and multiple measures of subsequent effort. The inflation measure tested in Study 2 was included as an additional indicator of pride versus humility. Measures of other constructs (e.g., competence, mood, awareness of room for improvement) were added that would be expected to be associated with pride and humility, according to my hypotheses. Finally, trait self-esteem was added as a premeasure based on prior theorizing that pre-existing levels of confidence may influence responses to praise (Delin & Baumeister, 1994) and findings that the relative motivating effects of positive and negative feedback depend upon the individual’s level of self-esteem (Baumeister & Tice, 1985).

Using different methods and measures, Study 3 was expected to replicate the findings from Studies 1a and 1b that praise increases pride, humility, and motivation. Study 3 was expected to replicate the findings that pride and humility mediate the effect of praise on motivation. Pride was expected to be associated with positive affect and perceived competence, and humility was expected to be associated with awareness of one’s room for improvement and incremental theories. The effect of praise on inflation of self-ratings was expected to be mediated by humility and pride in that humility was expected to be associated negatively with inflation, as found in Study 2, but pride to be associated positively with inflation. Self-ratings would be explored as a possible mediator of the effect of praise on motivation. Finally, high self-esteem was expected to increase overall positivity of responses on self-evaluative measures as well as possibly moderating the effect of praise.

Design and Participants

Study 3 employed a 2 condition (praise vs. no feedback) between participants design. Eighty-one undergraduates (54 women) participated for partial course credit. Participants were 77% White, 11% Black or African American, and 8% Hispanic or Latino. Participants’ average age was 19.3 years.

Data from seven participants distributed across condition were eliminated due to suspicion, and data from one participant were eliminated due to failure to follow directions (the participant’s friend provided feedback that was not positive). Thus, data from 73 participants were retained. In addition, partial data are missing for two participants due to experimenter error.
Materials

Pride. Participants completed a pride scale (Tracy & Robins, 2007) which includes subscales for “authentic pride” and “hubristic pride.” The authentic pride subscale asks participants to rate how much they feel “like I have accomplished,” “like I am achieving,” “confident,” “like I have self-worth,” “fulfilled,” “productive,” and “successful.” The hubristic pride subscale consists of items such as “arrogant,” “conceited,” “egotistical,” “pompous,” and “stuck-up.” Tracy and Robins (2007) found that authentic pride was associated with high self-esteem and effort attributions, whereas hubristic pride was associated with lower self-esteem, greater narcissism, and ability attributions. Descriptive statistics for all dependent measures based on the present sample are provided in Table 1.

Humility. Participants completed the same measure of humility as used in Study 2. They rated the extent to which they felt “willing to see myself accurately, including my strengths and weaknesses,” “able to see myself in perspective,” “aware of my place in the universe,” “open to learning from other people,” and “humble.”

Gratitude. Participants completed the same measure of humility as used in Studies 1a and 1b, which consisted of the items “grateful” and “appreciative,” $r(73) = .75, p < .001$.

Inflation versus accuracy of self-ratings. Participants rated the overall quality of their first essay, compared to the quality of an essay that a typical student in their psychology class might write. Ratings made by an expert judge were then subtracted from participants’ self-ratings to compose a measure of inflation of self-evaluations. This measure is the same as that used in Study 2.

Mood. Participants completed a mood measure (BMIS; Mayer & Gaschke, 1988), in which they rated to what extent they feel this way right now, on a scale from 1 = very slightly or not at all to 5 = extremely. The positive affect subscale includes the following items: lively, happy, caring, content, peppy, calm, active, and loving. The negative affect subscale includes the following items: sad, tired, gloomy, jittery, drowsy, grouchy, nervous, and fed up.

Interest/enjoyment. Participants’ interest in and enjoyment of writing was assessed by averaging their responses to the following items: “I think writing essays is a boring activity” (reverse scored), “I think writing is quite enjoyable,” “I would describe writing as very interesting,” and “Writing does not hold my attention at all” (reverse scored). This subscale is derived from the Intrinsic Motivation Inventory (Ryan, 1982), which has been validated by McAuley, Duncan, and Tammen (1989). The interest/enjoyment subscale is considered to reflect intrinsic motivation and has been used as a measure of intrinsic motivation in prior research (e.g., Ryan, Koestner & Deci, 1991).

Perceived competence. Participants’ perceptions of their competence at writing were assessed by averaging responses to the following items: “I am pretty skilled at writing,” “Writing essays is an activity I can’t do very well” (reverse scored), “I am satisfied with my performance on the essay,” and “I think I do pretty well at writing, compared to other students”. Items were based on a subscale of the Intrinsic Motivation Inventory (Ryan, 1982).

Awareness of room for improvement. Participants’ awareness of their room for improvement as writers was assessed by averaging responses to the items, “I’m very aware that I have a lot of progress to make before I am the best writer I can be” and “I am still a long ways from being as good a writer as I would like to be,” which correlated with each other at $r(73) = .57, p < .001$.

Entity theory. A subscale measuring the extent to which participants hold an entity theory of writing ability averaged participants’ responses to the items, “You can learn new things, but you can’t really change your basic writing ability,” “You have a certain amount of ability at writing and you really can’t do much to change it,” and “Your writing skill is something about you that you can’t change very much” (modified from Chiu, Hong, & Dweck, 1997).
**Motivation to improve.** The final questionnaire also included the single item, “I am motivated to improve my writing skills.”

**Effort on the second essay.** The experimenter recorded the number of seconds participants spent working on the second essay. The number of words participants wrote in the first essay and in the second essay were counted. The corrections and revisions participants made in the first essay and in the second essay were also counted (because participants were given a pen to use in writing their essays, the corrections and revisions they made to their essays were visible). The same expert judge who assisted in Studies 1a and 1b, blind to condition, evaluated the overall quality of the second group of essays.

**Table 1.** Study 3 Descriptive Statistics

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Cronbach’s Alpha</th>
<th>M (SD)</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Potential Mediators</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authentic Pride</td>
<td>.89</td>
<td>6.64 (1.61)</td>
<td>0 (not at all) - 10 (extremely)</td>
</tr>
<tr>
<td>Hubristic Pride</td>
<td>.84</td>
<td>1.54 (1.30)</td>
<td>0 (not at all) - 10 (extremely)</td>
</tr>
<tr>
<td>Humility</td>
<td>.71</td>
<td>6.81 (1.40)</td>
<td>0 (not at all) - 10 (extremely)</td>
</tr>
<tr>
<td>Gratitude</td>
<td>n/a</td>
<td>7.32 (2.00)</td>
<td>0 (not at all) - 10 (extremely)</td>
</tr>
<tr>
<td>Positive Affect</td>
<td>.90</td>
<td>3.31 (0.81)</td>
<td>1 (very slightly or not at all) - 5 (extremely)</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>.69</td>
<td>1.79 (0.55)</td>
<td>1 (very slightly or not at all) - 5 (extremely)</td>
</tr>
<tr>
<td>Interest/enjoyment</td>
<td>.89</td>
<td>2.77 (0.95)</td>
<td>1 (strongly disagree) - 5 (strongly agree)</td>
</tr>
<tr>
<td>Perceived competence</td>
<td>.80</td>
<td>3.32 (0.79)</td>
<td>1 (strongly disagree) - 5 (strongly agree)</td>
</tr>
<tr>
<td>Aware of room to improve</td>
<td>n/a</td>
<td>3.96 (0.75)</td>
<td>1 (strongly disagree) - 5 (strongly agree)</td>
</tr>
<tr>
<td>Entity theory of writing</td>
<td>.77</td>
<td>1.94 (0.70)</td>
<td>1 (strongly disagree) - 5 (strongly agree)</td>
</tr>
<tr>
<td>Motivation to improve</td>
<td>n/a</td>
<td>3.93 (0.79)</td>
<td>1 (strongly disagree) - 5 (strongly agree)</td>
</tr>
<tr>
<td>Self-rating of the first essay</td>
<td>n/a</td>
<td>5.53 (1.90)</td>
<td>0 (extremely below avg) - 10 (extremely above avg)</td>
</tr>
</tbody>
</table>

**Effort on second essay**

|                          |                  |              |                                    |
|                          | Time (seconds)   | n/a          | 758 (339)                          |
|                          | Words            | n/a          | 187.72 (74.54)                     |
|                          | Corrections      | n/a          | 6.57 (9.09)                        |
|                          | Quality          | n/a          | 4.99 (3.17)                        |

**Note:** All scores on multi-item measures were computed as means. Correlations between items for two item scales: Gratitude scale = r(73) = .75, p < .001, Aware of room to improve: r(73) = .57, p < .001. n = 73

**Procedure**

Participants were instructed to bring a friend (gender was not specified) with them to their experiment session. Undergraduate psychology students participated for partial course credit; participants’ friends who participated were entered into a raffle for $100 to compensate them for their assistance. Female undergraduate research assistants, blind to hypotheses, served as experimenters. Participants were told that the study related to learning and college life and that we were interested in how learning actually occurs in the social context of college. The participant and his/her friend first completed a demographics questionnaire in which they reported their college major or expected major. Participants also completed a trait self-esteem scale (Rosenberg, 1965), rating responses on a scale from 1 = disagree strongly to 7 = agree strongly.

**Praise manipulation.** Then the friend was escorted from the room while the participant wrote an essay for 20 minutes. Participants were told that their friend would be completing questionnaires about their “FSU experience” in the other room, and that after they finished their
essay, their friend and a graduate student in English would both be reading and providing written feedback on it. The essay prompt was the same as that used in Study 2 (see Appendix B). After finishing the first essay, the participant played solitaire on the computer while the friend and ostensibly a graduate student in English read and provided written feedback on his or her essay. The friend was instructed to provide positive but true feedback. Specifically, the friend was instructed to identify three strongly positive aspects of the essay and emphasize their importance (see Appendix C). The experimenter provided scripted positive feedback which was purported to be from a graduate student in English. The graduate student feedback script said, “Very good! Shows real promise!! The essay demonstrates insightful thinking. It also communicates ideas well with some very apt phrasing.” To enhance believability, the experimenter also underlined two sentences in the essay, and wrote “good” and “+” next to them. Based upon random assignment, half the participants were then shown this positive feedback and half were told that there wasn’t time to look at the feedback now but they would be able to see it at the end of the study. Thus, half the participants received praise and half the participants received no feedback.

Dependent measure. Participants completed measures of pride, humility, and gratitude embedded in a list of filler items taken from the Big 5 Inventory whose presence was intended to obscure the true focus of the study (see Appendix E). Participants then rated the quality of their own essay and reported their mood. The final questionnaire included measures related to motivation, including interest in writing, perceived competence at writing, awareness of room for improvement at writing, implicit theories of writing, and motivation to improve at writing. These measures were embedded in a list of filler items about political attitudes from the Social Attitudes Inventory (Eysenck, 1957; see Appendix F).

Participants’ motivation was also assessed by the amount of effort they put into a second essay. Upon completing the questionnaire, participants were given a second essay prompt concerning how much about people reflects their political beliefs. Participants were told to ring the bell to let the experimenter know when they had finished. The experimenter left the room and discreetly timed on a stop watch how long the participant worked on the second essay. For practical reasons, any participant who did not finish within 25 minutes was then stopped by the experimenter.
Table 2. Study 3 Correlations between Individual Difference Measures and Dependent Variables

<table>
<thead>
<tr>
<th>Potential Mediators</th>
<th>Gender¹</th>
<th>Self-esteem</th>
<th>Quality of First Essay</th>
<th>English Major</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authentic Pride</td>
<td>.14</td>
<td>.61**</td>
<td>.06</td>
<td>-.10</td>
</tr>
<tr>
<td>Hubristic Pride</td>
<td>-.21⁺</td>
<td>.01</td>
<td>.15</td>
<td>-.19</td>
</tr>
<tr>
<td>Humility</td>
<td>.31**</td>
<td>.48**</td>
<td>-.03</td>
<td>.06</td>
</tr>
<tr>
<td>Gratitude</td>
<td>.15</td>
<td>.58**</td>
<td>-.10</td>
<td>-.07</td>
</tr>
<tr>
<td>Positive affect</td>
<td>-.01</td>
<td>-.13</td>
<td>.08</td>
<td>-.12</td>
</tr>
<tr>
<td>Negative affect</td>
<td>.04</td>
<td>.25*</td>
<td>-.18</td>
<td>-.15</td>
</tr>
<tr>
<td>Interest/enjoyment</td>
<td>.09</td>
<td>.15</td>
<td>.37**</td>
<td>.22⁺</td>
</tr>
<tr>
<td>Perceived competence</td>
<td>.18</td>
<td>.31**</td>
<td>.29*</td>
<td>.23⁺</td>
</tr>
<tr>
<td>Aware of room to improve</td>
<td>.00</td>
<td>-.04</td>
<td>.00</td>
<td>.07</td>
</tr>
<tr>
<td>Entity theory</td>
<td>.04</td>
<td>-.10</td>
<td>.13</td>
<td>.14</td>
</tr>
<tr>
<td>Motivation to improve</td>
<td>.13</td>
<td>.14</td>
<td>.30*</td>
<td>.12</td>
</tr>
<tr>
<td>Self-rating on the first essay</td>
<td>.16</td>
<td>.28*</td>
<td>.27*</td>
<td>.04</td>
</tr>
<tr>
<td>Effort on the second essay</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seconds</td>
<td>.05</td>
<td>.07</td>
<td>.35**</td>
<td>.05</td>
</tr>
<tr>
<td>Words</td>
<td>.10</td>
<td>-.03</td>
<td>.53**</td>
<td>.15</td>
</tr>
<tr>
<td>Corrections</td>
<td>-.04</td>
<td>-.11</td>
<td>.03</td>
<td>.01</td>
</tr>
<tr>
<td>Quality</td>
<td>-.20⁺</td>
<td>-.10</td>
<td>.26*</td>
<td>.14</td>
</tr>
</tbody>
</table>

¹Gender was coded as male = 0, female = 1
⁺p < .10; *p < .05; **p < .01.

*n = 73

Results

Preliminary Analyses

Pre-existing differences in gender, trait self-esteem, writing ability, and attitudes about writing could be expected to influence results of the present study. As reported in Table 2, gender, self-esteem, the quality of the first essay, and whether participants were English majors indeed each correlated with some of the variables of interest. Therefore, in all subsequent analyses, I controlled for the individual difference measures that correlate at p < .10 with the outcome variable. Main effects of condition with and without controlling for individual difference measures can be seen in Table 3.

Main Effects of Condition

A series of two way ANCOVA’s controlling for related individual difference measures were used to test all main effects of feedback condition (summarized in Table 1). In order to conserve degrees of freedom, each ANCOVA only controls for the covariate(s) that are marginally or significantly related to the dependent measure. Hence, different degrees of freedom reflect the inclusion of a different number of covariates in that analysis. ⁶

Potential mediators. Consistent with predictions, results revealed that participants who received praise, compared to participants who received no feedback, felt more authentic pride, 𝐹(1, 70)=6.86, 𝑝 = .01, Cohen’s 𝑑 = .44, and perceived themselves as more competent at writing, 𝐹(1, 68) = 5.44, 𝑝 = .02, Cohen’s 𝑑 = .40. Participants who received praise versus no feedback also tended to feel more humble, 𝐹(1, 69) = 3.79, 𝑝 = .06, Cohen’s 𝑑 = .47. However, the following
variables showed no difference by condition: hubristic pride, gratitude, awareness of need for improvement, entity theory of writing, positive affect, and negative affect, all $Fs < 1$.

**Self-ratings.** The expert judge’s rating of the overall quality of the first essay was subtracted from participants’ self-ratings of their first essay to create an inflation score (following Beyer, 1990). This inflation score is the amount that the participant rated his or her first essay higher than the expert judge rated it. Controlling for gender and self-esteem, inflation did not significantly differ by condition, $F(1, 69) = 1.98, p = .16$, although the trend was for participants to inflate their self-ratings more in the praise condition ($M = 1.23, SE = .55$) than in the no-feedback condition ($M = .16, SE = .51$). Next, I tested the main effect of condition on participants’ self-ratings, while controlling for the expert judge’s ratings. Analyzing the data in this way reveals a similar resulting pattern, $F(1, 69) = 2.16, p = .15$, such that participants tended to rate their own essay more highly after receiving praise than after receiving no feedback, controlling for the actual quality of their essays. To measure overall accuracy, I also computed the absolute values of the differences between participants’ self-ratings and the expert judge’s ratings, such that higher scores reflect greater difference between the self-rating and the expert rating – in other words, greater inaccuracy. Using this absolute difference accuracy measure, no significant difference was found in the accuracy of participants who received praise ($M = 2.94, SD = 1.77$) compared to the accuracy of participants who received no feedback ($M = 2.62, SD = 1.66$), $F(1, 69) = 1.05, p = .31$. Thus, there appears to have been a slight trend for participants to rate their own essays more positively after receiving praise than after receiving no feedback, while accounting for the objective quality of their essays, although overall accuracy of self-ratings did not differ by condition.

**Self-reported motivation.** Participants’ reported motivation to improve their writing did not differ by condition, $F(1, 70) = 1.26, p = .27$, although the means were in the direction of praised participants reporting greater motivation to improve than non-praised participants reported. Inconsistent with predictions that praise would increase intrinsic motivation, participants’ reported interest in and enjoyment of writing also failed to differ by condition, $F < 1$.

**Effort on second essay.** Consistent with the hypothesis that praise would lead to greater motivation, participants who received praise versus no feedback spent more time working on the second essay, $F(1, 69) = 4.75, p = .03$, Cohen’s $d = .47$. Participants who received praise, compared to participants who received no feedback, also made more corrections to the second essay, controlling for number of corrections made to the first essay, $F(1, 69) = 6.01, p = .02$, Cohen’s $d = .51$. Participants who received praise versus no feedback tended to write more words on the second essay, controlling for number of words written in the first essay, $F(1, 68) = 2.76, p = .10$. However, the overall quality of the second essay as rated by an expert judge showed no difference by condition, controlling for the overall quality of the first essay, $F(1, 68) = .62, p = .43$. 

18
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<thead>
<tr>
<th>Dependent Variable</th>
<th>Condition</th>
<th>Not controlling for covariates</th>
<th>Controlling for covariates</th>
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<td></td>
<td>Praise</td>
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<td>3.85(0.78)</td>
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<td>5.26(2.14)</td>
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<td>Quality</td>
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<td>4.95(3.20)</td>
<td></td>
</tr>
</tbody>
</table>

¹ ANOVA’s were used to test for main effects of condition. Degrees of freedom vary due to missing data.  
² ANCOVA’s were used to test for main effects of condition, controlling for any individual difference measures that correlate with the variable, as noted in Table 2. I also controlled for the first essay quality when testing the self-rating of the first essay, I controlled for the first essay words when testing second essay words, I controlled for the first essay corrections when testing second essay corrections, and I controlled for first essay quality when testing second essay quality. Degrees of freedom also vary due to missing data.  
⁺p < .10; *p < .05  
n = 73

**Moderation Analyses**

Gender was examined for significant interactions with condition. The expected main effects of gender were obtained such that females reported feeling more humble than males did, F(1, 70) = 5.60, p = .02, and males tended to report greater levels of hubristic pride than females did, r(73) = -.21, p = .07. However gender showed no significant interactions with feedback condition.

Self-esteem was positively correlated with self-ratings on the first essay, r(73) = .28, p = .02. However, trait self-esteem was not correlated with the expert judge’s ratings on the first essay, r(73) = .04, p = .76, or with the expert judge’s ratings on the second essay, r(72) = -.10, p = .40. Thus, participants with high self-esteem compared to participants with low self-esteem evaluated their performance more highly even though their performance was not objectively better.

Self-esteem was found to interact with feedback condition to predict interest/enjoyment and number of words on the second essay. Regression analyses, with feedback condition dummy-coded as praise = 1 and no feedback = 0, revealed a marginal interaction involving self-esteem and feedback condition to predict interest/enjoyment, controlling for quality of the first essay and whether the participant is an English major, t(67) = 1.90, β = .27, p = .06. Consistent with recommendations by Aiken and West (1991), I created new high and low self-esteem variables at
one standard deviation above and below the sample mean to conduct significance tests for the simple slopes. Low self-esteem participants reported similar levels of interest/enjoyment in the praise condition as in the no-feedback condition, $t(67) = -.74, \beta = -.11, p = .46$. High self-esteem participants reported marginally greater levels of interest/enjoyment in the praise condition than in the no-feedback condition, $t(67) = 1.95, \beta = .30, p = .06$. For participants with high self-esteem, receiving praise rather than no feedback tended to increase their reported interest in writing (see Figure 3).

Self-esteem also interacted with condition to predict the number of words participants wrote on the second essay, controlling for first essay number of words, $t(67) = 2.44, \beta = .32, p = .02$. Significance tests of the simple slopes revealed that low self-esteem participants wrote a similar number of words on the second essay in the praise condition as in the no-feedback condition, $t(67) = -.45, \beta = -.06, p = .66$. High self-esteem participants wrote significantly more words on the second essay in the praise condition than in the no-feedback condition, $t(67) = 2.98, \beta = .43, p = .004$. Thus, the trend for participants to write more words on the second essay in the praise condition than in the no-feedback condition seems to be driven by the participants with high self-esteem (see Figure 4).

![Figure 3](image-url)

**Figure 3.** Regression lines predicting self-reported interest in and enjoyment of writing (intrinsic motivation) as a function of self-esteem and feedback condition, controlling for quality of the first essay and whether the participant is an English major in Study 3.
Mediation Analyses

Simple mediation analyses. As detailed by Baron and Kenney (1986), in order to test for mediation, certain criteria must first be met. First, the outcome variable should be affected by the manipulation. Time spent on the second essay and number of corrections made on the second essay met this criterion. Praised participants worked longer on the second essay and made more corrections to the second essay than did participants who received no feedback.

Second, the mediator variable should be affected by the manipulation. Authentic pride and competence met this criterion; humility marginally met this criterion. Praised participants reported feeling more authentic pride and perceiving themselves as more competent than did participants who received no feedback. Praised participants reported feeling marginally more humble than did participants who received no feedback.

Third, the mediator variable should have a unique effect upon the outcome variable, when accounting for the effect of condition. Contrary to expectations, none of the pairs of outcome and mediator variables met this criterion. After accounting for the effect of condition, time spent on the second essay did not significantly correlate with authentic pride, \( r(68) = .12, p = .32 \), or with competence, \( r(67) = .09, p = .48 \). Controlling for condition, time spent on essay two correlated negatively with humility, \( r(67) = -.25, p = .04 \). After accounting for the effect of condition, the number of corrections made on the first essay, and related individual difference measures, the number of corrections made on the second essay did not significantly correlate with authentic pride, \( r(67) = .16, p = .20 \), with competence, \( r(66) = .13, p = .29 \), or with humility, \( r(66) = .13, p = .30 \). Thus, the data did not permit mediational analyses.

Mediated moderation analyses. As noted above, self-esteem moderated the effect of condition on interest/enjoyment and number of words in the second essay. Therefore, the data were examined for evidence of mediation of this moderated effect. Authentic pride and competence differed by condition and humility tended to differ by condition, therefore I tested whether they were related to the outcome variables. Of these potential mediators, only competence had a unique effect on interest/enjoyment when condition was also a predictor, \( r(70) = .56, p < .001 \). None of the potential mediators correlated significantly with number of words on the second essay.

Hierarchical regression analyses were conducted to test whether perceived competence mediated the moderated effect of praise on interest/enjoyment. Feedback condition, self-esteem
and competence (mediator) were entered in the first step, and quality of the first essay and being an English major were also included to control for their effects. The feedback condition by self-esteem (condition X moderator) interaction term was entered in the second step, and the competence by self-esteem (mediator X moderator) interaction term was entered in the third step. If inclusion of the mediator variable or the mediator X moderator variable decreases the size and significance of the condition X moderator term, and either the mediator or its interaction with the moderator uniquely predicts interest/enjoyment, this would be evidence consistent with mediated moderation. However, with inclusion of competence and the competence X self-esteem interaction term, the condition X self-esteem effect was not reduced, $t(65) = 2.13, \beta = .28, p = .04$ (compared to the effect of overall moderation, $t(67) = 1.90, \beta = .27, p = .06$). Thus, perceived competence appears not to have mediated the moderated effect of praise on interest/enjoyment.

In sum, self-esteem moderated the effect of praise, such that participants with high self-esteem reported marginally greater interest/enjoyment in writing and also wrote more words on the second essay if they received praise than if they received no feedback. However, the present study did not provide evidence that pride, competence, or humility mediated this moderated effect.

**Exploratory analyses: Humility as interactional mediator.** As noted above, humility was negatively correlated with the amount of time spent on the second essay. This unexpected finding prompted an examination of the correlations between humility and second essay time separately for each condition, as suggested by Spencer, Zanna and Fong (2005). Time spent on the second essay was negatively correlated with humility in the no-feedback condition, $r(35) = -.47, p = .004$, but showed no relation to humility in the praise condition, $r(29) = .09, p = .64$. When the relationship between a potential mediator and the outcome variable is different in the control condition than in the experimental condition, there may be what Judd and Kenney (1981) termed “interactional mediation” (see also Spencer, Zanna & Fong, 2005).

Therefore, post-hoc analyses were conducted to test humility as an interactional mediator of the effect of praise on motivation. Following the example of Harackiewicz, Abrahams, and Wageman (1987), I conducted hierarchical regression analyses predicting motivation variables, entering condition and humility in the first step and a condition X humility interaction term in the second step. The condition X humility interaction marginally predicted interest/enjoyment (intrinsic motivation), $t(68) = 1.86, \beta = .26, p = .07$, significantly predicted second essay time, $t(68) = 2.23, \beta = .30, p = .03$, and marginally predicted second essay corrections, $t(67) = 1.88, \beta = .24, p = .06$. Therefore, I created high and low humility variables at one standard deviation above and below the sample mean to conduct significance tests for the simple slopes. Plots of the predicted means are also presented in Figures 5, 6, and 7, to aid interpretation. Results revealed that participants who reported high humility tended to also report greater intrinsic motivation in the praise condition than in the no-feedback condition, $t(68) = 1.99, \beta = .34, p = .05$. Participants who reported low humility did not report greater intrinsic motivation in the praise condition than in the no-feedback condition, $t(68) = -1.86, \beta = -.16, p = .03$ (see Figure 5). Participants who reported high humility worked significantly longer on the second essay in the praise condition than in the no-feedback condition, $t(68) = 3.25, \beta = .54, p = .002$. Participants who reported low humility worked the same amount of time if they received praise as if they received no feedback, $t(68) = -.30, \beta = -.06, p = .76$ (see Figure 6). Participants who reported high humility made more corrections on their second essay in the praise condition than in the no-feedback condition, $t(67) = 3.00, \beta = .45, p = .004$. Participants who reported low humility made about the same number of corrections on their second essay if they received praise as if they received no feedback, $t(67) = -.03, \beta = -.01, p = .98$ (see Figure 7). Thus, levels of self-reported humility after receiving praise seemed to predict greater motivation than that predicted by levels of self-reported humility after receiving no feedback. In other words, self-
reported humility tended to be positively associated with motivation when it followed praise but negatively associated with motivation when it followed no feedback.

**Figure 5.** Regression lines predicting interest/enjoyment as a function of humility and feedback condition in Study 3.

**Figure 6.** Regression lines predicting time spent on the second essay as a function of humility and feedback condition in Study 3.
Inflation versus accuracy of self-ratings. Pride and humility had been expected to mediate the effect of praise manipulation on inflation of self-ratings. Inflation of self-ratings would then be tested as a mediator of the effect of praise on motivation and effort on the second essay. However, because self-ratings were not significantly affected by the praise manipulation, it is not appropriate to conduct tests of mediation. Therefore, I instead tested the more basic prediction that authentic pride would positively predict self-ratings and humility would negatively predict self-ratings, while controlling for the actual quality of the essays. Because authentic pride and humility were highly correlated with each other, $r(73) = .64$, $p < .001$ (see Table 4 for simple correlations between all dependent measures), each was tested as a predictor of self-ratings while controlling for the other. Using multiple regression to predict self-ratings, quality of the first essay, self-esteem, and feedback condition were entered in the first step, and pride and humility were simultaneously entered in the second step. As expected, when controlling for humility, authentic pride predicted higher self-ratings, $t(67) = 5.00$, $\beta = .711$, $p < .001$. When controlling for authentic pride, humility predicted lower self-ratings, $t(67) = -2.71$, $\beta = -.344$, $p = .01$. The same pattern of significant results was obtained when pride and humility were used to simultaneously predict self-ratings without controlling for the effect of feedback condition or self-esteem.
Table 4. Study 3 Correlations

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*p < .10; *p < .05; **p < .01.

n = 73
Discussion

Study 3 found that receiving praise compared to receiving no feedback led to increased effort. Participants who received praise rather than no feedback worked longer on their second essay and made more corrections and revisions to it. Praise did not lead to improvement in overall quality of the second essay, as rated by an expert judge, possibly because writing requires skill as well as effort, consistent with findings by Baumeister, Hutton, and Cairns (1990) that praise improved performance on effort-dependent tasks but not on skilled tasks.

Study 3 also found that receiving praise rather than no feedback led participants to report feeling prouder, feeling marginally more humble, and perceiving themselves as more competent at writing. The effect of praise on humility was weaker in Study 3 than it was in Studies 1a and 1b; speculatively, this may have been due to factors such as the praise being delivered in writing rather than face-to-face, the participants reading the praise in private, and the praise being for a task performed alone rather than in collaboration with other people. Nevertheless, praise did marginally (p = .06) increase self-reported humility, a result consistent with the findings of Studies 1a and 1b. This study did not provide evidence that pride, humility, or perceived competence mediated the effect of praise on subsequent effort.

In Study 3, humility showed a pattern of interactional mediation. After praise, self-reported humility tended to be positively associated with motivation whereas, after no feedback, humility tended to be negatively associated with motivation. These results may reflect the fact that humility has different implications for a person who has just received praise than for a person who has received no feedback on a task that is not particularly interesting. This interpretation is compatible with Exline’s (2006) suggestion that humility serves a beneficial protective function but by itself does not energize or motivate people. Perhaps humility unaccompanied by any other source of motivation can lead to passivity (Exline, 2006).

In contrast to the results of Studies 1a and 1b, Study 3 did not produce clear evidence that praise affected participants’ self-reported motivation. This may have been partly due to Study 3’s procedure of telling participants that their essay would be evaluated. Prior research suggests that positive feedback is not beneficial for intrinsic motivation when participants are led to expect evaluation (Harackiewicz, et al., 1984). Deci, Koestner, and Ryan (1999) note that this may be due to the fact that expected rewards are more likely to undermine intrinsic motivation than unexpected rewards are. Participants in the praise condition in Studies 1a and 1b, by contrast, likely recalled instances of receiving unanticipated praise and reported high levels of motivation. Unfortunately, Study 3 did not include a manipulation check which might have helped to determine whether participants viewed the written positive feedback as being unexpected high praise.

However, Study 3 did find that receiving praise versus no feedback marginally increased the self-reported motivation of high self-esteem participants. High self-esteem participants, in contrast to low self-esteem participants, also wrote more words on their second essay if they received praise rather than no feedback. This parallels results of two studies by Baumeister and Tice (1985) in which high self-esteem participants compared to low self-esteem participants appear to have responded to success feedback by spending more free-choice time on the task and performing better on a subsequent test. The presently observed difference in outcomes of praise for high and low self-esteem participants might be attributable to high self-esteem people being highly motivated to pursue activities at which they have done well so that they can excel versus low self-esteem people disengaging from activities at which they have done well due to doubts.
about their ability to repeat their initial success (Baumeister & Tice, 1985). Overall, Study 3
provided suggestive evidence that praise may more effectively motivate people with high rather
than low self-esteem.

In summary, receiving praise versus no feedback caused participants to feel prouder,
perceive themselves as more competent, and feel marginally more humble. In addition,
participants with high self-esteem reported finding writing marginally more interesting/enjoyable
if they received praise versus no feedback. Receiving praise versus no feedback also caused
participants to put more effort into their second essay. Praised participants, compared to
participants who received no feedback, spent more time working on their second essay and made
more corrections and revisions to their second essay. Participants with high self-esteem also
wrote more words on their second essay if they received praise than if they received no feedback.
However, Study 3 failed to produce evidence that the study variables (including pride, humility,
competence, mood, and self-accuracy) mediated the effect of praise on motivation.
GENERAL DISCUSSION

Summary of Results

The present research provides evidence that receiving praise compared to receiving no feedback can increase not only motivation but also pride and humility. In two studies, participants recalled feeling prouder, more humble, and more motivated after receiving praise than after conversing with someone they respect or spending a typical day at home. In a third study, participants reported feeling prouder, reported feeling marginally more humble, and put more effort into a second essay if they had received praise rather than no feedback on a first essay. The present research also provides mixed evidence regarding the possible mediating role of pride and humility. In two studies, pride and humility each mediated the effect of praise on motivation. In a third study, neither pride nor humility was found to mediate the effect of praise on motivation.

Consistent with prior research (e.g., Hancock, 2002), I expected praise to increase motivation. Results generally supported this hypothesis. In Studies 1a and 1b, participants recalled being more motivated after praise than after non-praise experiences. In Study 3, only participants with high self-esteem reported marginally greater intrinsic motivation after receiving praise versus no feedback. However, in Study 3, participants worked longer on and made more corrections to a second essay after receiving praise than after receiving no feedback. Participants with high self-esteem also wrote more words on a second essay after receiving praise versus no feedback. Thus, in Studies 1a, 1b, and 3, praised participants evidenced greater motivation than non-praised participants did. Study 3 additionally produced suggestive evidence that praise may be more motivating for people with high than with low self-esteem.

I had predicted that praise would lead to increased pride. Furthermore, I predicted that pride would mediate the effect of praise on motivation, possibly due to pride’s association with positive affect and perceived competence. In Studies 1a, 1b, and 3, participants in praise conditions reported greater pride than participants in control conditions. Furthermore, in Study 3, pride was positively associated with perceived competence and with positive affect. However, evidence regarding pride’s mediating role was inconsistent. Although two retrospective studies yielded evidence that pride mediated the effect of praise on motivation, the laboratory study failed to produce evidence of mediation.

I had also predicted that praise would lead to increased humility. Furthermore, I predicted that humility would mediate the effect of praise on motivation. I thought this might occur if humility promoted less inflated self-evaluations, greater awareness of one’s room for improvement, and lesser endorsement of an entity theory of writing. Results of Studies 1a, 1b, and 3 were consistent with the hypothesis that praise evokes humility (although the effect of praise on humility was marginal in Study 3). In Studies 1a and 1b, humility was also found to mediate the effects of praise on motivation. Study 2 also provided evidence that a humble state facilitates less inflated self-evaluations. Similarly, in Study 3, humility predicted less inflated self-ratings, when controlling for pride. However, in Study 3, humility did not mediate the effect of praise on motivation, nor was humility associated, as predicted, with awareness of room for improvement or rejection of an entity theory of writing.
Gender Differences

A weak pattern of gender differences consistent with prior research was obtained across Studies 1a, 1b, and 3. Men showed a slight tendency to report greater pride than women did on Study 1a’s 8-item pride scale (p = .12). Men compared to women also scored marginally higher on the hubristic pride subscale in Study 3, although no gender differences were found for authentic pride, consistent with Tracy and Robins’ (2007) findings. In Study 1b, women reported higher levels of gratitude than men did. Women also reported higher levels of humility than men did in Study 3. Thus, the current investigation suggests that men may tend toward greater hubristic pride, whereas women may tend toward greater humility and gratitude. However, consistent with much of the existing literature, no gender differences were obtained in levels of motivation in response to praise.

Accounting for Inconsistent Findings

There are several possible explanations for the inconsistency in mediators across the studies. Three explanations point to Study 3’s conclusions as being more valid. First, the quality of the measures used in Study 3 was generally superior to the measures used in Studies 1a and 1b. Study 3 used better validated self-report measures as well as including behavioral measures. This suggests that greater confidence should be placed in the results of Study 3. Second, Study 3 also avoided the potential problems inherent in using retrospective methods, such as the possibility that participants’ theory about praise processes may have influenced their recollections. Thus, participants may have been able to report their thoughts and feelings in response to praise versus no feedback more accurately in Study 3 than in Studies 1a and 1b. Third, the procedure in Study 3 also allowed for a greater level of experimental control over the source and domain of praise.

On the other hand, other considerations might indicate that greater weight should be placed on the results of Studies 1a and 1b than on the results of Study 3. In particular, the praise that participants recalled in Studies 1a and 1b may have had greater meaning and import for them than the praise participants received in the lab in Study 3 had. Although efforts were taken in Study 3 to increase the chances that the praise would be meaningful to participants, Study 3 traded off ecological validity for experimental control. In Study 3, the sources of praise were a friend and a purportedly expert source. Nevertheless, the praise that participants recalled receiving in Studies 1a and 1b may have been from sources with whom they had closer relationships or whom they admired and respected more highly. In addition, while college students might generally like to be good at writing (the domain of praise used in Study 3), writing performance on an essay may not have been highly important to all participants. Participants are also more likely to have doubted the genuineness of praise delivered in the laboratory than the genuineness of praise received in salient past experiences. Praise that seems spontaneous and genuine is likely to be more meaningful to the recipient. Each of these factors has been hypothesized to influence the meaning of praise for the recipient (e.g., Henderlong & Lepper, 2002; Delin & Baumeister, 1994).

Perhaps a more important difference is that the praise in Study 3 may have been expected. Participants in Study 3 knew that their friend would be evaluating their essay and perhaps the majority of participants expected their friends to give positive comments. In prior research, praise did not increase intrinsic motivation when participants were expecting the evaluation (Harackiewicz, et al., 1984). This, as well as the above mentioned aspects of Study 3’s praise situation may help to explain why Study 3 did not show that praise affected self-
reported motivation and had only a marginal effect on humility, as well as explaining Study 3’s failure to replicate the mediational findings. In sum, I suggest that aspects of the praise situation in Study 3 caused the praise to be less meaningful to participants than were the praise experiences that participants in Studies 1a and 1b typically recalled. It is an empirical question yet to be determined whether increasing the meaningfulness of the praise for the recipient simply strengthens its effect or also leads to qualitatively different processes and outcomes. For now, conclusions regarding whether pride or humility mediate the effect of praise on motivation must await further research.

Implications for Humility Research

In light of the limited amount of existing research on humility, there are several ways in which the present investigation may contribute to our understanding of humility. First, the present research provides evidence suggesting that experiences of receiving praise and experiences that remind people of their place in the universe may induce a state of increased humility. Pride and humility, at least in certain situations, seem not to be wholly antithetical, considering that participants reported both greater pride and greater humility after receiving praise than after receiving no feedback. Furthermore, self-reported gratitude and humility were positively correlated across all studies, consistent with theory suggesting gratitude and humility may facilitate each other.

Humility is sometimes assumed to facilitate accurate self-views, but empirical research directly testing this hypothesis is lacking. In Study 2, participants who received the humility induction compared to participants who watched a neutral video made less inflated evaluations of their own essays. In Study 3, self-reported humility was negatively associated with inflated evaluations of their own essays, while controlling for pride. Thus, the present research provides preliminary evidence supporting the hypothesis that humility is associated with refraining from self-enhancing when evaluating one’s own performance.

The evidence from the present investigation regarding the relationship between humility and motivation is mixed and merely suggestive. In Studies 1a and 1b, self-reported humility was positively associated with self-reported motivation across praise and control conditions. Furthermore, humility mediated the effect of praise on motivation. In Study 2, I expected participants who watched a humility-inducing video versus a neutral video and participants who reported high versus low levels of humility to report more interest in looking at examples of excellent essays. I expected this to reflect the fact that humility reduces self-enhancement motivation while increasing self-improvement motivation. However, although the trends were in the predicted direction, they did not approach significance (both \(p’s > .1\)). Post-hoc analyses in Study 3 indicated that humility showed a pattern of interactional mediation, such that humility tended to be beneficial to motivation after praise but tended to be detrimental to motivation after no feedback. This appears consistent with Exline’s (2006) suggestion that humility by itself may lead to passivity and only facilitates active goal pursuit when combined with another source of motivation. Contrary to expectations, in Study 3, humility failed to show the expected correlations with self-reported motivation to improve, awareness of room for improvement, or low endorsement of an entity theory of writing. Thus, across four studies, a clear picture of humility’s effect on motivation failed to emerge. Future research may clarify whether the present results hint at a meaningful complex relationship between humility and motivation or are merely intriguingly spurious.
Limitations and Future Directions

Each of the studies here presented carried limitations. For example, limitations of Studies 1a and 1b included the use of non-validated measures and the absence of measures of perceived competence and mood for comparison purposes. A limitation of Study 3 is that pre-praise levels of motivation were not assessed. It might also be beneficial for future research to include positive affect control conditions that do not involve praise or pride (e.g., a positive event that is not attributed to the self). Future research might also fruitfully examine pride and humility as mediators of the effect of praise on motivation and persistence after a subsequent failure.

It is possible that there are significant differences between the types of memorable praise experiences that participants wrote about in Studies 1a and 1b and the types of praise experiences that are typical in real life. Similarly, it is likely that there are important differences between the praise manipulation administered in the laboratory in Study 3 and praise as it usually occurs. Therefore at this point it is difficult to know to what extent the results of the present investigation may generalize. Although both the retrospective approach and the laboratory approach have disadvantages, it is a strength of the present investigation that both types of research approaches were incorporated. Furthermore, future research may benefit from use of a wider array of research approaches, including field studies (e.g., in classroom settings) or diary methods.

Cultural Differences

Due to sampling limitations, all of the present studies utilized Florida State University undergraduates enrolled in psychology courses for participants. There are reasons to predict that cultural differences would have influenced the results of this research. Cross-cultural research indicates that collectivist cultures may value and experience humility more and pride less than Americans do. Compared to people from individualist cultures, people from collectivist cultures have been found to experience less pride (Scollon, Diener, Oishi, & Biswas-Diener, 2004), self-enhance less (e.g., White & Chan, 1983), and value pride less (Eid & Diener, 2001). People from collectivistic cultures have also been found to report valuing humility more highly than people from individualist cultures do (Shen, 1995). Thus, overall levels of pride and humility may differ by culture, and such differences in trait pride and humility may influence responses to praise.

I am unaware of research specifically comparing definitions of pride and humility across cultures. However, speculatively, the way pride and humility are characterized in collectivist cultures may not perfectly overlap with Western conceptions of pride and humility. For example, people from collectivist cultures may be more prone to distinguish between pride in the self versus pride in the group, finding the latter to be more acceptable. Relative to people from individualist cultures, people from collectivist cultures may tend to value humility and devalue pride due to focusing on how pride and humility affect the group rather than how they are experienced by the individual. By contrast, people from individualistic cultures may tend to emphasize the possible dangers of humility and the intrapersonal consequences of humility (consistent with theorizing by Sandage & Wiens, 2001).

Research by Heine and colleagues found that Japanese participants worked harder after failure than after success, while North American participants showed the reverse pattern (Heine, Kitayama, Lehman, Takata, Ide, Leung, & Matsumoto, 2001). This suggests that praise may be less motivating for people from collectivist than individualist cultures, either because they experience less pride in response or because they find that pride less motivating. Study 3
provided suggestive evidence that praise may be more motivating for people with high than for people with low self-esteem. This is consistent with Baumeister and Tice’s suggestion that people with low self-esteem are mainly concerned with moving their performance up from “substandard to passable” (1985, p. 451). Heine and colleagues have suggested that Japanese are more concerned with not falling below standards than with excelling (Heine, et al., 2001). Thus, for both people with low self-esteem and Japanese, praise may be a poor motivator. If so, future research may investigate in what ways Japanese people’s (or people from other collectivist cultures) reasons for this response pattern differ from low self-esteem people’s reasons. Furthermore, determining what might be the advantages and disadvantages of being more motivated by praise or being more motivated by criticism could have useful implications.

Conclusion

As a social interaction, the praise situation is inevitably complex (Delin & Baumeister, 1994). Experiences of receiving praise may be expected to involve a variety of processes and outcomes that can depend upon multiple moderating factors (Henderlong & Lepper, 2002). The present research helps to shed further light on these processes by providing evidence that praise can evoke both pride and humility, which in turn might influence levels of motivation.
Take a moment to reflect about yourself. You are a unique, precious, individual human being. You have goals, cares, and concerns. You have wishes, longings and desires. You have families, friends, and classmates. You are one of many individuals who are currently enrolled as students at FSU.

And when you look beyond yourself, you realize that everyone has cares and concerns, and that all of the people in Tallahassee and each of the 17 million people living in the state of Florida—every one of them has their own complex lives, their own cares and concerns, struggles and challenges. And the United States, with its 300 million people, is just one country in a whole world full of individuals—many, many individuals who are each dealing with the challenges and struggles of their own lives—people who are learning and pursuing their goals, people who are gathering together and enjoying life, people who are facing pain and serious illness, people who are falling in love, old people and young people.

There are 2.2 billion children in the world. Every day 151 thousand people die and every hour 15 thousand babies are born. The world is full of individuals, traveling, working, relaxing, and each of these lifetimes is like a tiny grain of sand in the span of history. Throughout history, civilizations have risen and they have fallen. And our culture is just part of this long continuum—all 6.5 billion of us alive today in all of the 228 countries of the world.

And the earth is just one planet revolving around the sun. And the sun is just one star in one galaxy out of the countless galaxies of stars. In a seemingly infinite, limitless universe, we are here only for a short time and take up so little space. Our place in the universe is a small speck in time and space compared to the immensity of what is around us.
APPENDIX B
STUDY 3 FEEDBACK INSTRUCTIONS FOR FRIEND

Identify 3 strong aspects of the essay and emphasize their importance.

In your feedback note, you will be praising your friend for strong or impressive aspects of his or her essay. Your feedback should be true, but it should focus on the most significant strengths of the essay. Your feedback should be 4 or 5 sentences long.

Below are listed some examples of possible strong aspects of the essay. Please choose at least three adjectives or phrases from the list to use in your written feedback. Compose a first draft of your feedback using the scratch paper, then when you are satisfied with the note, copy the final version on the blank space on the last page of your friend’s essay.

Examples of positive qualities that the essay may possess:

- well-argued, strong points, used detailed examples to support points
- witty, funny
- insightful, thoughtful, thought deeply about subject matter, profound
- analytical, logical, rational
- good vocabulary, excellent word choices, articulate
- clear sentences, flow or organization of essay makes sense
- exciting
- passionate
- direct and focused, cuts right to the heart of the issue, concise, on-topic
- excellent language skills, grammar, syntax
- interesting
- personal, relatable, draws upon the author’s own perspective and experiences
- creative, original, unique
- fair, balanced, considered different perspectives or different points of view, or addressed both positive and negative aspects
- smart, intelligent
- compassionate
- significant, important, practical, or meaningful ideas
APPENDIX C
STUDY 3 PRIDE AND HUMILITY QUESTIONNAIRE

To what extent do each of the following describe the way you feel right now? Use the following scale to rate your present level of agreement with each of the items below:

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Somewhat</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

I feel.....

- tense
- like I have accomplished
- talkative
- willing to see myself accurately, including my strengths and weaknesses
- like I am achieving
- able to see myself in perspective
- arrogant
- reserved
- conceited
- open to learning from other people
- confident
- full of energy
- egotistical
- lazy
- humble
- fulfilled
- like generating a lot of enthusiasm
- pompous
- relaxed
- aware of my place in the universe
- productive
- assertive
- like being quiet
- distracted
- like I have self-worth
- grateful
- smug
- shy, inhibited
- snobbish
- appreciative
- stuck-up
- outgoing, sociable
- successful
APPENDIX D
STUDY 3 MOTIVATION QUESTIONNAIRE

Please rate to what extent you agree or disagree with each of the following statements.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neither agree nor disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

- I am pretty skilled at writing.
- Birth control, except when recommended by a doctor, should be made illegal.
- I am motivated to improve my writing skills.
- Compulsory military training in peace-time is essential for the survival of this country.
- You can learn new things, but you can't really change your basic writing ability.
- I am very concerned about protecting the environment.
- You have a certain amount of ability at writing and you really can't do much to change it.
- I believe it is the responsibility of every citizen to vote.
- I don’t try very hard to do well at writing.
- Political candidates who stick up for their principles often fail to get elected.
- I put a lot of effort into writing.
- I support America’s involvement in the war in Iraq.
- I think writing essays is a boring activity.
- The dropping of the first atom bomb on a Japanese city, killing thousands of innocent women and children, was morally wrong and incompatible with our kind of civilization.
- I think writing is quite enjoyable.
- Morality can not be legislated.
- I would describe writing as very interesting.
- I’m very aware that I have a lot of progress to make before I am the best writer I can be.
- Many people are poor through no fault of their own.
- Writing essays is an activity that I can’t do very well.
- It is important to me to write well.
- Our courts often let the guilty go free while they convict innocent people.
- I am satisfied with my performance on the essay.
- Our treatment of criminals is too harsh; we should try to cure them, not punish them.
- I am still a long ways from being as good a writer as I would like to be.
- People are often victims of crime just because they were in the wrong place at the wrong time.
- I think I do pretty well at writing, compared to other students.
- The death penalty is barbaric, and should be abolished.
- Your writing skill is something about you that you can't change very much.
- The welfare of one nation inevitably affects the welfare of the rest of the world.
- Writing does not hold my attention at all.
Comparing Praise to Tangible Rewards. Although early research often characterized praise as a reinforcer, several reasons have been noted for framing praise differently. Delin and Baumeister (1994) noted that, if praise is a reinforcer, then by definition its main effect should be to increase behavior, yet it does not always have this effect nor is it always intended to (see also Henderlong & Lepper, 2002). Praise tends to convey more information about competence than tangible rewards do (Henderlong & Lepper, 2002; Deci, Koestner, & Ryan, 1999). Praise also tends to be less controlling (and therefore less autonomy-reducing) than tangible rewards are, perhaps partly because it is less salient and more often unexpected (Henderlong & Lepper, 2002; Deci, Koestner, & Ryan, 1999). In fact, praise generally seems to be taken by the recipient as non-controlling unless rather explicitly pressuring statements (e.g., pressuring the participant to continue to succeed) are added to the praise (Ryan, 1982; Pittman, Davey, Alafat, Wetherill, & Kramer, 1980). Praise may also be more likely to promote communal relationships whereas the giving of tangible rewards such as money might evoke a mindset of exchange relationships. According to Self-Determination Theory, intrinsic motivation should be facilitated in a context of relatedness and security (Ryan & Deci, 2000). Finally, praise has been found sometimes to produce different consequences than tangible rewards do; in particular, praise seems more consistently to enhance rather than undermine intrinsic motivation (noted by Delin & Baumeister, 1994; or for meta-analysis of findings see Deci, Koestner, & Ryan, 1999). Thus, praise does bear similarities to tangible rewards and sometimes produces similar effects, as has been emphasized by researcher such as Deci, Koestner, and Ryan (1999). However, labels such as “social reinforcement” or “verbal rewards” may be misleading if they obscure important potential differences between the nature, processes, and consequences of praise and tangible rewards.

Evidence regarding perceived competence as a mediator of motivation. By contrast, there does exist research examining possible mediators of the effect of tangible rewards (e.g., money) on motivation, partly stimulated by the debate over whether and under what conditions tangible rewards undermine intrinsic motivation. Monetary rewards for high performance has been found to increase participants’ perceived competence (e.g., Houlfort, Koestner, Nantel-Vivier, & Lekes, 2002), and perceived competence in turn has been found to mediate the effect of monetary reward on participants’ reported interest or enjoyment of the task (Eisenberger, Rhoades, & Cameron, 1999; Cameron, Pierce, Banko, & Gear, 2005). The fact that perceived competence has been found to mediate the effect of monetary rewards on self-reported intrinsic motivation suggests that perceived competence may also help to explain the motivating effect of praise. However, it is not clear that we can assume that praise motivates people in the same way that receiving money for meeting specified performance criteria motivates people.

Multiple Mediator Models. Preacher and Hayes (2007) have developed an SPSS macro for a multivariate delta method (using the products of coefficients strategy) with bootstrapping that enables analysis of multiple mediation. Analyzing the data of Studies 1a and 1b using this method confirms that both pride and humility mediated the effect of praise on motivation.
Furthermore, contrast tests of the indirect effect of humility versus the indirect effect of pride indicate no significant difference in the magnitude of their specific indirect effects, in Study 1a or in Study 1b, as evidence by the fact that the bias corrected and accelerated confidence intervals for the contrasts include zero and as evidence by the non-significant $p$ values (both $p$’s > .6).

4 Study 3 Experimenter errors. The experimenter gave one participant the same essay prompt for the second essay as for the first essay, and the experimenter failed to record the time for one participant’s second essay.

5 Study 3 Essay Ratings. Participants’ first essays were typed into text files and printed for the expert judge to rate. This was done to keep the expert judge blind to condition.

6 Study 3 Varying degrees of freedom due to controlling for individual differences. Although it is often considered ideal to keep the degrees of freedom parallel across analyses, I chose to control only for true covariates (individual differences measures that are correlated with the dependent measure) because doing so has the benefit of using up fewer degrees of freedom.

7 Study 3 Handling of outliers. Inspection of the data revealed the existence of two outliers (more than three standard deviations above the mean) for number of corrections made to the second essay (one outlier in each condition). In order that these outliers would not overly influence results, those two data points were brought down to the fence of three standard deviations above the mean before any analyses were conducted with the corrections variable. Results do not change when outliers are left in, however.

8 Relationship between pride and humility. In Studies 1a and 1b, humility and pride were positively correlated, $r(57) = .48, p < .001$, and $r(256) = .48, p < .001$. Study 3 utilized a pride measure which includes authentic pride and hubristic pride subscales (Tracy & Robins, 2007). Authentic pride is theorized to have more positive effects than hubristic pride. Consequently, I expected that only authentic pride, not hubristic pride, would be associated with humility in Study 3. I entered authentic pride and hubristic pride in a simultaneous regression predicting humility. Results revealed that authentic pride positively predicts humility, $t(70) = 7.27, \beta = .66, p < .001$, but hubristic pride does not, $t(70) = -1.44, \beta = -.13, p = .16$.

9 Relationship between gratitude and humility. In Studies 1a, 1b, and 3, self-reported gratitude was assessed using a two item (grateful and appreciative) scale. In Study 2, self-reported gratitude was assessed using the single item “grateful”. Self-reported gratitude was positive correlated with self-reported humility across all studies: Study 1a, $r(56) = .49, p < .001$, Study 1b, $r(258) = .52, p < .001$, Study 2, $r(50) = .85, p < .001$, Study 3, $r(73) = .64, p < .001$. 
APPENDIX F
STUDY 1A IRB APPROVAL, INFORMED CONSENT FORM

Florida State University
Office of the Vice President For Research
Human Subjects Committee
Tallahassee, Florida 32306-2742
(850) 644-3873 · FAX (850) 644-4392

APPROVAL MEMORANDUM

Date: 4/12/2006

To:
Anne Geyer
MC 1270

Dept.: PSYCHOLOGY DEPARTMENT

From: Thomas L. Jacobson, Chair

Re: Use of Human Subjects in Research Feedback Questionnaire II

The forms that you submitted to this office in regard to the use of human subjects in the proposal referenced above have been reviewed by the Secretary, the Chair, and two members of the Human Subjects Committee. Your project is determined to be Exempt per 45 CFR § 46.101(b) 2 and has been approved by an accelerated review process.

The Human Subjects Committee has not evaluated your proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. This approval does not replace any departmental or other approvals, which may be required.

If the project has not been completed by 4/9/2007 you must request renewed approval for continuation of the project.

You are advised that any change in protocol in this project must be approved by resubmission of the project to the Committee for approval. Also, the principal investigator must promptly report, in writing, any unexpected problems causing risks to research subjects or others.

By copy of this memorandum, the chairman of your department and/or your major professor is reminded that he/she is responsible for being informed concerning research projects involving human subjects in the department, and should review protocols of such investigations as often as needed to insure that the project is being conducted in compliance with our institution and with DHHS regulations.

This institution has an Assurance on file with the Office for Protection from Research Risks. The Assurance Number is IRB00000446.

Cc: Roy Baumeister
HSC No. 2006-0233
“FEEDBACK QUESTIONNAIRE II”
INFORMED CONSENT FORM

I freely and voluntarily and without element of force or coercion, consent to be a participant in the research project entitled “Feedback Questionnaire II”. This research is being conducted by Anne Geyer, who is a graduate student at Florida State University. I understand the purpose of her research project is to better understand how people recall responding to various experiences. I understand that if I participate in the project, I will be asked to recall a past experience and complete some questionnaires. The total time commitment would be about 30-35 minutes and I will be compensated by receiving ½ extra credit point for my time.

I understand that I must be 18 years of age to participate. I understand that I must also have participated in the Mass Testing survey at the beginning of the semester in my General Psychology class to be eligible to participate in this study. I understand that my responses in this study will be connected to the data from my participation in the mass testing survey. I understand that my participation is totally voluntary and I may stop participation anytime. If I decide to stop participation, I will still be entitled to the compensation. All my responses to the tasks will be anonymous and will not be tied back to me personally. My name will not appear on any of the results. No individual responses will be reported in any publication. Only group findings will be reported. All data, identified only by subject code number, will be stored in a locked file cabinet and will be destroyed by August 31, 2014. My participation in this project will remain confidential to the extent allowed by law.

I understand there is a possibility of a minimal level of risk involved if I agree to participate in this study. I am also able to stop my participation at any time I wish. By minimal risk it is just meant that I will be recalling a personal experience and writing about it. I understand that, while there are no foreseeable risks beyond that of typical psychological testing, if any discomfort should arise, the interview will be stopped at that moment. Also, if needed, or if concerns or questions are raised, help will be offered in the form of talking with the researcher or being offered help in contacting the university counseling center at 644-2003.

I understand that this consent may be withdrawn at any time without prejudice, penalty, or loss of benefits to which I am otherwise entitled. I have been given the right to ask and have answered any inquiry concerning the study. Questions, if any, have been answered to my satisfaction.

I understand that I may contact Anne Geyer, geyer@psv.fsu.edu, Florida State University, Department of Psychology, 102 Psychology Building, 645-1497 or Dr. Roy Baumeister, 102, Psychology Building, 644-4200, for answers to questions about this research or my rights. Group results will be sent to me upon my request. If I have questions about my rights as a subject/participant in this research, or if I feel I have been placed at risk, I can contact the Chair of the Human Subjects Committee, Institutional Review Board, through the Office of the Vice President for Research, at (850) 644-8633.

I understand that I may request and will receive a summary of the findings from this study and any other information that came out of the study, if I so desire. I may request this information by emailing the researcher at geyer@psv.fsu.edu.

I have read and understand this consent form.

(Signature)                                               (Date)
APPENDIX G
STUDY 1B IRB APPROVAL, INFORMED CONSENT FORM

Florida State University
Office of the Vice President for Research
Human Subjects Committee
Tallahassee, Florida 32306-2763
(850) 644-9673 - FAX (850) 644-4392

APPROVAL MEMORANDUM

Date: 8/25/2005
To: Anne Geyer
MC 1270

Dept.: PSYCHOLOGY DEPARTMENT

From: Thomas L. Jacobson, Chair

Re: Use of Human Subjects in Research Feedback Questionnaire

The forms that you submitted to this office in regard to the use of human subjects in the proposal referenced above have been reviewed by the Secretary, the Chair, and two members of the Human Subjects Committee. Your project is determined to be Exempt per 45 CFR § 46.101(b)(2) and has been approved by an accelerated review process.

The Human Subjects Committee has not evaluated your proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. This approval does not replace any departmental or other approvals, which may be required.

If the project has not been completed by 8/23/2006 you must request renewed approval for continuation of the project.

You are advised that any change in protocol in this project must be approved by resubmission of the project to the Committee for approval. Also, the principal investigator must promptly report, in writing, any unexpected problems causing risks to research subjects or others.

By copy of this memorandum, the chairman of your department and/or your major professor is reminded that he/she is responsible for being informed concerning research projects involving human subjects in the department, and should review protocols of such investigations as often as needed to insure that the project is being conducted in compliance with our institution and with DHHS regulations.

This institution has an Assurance on file with the Office for Protection from Research Risks. The Assurance Number is IRB00000446.

Cc: Roy Baumester
HSC No. 2005.615
"FEEDBACK QUESTIONNAIRE"
INFORMED CONSENT FORM

I freely and voluntarily and without element of force or coercion, consent to be a participant in the research project entitled "Feedback Questionnaire." This research is being conducted by Anne Geyer, who is a graduate student at Florida State University. I understand the purpose of his research project is to better understand how people are affected by situations in which someone praises them. I understand that if I participate in the project, I will be asked to complete some questionnaires. The total time commitment would be about 30 minutes and I will be compensated by receiving ½ extra credit point for my time.

I understand that I must be 18 years of age to participate. I understand that I must also have participated in the Mass Testing survey at the beginning of the semester in my General Psychology class to be eligible to participate in this study. I understand that my responses in this study will be connected to the data from my participation in the mass testing survey. I understand that my participation is totally voluntary and I may stop participation at anytime. If I decide to stop participation, I will still be entitled to the compensation. All my responses to the tasks will be anonymous and will not be tied back to me personally. My name will not appear on any of the results. No individual responses will be reported in any publication. Only group findings will be reported. All data, identified only by subject code number, will be stored in a locked file cabinet and will be destroyed by August 31, 2014. My participation in this project will remain confidential to the extent allowed by law.

I understand there is a possibility of a minimal level of risk involved if I agree to participate in this study. I am also able to stop my participation at any time I wish. By minimal risk it is just meant that I will be recalling a personal experience and writing about it.

I understand that this consent may be withdrawn at any time without prejudice, penalty, or loss of benefits to which I am otherwise entitled. I have been given the right to ask and have answered any inquiry concerning the study. Questions, if any, have been answered to my satisfaction.

I understand that I may contact Anne Geyer, geyer@psy.fsu.edu, Florida State University, Department of Psychology, 102 Psychology Building, 645-1497 or Dr. Roy Baumeister, 102, Psychology Building, 644-4200, for answers to questions about this research or my rights. Group results will be sent to me upon my request. If I have questions about my rights as a subject/participant in this research, or if I feel I have been placed at risk, I can contact the Chair of the Human Subjects Committee, Institutional Review Board, through the Office of the Vice President for Research, at (850) 644-8633.

I have read and understand this consent form.

(Signature) (Date)

(Name, Please Print)
APPENDIX H
STUDY 2 IRB APPROVAL, INFORMED CONSENT FORM

Date: 10/31/2006

To: Anne Zell
MC 4391

Dept.: PSYCHOLOGY DEPARTMENT

From: Thomas L. Jacobson, Chair

Re: Use of Human Subjects in Research
Picture Presentation Rating and Mood

The forms that you submitted to this office in regard to the use of human subjects in the proposal referenced above have been reviewed by the Human Subjects Committee at its meeting on 10/11/2006. Your project was approved by the Committee.

The Human Subjects Committee has not evaluated your proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. This approval does not replace any departmental or other approvals which may be required.

If the project has not been completed by 10/10/2007 you must request renewed approval for continuation of the project.

You are advised that any change in protocol in this project must be approved by resubmission of the project to the Committee for approval. The principal investigator must promptly report, in writing, any unexpected problems causing risks to research subjects or others.

By copy of this memorandum, the chairman of your department and/or your major professor is reminded that he/she is responsible for being informed concerning research projects involving human subjects in the department, and should review protocols of such investigations as often as needed to insure that the project is being conducted in compliance with our institution and with DHHS regulations.

This Institution has an Assurance on file with the Office for Protection from Research Risks. The Assurance Number is IRB00000446.

cc: Dianne Tice
HSC No. 2006.0898
“Picture Presentation Rating and Mood”
INFORMED CONSENT FORM

I freely and voluntarily and without element of force or coercion, consent to be a participant in the research project entitled “Picture Presentation Rating and Mood”. This research is being conducted by Anne Zell, who is a graduate student at Florida State University. I understand the purpose of her research project is to better understand how people recall responding to various experiences. I understand that if I participate in the project, I will be asked to view a picture presentation, complete questionnaires, and try out activities that may be used in future studies. The total time commitment would be about 30-35 minutes and I will be compensated by receiving ½ extra credit point for my time.

I understand that I must be 18 years of age to participate. I understand that my participation is totally voluntary and I may stop participation at anytime. If I decide to stop participation, I will still be entitled to the compensation. All my responses to the tasks will be anonymous and will not be tied back to me personally. My name will not appear on any of the results. No individual responses will be reported in any publication. Only group findings will be reported. All data, identified only by subject code number, will be stored in a locked file cabinet and will be destroyed by November 31, 2015. My participation in this project will remain confidential to the extent allowed by law.

I understand there is a possibility of a minimal level of risk involved if I agree to participate in this study. I am also able to stop my participation at any time I wish. By minimal risk it is just meant that I will be viewing a picture presentation and reporting my mood. I understand that, while there are no foreseeable risks beyond that of typical psychological testing, if any discomfort should arise, the interview will be stopped at that moment. Also, if needed, or if concerns or questions are raised, help will be offered in the form of talking with the researcher or being offered help in contacting the university counseling center at 644-2003.

I understand that this consent may be withdrawn at any time without prejudice, penalty, or loss of benefits to which I am otherwise entitled. I have been given the right to ask and have answered any inquiry concerning the study. Questions, if any, have been answered to my satisfaction.

I understand that I may contact Anne Zell, geyer@psy.fsu.edu, Florida State University, Department of Psychology, PDB 303, (850)645-7412, or Dr. Dianne Tice, PDB 424, for answers to questions about this research or my rights. If I have questions about my rights as a subject/participant in this research, or if I feel I have been placed at risk, I can contact the Chair of the Human Subjects Committee, Institutional Review Board, through the Office of the Vice President for Research, at (850) 644-8633.

I understand that I may request and will receive a summary of the findings from this study and any other information that came out of the study, if I so desire. I may request this information by emailing the researcher at geyer@psy.fsu.edu.

I have read and understand this consent form.

(Signature) (Date)

(Name, Please Print)
APPENDIX I
Study 3 IRB APPROVAL, INFORMED CONSENT FORMS

Florida State
University
Office of the Vice President For Research
Human Subjects Committee
Tallahassee, Florida 32306-2742
(850) 644-8633 - FAX (850) 644-4382

APPROVAL MEMORANDUM

Date: 2/26/2007

To: Anne Zell
MC 4391

Dept.: PSYCHOLOGY DEPARTMENT

From: Thomas L. Jacobson, Chair

Re: Use of Human Subjects in Research
Mediators of the Motivating Effect of Praise

The forms that you submitted to this office in regard to the use of human subjects in the proposal referenced above have been reviewed by the Human Subjects Committee at its meeting on 2/14/2007. Your project was approved by the Committee.

The Human Subjects Committee has not evaluated your proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. This approval does not replace any departmental or other approvals which may be required.

If the project has not been completed by 2/13/2008 you must request renewed approval for continuation of the project.

You are advised that any change in protocol in this project must be approved by resubmission of the project to the Committee for approval. The principal investigator must promptly report, in writing, any unexpected problems causing risks to research subjects or others.

By copy of this memorandum, the chairman of your department and/or your major professor is reminded that he/she is responsible for being informed concerning research projects involving human subjects in the department, and should review protocols of such investigations as often as needed to insure that the project is being conducted in compliance with our institution and with DHHS regulations.

This institution has an Assurance on file with the Office for Protection from Research Risks. The Assurance Number is IRB00009446.

cc: Dianne Tice, Shannon Young, Carolina Avila, Leslie Anderson
HSC No. 2007.074
"Learning and College Life"
INFORMED CONSENT FORM

I freely and voluntarily and without element of force or coercion, consent to be a participant in the research project entitled "Learning and College Life". This research is being conducted by Anne Zell, who is a graduate student at Florida State University. I understand the purpose her research project is to better understand how learning is affected by one’s social environment. I understand that if I participate in the project, I will be asked to write or evaluate essays and to fill out questionnaires. The total time commitment would be about 1 hour and 20 minutes, and I will be compensated by being entered into a raffle for $100.00. I understand that the winner of the raffle will be drawn on April 23, 2007, and that I will be notified by email if I have won.

I understand that I must be 18 years of age to participate. I understand that my participation is totally voluntary and I may stop participation at anytime. If I decide to stop participation, I will still be entitled to the compensation. All my responses to the tasks will be anonymous and will not be tied back to me personally. My name will not appear on any of the results. No individual responses will be reported in any publication. Only group findings will be reported. All data, identified only by subject code number, will be stored in a locked file cabinet and will be destroyed by June 30, 2015. My participation in this project will remain confidential to the extent allowed by law.

I understand there is a possibility of a minimal level of risk involved if I agree to participate in this study. I am also able to stop my participation at any time I wish. By minimal risk it is just meant that I will be writing my opinion and completing questionnaire about myself. I understand that, while there are no foreseeable risks beyond that of typical psychological testing, if any discomfort should arise, the interview will be stopped at that moment. Also, if needed, or if concerns or questions are raised, help will be offered in the form of talking with the researcher or being offered help in contacting the university counseling center at 644-2003.

I understand that this consent may be withdrawn at any time without prejudice, penalty, or loss of benefits to which I am otherwise entitled. I have been given the right to ask and have answered any inquiry concerning the study. Questions, if any, have been answered to my satisfaction.

I understand that I may contact Anne Zell, geyer@psy.fsu.edu, Florida State University, Department of Psychology, PDB 303, (850)645-7412, or Dr. Dianne Tice, PDB 424, for answers to questions about this research or my rights. If I have questions about my rights as a subject/participant in this research, or if I feel I have been placed at risk, I can contact the Chair of the Human Subjects Committee, Institutional Review Board, through the Office of the Vice President for Research, at (850) 644-8633.

I understand that I may request and will receive a summary of the findings from this study and any other information that came out of the study, if I so desire. I may request this information by emailing the researcher at geyer@psy.fsu.edu.

I have read and understand this consent form.

(Signature) (Date)

(Name, Please Print)
“Learning and College Life”
INFORMED CONSENT FORM

I freely and voluntarily and without element of force or coercion, consent to be a participant in the research project entitled “Learning and College Life”. This research is being conducted by Anne Zell, who is a graduate student at Florida State University. I understand the purpose of her research project is to better understand how learning is affected by one’s social environment. I understand that if I participate in the project, I will be asked to write or evaluate essays and to fill out questionnaires. The total time commitment would be about 1 hour and 20 minutes, and I will be compensated by receiving 1 ½ extra credit points for my time.

I understand that I must be 18 years of age to participate. I understand that my participation is totally voluntary and I may stop participation at anytime. If I decide to stop participation, I will still be entitled to the compensation. All my responses to the tasks will be anonymous and will not be tied back to me personally. My name will not appear on any of the results. No individual responses will be reported in any publication. Only group findings will be reported. All data, identified only by subject code number, will be stored in a locked file cabinet and will be destroyed by June 30, 2015. My participation in this project will remain confidential to the extent allowed by law.

I understand there is a possibility of a minimal level of risk involved if I agree to participate in this study. I am also able to stop my participation at any time I wish. By minimal risk it is just meant that I will be writing my opinions and completing questionnaires about myself. I understand that, while there are no foreseeable risks beyond that of typical psychological testing, if any discomfort should arise, the interview will be stopped at that moment. Also, if needed, or if concerns or questions are raised, help will be offered in the form of talking with the researcher or being offered help in contacting the university counseling center at 644-2003.

I understand that this consent may be withdrawn at any time without prejudice, penalty, or loss of benefits to which I am otherwise entitled. I have been given the right to ask and have answered any inquiry concerning the study. Questions, if any, have been answered to my satisfaction.

I understand that I may contact Anne Zell, geyer@psy.fsu.edu, Florida State University, Department of Psychology, PDB 303, (850)645-7412, or Dr. Dianne Tice, PDB 424, for answers to questions about this research or my rights. If I have questions about my rights as a subject/participant in this research, or if I feel I have been placed at risk, I can contact the Chair of the Human Subjects Committee, Institutional Review Board, through the Office of the Vice President for Research, at (850) 644-8633.

I understand that I may request and will receive a summary of the findings from this study and any other information that came out of the study, if I so desire. I may request this information by emailing the researcher at geyer@psy.fsu.edu.

I have read and understand this consent form.

(Signature) (Date)

(Name, Please Print)
REFERENCES


BIOGRAPHICAL SKETCH

Anne L. Zell (formerly Geyer) grew up in Tremont, IL. She earned a Bachelor of Arts dual degree in Psychology and Biblical Studies at Gordon College and a Master of Arts degree in Psychology at Case Western Reserve University. She has published theory on values with Bert Hodges, research on humility and social comparison with Julie Exline, and research on self-control with Brandon Schmeichel.