The Preference for Potential

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Abstract

When people seek to impress others, they often do so by highlighting individual achievements. Despite the intuitive appeal of this strategy, we demonstrate that people often prefer potential rather than achievement when evaluating others. Indeed, compared to references to achievement (e.g., “this person has won an award for his work”), references to potential (e.g., “this person could win an award for his work”) appear to stimulate greater interest and processing, which can translate into more favorable reactions. This tendency creates a phenomenon whereby the potential to be good at something can be preferred over actually being good at that very same thing. We document this preference for potential in laboratory and field experiments, using targets ranging from athletes to comedians to graduate school applicants and measures ranging from salary allocations to online ad clicks to admission decisions.

Who is more impressive: A graduating Ph.D. student described as having the potential to publish 10 articles in premier journals in her first three years as assistant professor, or a third-year assistant professor who actually has published those 10 articles? A rookie in a professional sports league who is projected to make the All-Star team in his second season, or a second year player who actually has made the All-Star team? An artist with the potential to win a prestigious award for his work, or one who actually has received that honor? Objectively, it seems reasonable to suggest that the second individual in each instance is more impressive. Indeed, he or she has achieved what the other individual has mere potential to achieve.

Consistent with this intuition, when people seek to promote or endorse others, they often do so by highlighting their personal achievements. When stumping for political allies, for instance, politicians frequently offer extended descriptions of those allies' records, linking their known achievements to their suitability for office. Likewise, when recommending their students for jobs or graduate school, letter writers tend to offer exacting detail about those students' prior experiences and notable accomplishments. Similarly, when talent agents promote their clients (e.g., athletes, actors, or comedians), they may be inclined to highlight those clients' past achievements (e.g., impressive statistics, theatre experience, or popularity); and in marketing settings, there is a widespread tendency for companies to highlight individuals' achievements as a means of attracting customers. Wineries, for example, go to lengths to prominently display honors bestowed upon their wine makers (e.g., "Recipient of the 2010 James Beard Award!").

On the face of it, these strategies seem sensible. Evidence of achievement should reduce uncertainty about a person's talent and boost confidence about his or her future success or high performance. Potential, on the other hand, is fraught with uncertainty by its very nature: an individual with high potential might achieve greatness, but very well might not. Because

potential leaves more room for doubt about a person's true talent or future outcomes, it stands to reason that achievement should be viewed as more impressive than otherwise equivalent potential, and should often be viewed as a stronger or more reliable indicator of future success.

Consistent with this reasoning, a considerable body of research—spanning a wide range of decision making contexts—suggests that uncertainty is frequently aversive and that people tend to prefer more subjectively certain options (e.g., Ellsberg, 1961; Fox & Tversky, 1995; Kahn & Sarin, 1988; Kahneman & Tversky, 1979; Kruglanski, 1989; Price & Stone, 2004; Sniezek & Van Swol, 2001; Taylor, 1974; Urbany, Dickson, & Wilkie 1989). Research on the "uncertainty effect," for instance, suggests that individuals sometimes perceive uncertain prospects to be worse than their worst possible instantiations (Gneezy, List, & Wu, 2006), and certainty about the mere existence of things has been shown to raise perceptions of their goodness and value (Eidelman, Crandall, & Pattershall, 2009). In fact, across many literatures, psychological certainty has been viewed as a positive experience that can prompt people into action. For example, consumer behavior research has revealed that people are willing to pay more and purchase sooner when they feel certain rather than uncertain about products and services (e.g., Greenleaf & Lehmann, 1995; Simmons & Nelson, 2006; Thomas & Menon, 2007; Wan, Rucker, Tormala, & Clarkson, 2010). In attitudes research as well, certainty has been viewed as a catalyst that transforms attitudes into action; for example, turning favorable attitudes toward a politician into votes for that politician (Tormala & Rucker, 2007).

Despite intuitive support for the value of achievement and empirical support for the value of certainty, is it possible that highlighting a person's achievements can be less effective or compelling than highlighting a person's mere potential to reach those achievements? We suggest that it can—that people often have a basic preference for potential rather than achievement when

evaluating others. Anecdotal examples of this preference abound. In professional sports, rookies with no playing experience receive multimillion dollar contracts and signing bonuses. In academic settings, new faculty members often receive disproportionately high salaries given their sparse publication records. In art and music contexts too, people often express the most enthusiasm for artists and musicians who are new to the scene and could—but have not yet—become the next big thing. Accordingly, we propose that (as yet) untapped potential can be perceived as more interesting and ultimately better than demonstrated achievement, creating a phenomenon whereby the potential for X is valued more than X itself.

Of course, there are cases in which potential might be a better "bet" than achievement. For example, a record producer or sports team owner might prefer a new prospect with potential to be great because he or she can invest in that prospect at a lower cost and secure a greater return-on-investment if indeed greatness is achieved. Moreover, it might be rational to bet on potential if there is a chance that the target individual will somehow exceed people's already high expectations. We hypothesize, however, that even after equating past, present, and anticipated future performance, merely framing a person's merits in terms of potential ("this person could become a leader in the field") as opposed to achievement ("this person has become a leader in the field") can make that person seem more interesting, talented, and valuable.

The Preference for Potential

Why would potential be favored over achievement even when the level of expected versus observed performance is equated? We postulate that potential is more interesting and engaging than achievement precisely because it is less certain and more ambiguous. Indeed, considerable research has revealed that relative to certainty, uncertainty can sometimes stimulate greater interest and involvement, and ultimately deeper processing (e.g., Gal & Rucker, 2010;

Maheswaran & Chaiken, 1991; Tiedens & Linton, 2001; Tormala & Rucker, 2007). The logic is that when people feel uncertain, they often seek to resolve that uncertainty, and greater processing of available information can be an effective means of doing so (e.g., Chaiken, Liberman, & Eagly, 1989; Petty & Cacioppo, 1986). When the available information is favorable—for example, it brings positive thoughts to mind—the result is a more favorable attitude, impression, or feeling. Thus, we suggest that the uncertainty surrounding individuals with high potential makes them more interesting, which draws people in, increases processing, and can have positive downstream effects on judgment.

Consistent with this hypothesis, recent evidence from a variety of domains suggests that people sometimes respond more favorably to things that are uncertain. For instance, uncertainty about positive events can intensify and prolong positive feelings (e.g., Bar-Anan, Wilson, & Gilbert, 2009; Lee & Qiu, 2009; Wilson, Centerbar, Kermer, & Gilbert, 2005). Similarly, expressed uncertainty in a persuasive message can sometimes give that message more impact. For example, Karmarkar and Tormala (2010) demonstrated that when expert sources explicitly expressed uncertainty (versus certainty) about their recommendations, those recommendations were processed more deeply and could be more persuasive. In a dating context, Norton, Frost, and Ariely (2007) observed that uncertainty could be surprisingly alluring, finding that people liked prospective mates more when they knew less about them. Finally, in consumer research, some evidence suggests that uncertain events, discounts, promotions, and product launches can elicit deeper processing, more excitement, and increased purchasing relative to more certain ones (Dhar, Gonzales-Vallejo, & Soman, 1999; Goldsmith & Amir, 2010; Grant & Tybout, 2008; Vosgerau, Wertenbroch, & Carmon, 2006). Vosgerau et al. (2006), for instance, found that

people prefer live television to tape-delayed broadcasts, because live TV has an indeterminacy that makes it more exciting.

Overview

In short, although an extensive body of work attests to the aversive nature of uncertainty in decision-making settings, a growing literature suggests that in some contexts uncertainty can be more engaging—and alluring—than certainty. Our studies extend this core logic to the preference for potential. We propose that compared to references to achievement (e.g., "this candidate has published 10 papers" or "this artist has won an award"), the relative uncertainty surrounding references to potential (e.g., "this candidate could publish 10 papers" or "this artist could win an award") can stimulate greater interest and ultimately more favorable reactions.

We present 8 experiments investigating this preference for potential. Experiments 1 and 2 seek to demonstrate the basic effect in two different domains—sports and leadership assessments—using a between-participants design. Experiments 3 and 4 explore the effect in the context of hiring decisions and art evaluations, and shift the design to a within-participants paradigm in which people directly compare two individuals: one with high achievement and another with high potential. Experiment 5 is a field study on a popular social networking website, allowing us to (A) run online advertisements highlighting a real comedian's achievement or potential, and (B) track actual consumers' responses to those ads. Experiment 6 follows up on the results of the field study and demonstrates that participants self-report the same behavior they spontaneously display in Experiment 5. Finally, Experiments 7 and 8 explore the preference for potential in two novel contexts (graduate school admissions and restaurant reviews) and test the effect of potential versus achievement on information processing. Across studies, we uncover a robust preference for potential, identify some of its boundary conditions,

and provide convergent evidence for mechanism. In sum, we demonstrate that potential feels more uncertain (Experiment 4), stimulates greater interest (Experiments 5-6), and motivates deeper processing (Expermiments 7-8) than does otherwise equivalent achievement.

Experiment 1

Experiment 1 was designed to provide an initial test of the preference for potential. We presented participants with information about a hypothetical NBA (National Basketball Association) player's potential or achievement and explored the effect of that information on participants' perceptions of the player's talent and value. We equated the objective content of the player's potential versus achievement, making the manipulation purely one of anticipated versus actual performance, which enabled us to test the hypothesis that potential to be a good player is valued more than actually being a good player.

Method

Seventy-five undergraduates were asked to imagine that they were managing a team in the NBA and were considering offering a contract to a particular player.[1] The player was described as having had a very good college career playing the Forward position at Duke University, known for its high-caliber basketball program. All participants then received favorable scouting reports containing the following statistics for the player's first five years in the NBA: 11.1 (3.4), 12.4 (4.1), 13.5 (5.2), 14.7 (5.6), and 15.1 (6.2) points (rebounds) per game during years 1 through 5.

Importantly, all participants received the exact same statistics, and they were explicitly informed that these statistics would be considered good in the NBA. According to random assignment, however, the player had already achieved those statistics or merely had the potential to do so. In the *achievement condition*, the player was described as having been in the NBA for

5 years and, ostensibly, five years of actual NBA statistics were presented. In the *potential condition*, the player was described as an incoming player from college and identical statistics over 5 years were presented as performance projections. In essence, then, participants considered a 5-year NBA veteran or an incoming rookie, though the words "veteran" and "rookie" never appeared in the study.

Following the manipulation of potential versus achievement, participants completed a series of dependent measures. First, participants reported the salary they would be willing to pay the player in his *sixth season* in the NBA. We asked about the sixth season to equate the ages of the players and remove any additional confounds between rookies and veterans. Willingness-to-pay was reported on a 0-10 scale, where the unit change for each scale-point was $1,000,000. Next, we assessed performance expectations by asking participants to estimate how many points-per-game the player would average in his sixth season. This item was open-ended and asked participants to type a number in a space provided on the computer screen. Finally, participants were asked to assess how likely the player would be to make the NBA All-Star team at some point in his career (1 [very unlikely] – 7 [very likely]).

Results and Discussion

Each measure revealed the predicted preference for potential. First, participants were willing to pay a higher sixth-year salary in the potential (M = $5.25M, SD = 2.16) rather than achievement (M = $4.26M, SD = 1.93) condition, $t(73) = 2.10$, $p < .04$. Similarly, participants estimated a marginally higher sixth-year scoring average in the potential (M = 17.45, SD = 3.21) rather than achievement (M = 16.18, SD = 2.63) condition, $t(69) = 1.83$, $p = .072$.[2] Finally, participants perceived a greater likelihood of making the all-star team in the potential (M = 4.47, SD = 1.19) rather than achievement (M = 3.81, SD = 1.28) condition, $t(73) = 2.26$, $p < .03$.

In short, Experiment 1 revealed a preference for potential in participants' assessments of an individual's talent and value. Indeed, because the incoming rookie's 5-year predictions exactly matched the veteran's 5-year achievements, the results are compatible with the notion that potential success is favored over actual success. As a caveat to drawing this conclusion, however, it could be that our participants were familiar with the excessive hype that often accompanies rookies in the sports arena, and simply responded based on what they believed a typical general manager of an NBA team would do. Alternatively, perhaps because we selected for participants who self-reported having at least some knowledge about NBA basketball (see Footnote 1), we inadvertently capitalized on perceiver competence by creating a situation in which participants felt more confident betting on a less certain target than they normally would (see Heath & Tversky, 1991). If true, perhaps the preference for potential would not emerge in a context in which participants had less pre-existing knowledge. The next experiment was designed with these issues in mind.

Experiment 2

In Experiment 2, we sought to provide a basic replication of the preference for potential in a different context. In particular, we tested the effect in a hiring context in which people naturally might weight experience quite heavily, and in which there was no reason to believe that participants had any pre-existing knowledge or competence. Specifically, participants considered one of two hypothetical job candidates. The candidates' backgrounds and qualifications were identical with one key exception: one had 2 years of relevant experience and scored highly on a test of leadership achievement, whereas the other had 0 years of experience but scored highly on a test of leadership potential.

Method

Eighty-four participants, recruited through a nationwide database for an online experiment, received information about an applicant for a Division Leader position in the banking division of a large company. All participants learned that the applicant received a B.A. in 2004 from Cornell University, majored in Economics with a 3.82 GPA, and earned an M.B.A. from New York University in 2008. In the *achievement condition*, the applicant was then described as having 2 years of relevant banking experience and recently receiving a score of 92/100 on a test called the "2-Year SRI Assessment of Leadership Achievement." In the *potential condition* the applicant was described as having 0 years of relevant banking experience and recently receiving a score of 92/100 on a test called the "2-Year SRI Assessment of Leadership Potential." In each condition, a brief description indicated that the test assessed the applicant's "observed" (achievement) or "predicted" (potential) leadership performance two years into his career. Thus, the focus was on year-2 performance in each case, but we varied whether it was observed or predicted.

Following this information, participants evaluated the applicant. Specifically, they rated how successful the applicant would be in his career (1 [not successful at all] – 9 [extremely successful]) and how well he would perform as a leader by his 5th year at the company (1 [very bad] – 9 [very good]). We included the latter item to provide a strong test of our hypothesis: The applicant in the achievement condition had a two-year head start (i.e., 2 years of experience) and, thus, would be in the seventh year of his career by year-5 at the company. In contrast, the individual in the potential condition would be in the fifth year of his career by year-5 at the company. The second item therefore allowed us to assess whether participants believed the

individual with potential would outpace the individual with achievement, providing an indirect measure of perceived talent.

Results and Discussion

As hypothesized, participants believed the applicant would be more successful in the potential (M = 7.20, SD = .93) rather than achievement (M = 6.65, SD = 1.42) condition, $t(82) = 2.13$, $p < .04$. Similarly, they expected better leadership performance by year-5 in the potential (M = 7.73, SD = 1.00) rather than achievement (M = 7.10, SD = 1.58) condition, $t(82) = 2.20$, $p < .04$. Thus, even in a context in which the person with potential was objectively less qualified than the person with achievement (having less prior experience), potential was favored. Moreover, in their year-5 predictions, participants' ratings essentially indicated that they believed the applicant in the potential condition would perform better by the fifth year of his career than the applicant in the achievement condition would by the seventh year of his. This result speaks to the power of potential, especially considering that our manipulation in Experiment 2 simply varied the name of a leadership test taken by a hypothetical job applicant.

Experiment 3

Experiment 3 had two primary objectives. First, we explored whether the preference for potential would emerge in a joint (or within-participant) evaluation task—that is, in a situation in which participants simultaneously evaluated two individuals, one with high potential and another with high achievement. It could be that in a joint evaluation paradigm, the objective advantage of an individual with high achievement would be more salient and thus outweigh whatever interest is piqued by high but uncertain potential. In contrast to this idea, we predicted that even though people would recognize that a high achievement target has a more objectively impressive resume at present (an intuition that we directly test in Experiment 3), they would still prefer and be more

subjectively drawn to—for instance, be more interested in hiring—an individual with high potential.

In addition to testing the preference for potential in a joint evaluation paradigm, we examined two alternative accounts for our findings thus far. First, it is possible that what we have interpreted as a preference for potential is actually an extremity effect such that, due to the uncertainty surrounding a person with high potential, people evaluate individuals with potential both more positively and more negatively. That is, perhaps people see both positive and negative extremes as more likely for individuals with potential. If true, the effect we observe might not reflect an actual *preference* for potential, but rather an expectation of more dramatic highs and lows from individuals with mere potential. It is therefore possible that we captured only the high, or positive, end of this effect in the first two studies because our measures only invited or emphasized positive reactions. Although we find this account to be interesting and acknowledge that increased variability in future predictions might play a role in our findings, we submit that the preference for potential is not a mere artifact of a more general extremity effect. Instead, we posit that the uncertainty surrounding potential is inherently interesting and provocative, which stimulates processing activity. If the available information is favorable, this should translate into more favorable—but not necessarily more unfavorable—reactions. We examined this issue by including both positively- and negatively-framed measures in Experiment 3.

Second, it is possible that the effects observed in Experiments 1 and 2 reflect a pro-youth bias, whereby people simply prefer youth to more aged veteran status. In each of the first two studies, the target person could have been viewed as younger in the potential rather than achievement condition. In Experiment 1 this was explicitly the case, and in Experiment 2 it may have been inferred from the individuals' background experience (2 versus 0 years). To assess

youth perceptions as a possible explanation for our findings, we explicitly provided age information in Experiment 3—making the individual in the potential condition very close in age to the individual in the achievement condition—and later asked participants to report how young or old they thought the target individuals were. We expected to find that the preference for potential could not be explained by differences in perceived age.

Method

Seventy-seven participants were recruited through a nationwide database for an online experiment that was modeled after the procedure used in Experiment 2. The opening instructions indicated that participants would receive information about one or more applicants for a managerial position at a large company. When they continued, participants received information about two applicants—Applicant A and Applicant B—displayed side by side on the computer screen. Background information was provided for each applicant, including their sex (male), date of birth (and thus age), education, and internship experience. This information was designed to be roughly equivalent across applicants (see Appendix A).

Of greatest import, we also provided participants with a summary of the applicants' job testing scores. Specifically, participants received each applicant's scores on ostensible tests of leadership achievement (the "Leadership Achievement Inventory") and leadership potential (the "Assessment of Leadership Potential"). Brief descriptions of these tests accompanied the scores, indicating that the achievement test assessed candidates' observed leadership performance at their current career stage, whereas the potential test assessed predicted leadership performance in the near future. To vary which applicant was more potential- or achievement-oriented, we structured the test scores such that one applicant was high (96/100) in potential but more moderate (83/100) in achievement, whereas the other was high (96/100) in achievement but more

moderate in potential (83/100). We used moderate rather than low scores for the worse test performance to place the emphasis on the dimension along which each applicant excelled rather than the dimension along which each applicant was lacking. Also important, we ran counterbalanced versions such that the background information (date of birth, education, and internships) accompanying the high potential versus high achievement applicant varied according to random assignment.

Immediately below the information about the applicants on the same screen, participants completed a series of dependent measures. First, to provide a general assessment of favorable expectations, we asked 3 questions about each applicant: If you were a manager at the company in question, how interested would you be in hiring Applicant A (Applicant B)? How successful do you think Applicant A (Applicant B) will be in his career? Would hiring Applicant A (Applicant B) at the company be a good decision or a bad one? Responses to these items, provided on scales ranging from 1 to 9 with higher values indicating more favorable assessments, were highly consistent for both Applicant A ($\alpha = .88$) and Applicant B ($\alpha = .90$), so we averaged them to form composite indices for each.

Following the favorable assessments, participants also evaluated the applicants along 2 negative dimensions and perceived age. To assess negative reactions, we asked participants to indicate the likelihood that each applicant "would turn out to be a failure (i.e., a bust)" and to estimate the chances that each applicant "would be a disappointment in the long run." Responses to these items were provided on scales ranging from 1 (not likely at all, very low) to 9 (very likely, very high) and were correlated for both Applicant A ($r = .77$, $p < .001$) and Applicant B ($r = .72$, $p < .001$). Thus, we averaged them to form composite indices of negative expectations for

each applicant. Following the negative assessments, participants indicated how young or old they believed each applicant was on a scale ranging from 1 (very young) to 9 (very old).

Finally, we included 2 relative assessments directly comparing Applicant A and Applicant B. These items asked participants to report which applicant would perform better by his 5th year at the company and which applicant had a more objectively impressive resume at present. The latter item essentially acted as a manipulation check, allowing us to test the intuition that someone with a record of achievement seems normatively or technically more accomplished at the current moment in time. Responses to these questions were provided on continuous scales ranging from 1 (definitely Applicant A) to 9 (definitely Applicant B).

Results and Discussion

We began our analysis by submitting participants' favorable assessments of each applicant to a 2 (Applicant: A [potential] or B [achievement]) × 2 (Counterbalancing condition) mixed ANOVA, with applicant and counterbalancing condition as within- and between-participant factors, respectively. This analysis revealed a main effect for applicant, F (1, 74) = 4.13, $p < .05$, such that the applicant with potential (M = 7.74, SD = .83) was viewed more favorably than was the applicant with achievement (M = 7.56, SD = .90). There was no main effect for counterbalancing condition, F (1, 74) = 1.77, $p > .18$, and no interaction, $F < 1$.

Next, we submitted participants' negative assessments to analysis. Here we found no effect of applicant, $F < 1$, and no effect involving the counterbalancing factor, Fs < 1.82, ps > .18. Across conditions participants viewed the applicant with potential (M = 2.92, SD = 1.26) and the applicant with achievement (M = 3.00, SD = 1.46) as equally unlikely to fail or be a disappointment. We also found no difference between the high potential (M = 3.58, SD = 1.21)

and high achievement (M = 3.82, SD = 1.68) applicants in perceived age, F (1, 74) = 2.42, p > .12, and no effects involving counterbalancing condition on this measure, Fs < 1.92, ps > .17.

Finally, we examined participants' relative assessments of the applicants' future performance by year 5 and current resume impressiveness. First, there were no differences across counterbalancing conditions on either of these responses, Fs < 1. More importantly, participants generally expected the applicant with potential (Applicant A) to outperform the applicant with achievement (Applicant B) by his 5th year at the company, as indicated by a grand mean on this item that was significantly below the scale midpoint of 5 (M = 4.45, SD = 1.98; t [76] = -2.42, p < .02). On the other item, assessing perceptions of whose resume was more objectively impressive at present, the opposite preference emerged. In this case, participants rated the applicant with achievement more highly, as indicated by a grand mean that was significantly *above* the midpoint of 5 (M = 5.70, SD = 1.66; t [76] = 3.70, p < .001).

In summary, we found that although participants recognized that the individual with achievement was more objectively impressive on paper, they showed a general *preference* for potential in their hiring decisions and assessments of future success. To be sure, the effect was modest, which could be expected given the joint-evaluation paradigm we employed. Moreover, the 2 applicants were very similar in their background and qualifications; therefore, any differences emerging in perceptions of them were likely to be slight. Nonetheless, this difference did emerge and it reflected a preference for potential. Importantly, this effect was observed on favorable dimensions but failed to emerge on negative dimensions or age assessments. Thus, we found no support for the notion that the preference for potential stems from participants giving more extreme ratings (in both directions) to potential, nor for the notion that it reflected a youth bias.

Experiment 4

In Experiment 4, we conducted a joint evaluation (within-participant) study in a different domain: art. Participants in this study viewed 2 paintings, ostensibly from two different artists, and expressed their preference between them in a series of forced (dichotomous) choices. In addition to replicating the preference for potential in another context, this experiment had several key goals. First, we sought to address competing accounts for the effect revolving around time perspective and optimistic biases. Consider time perspective. Past research suggests that people sometimes make surprisingly confident predictions of future outcomes based on limited present information (e.g., Kahneman & Tversky, 1973). Perhaps the inherent future orientation of potential uniquely aligns it with making future predictions, thus fostering an apparent preference for potential rather than achievement. In other words, it could be that performance *predictions* are pre-packaged to favor descriptions of potential, which also focus on future outcomes.

A related interpretation of the results from the first few experiments might be that the preference for potential stems from optimistic biases, such as the belief that high expectations will one day be exceeded. Previous research attests to the fact that people can be remarkably optimistic about the future, even in the face of negative information (e.g., Taylor & Brown, 1988; see also Massey, Simmons, & Armor, 2011). In the present context, perhaps people are simply optimistic and believe that a person with potential might one day exceed that potential and perform even better than expected. If true—that is, if the ceiling or upper bound on performance is believed to be higher in the case of potential as opposed to achievement—the preference for potential could actually reflect a preference for someone who might be great (e.g., a 10 out of 10) over someone who definitely is good (e.g., an 8 out of 10). This would still reflect a preference for potential, but the underlying mechanism would be different from the uncertainty

and processing account we have proposed. Although we assume optimistic biases could sometimes contribute to the preference for potential, we submit that the effect can emerge even when those biases are inoperative or inapplicable to the particular evaluation requested.

We addressed these issues in Experiment 4 by asking participants to consider two pieces of art—and the artists who created them—after learning that one had high potential and the other had high achievement. To remove the future focus from our measures and also render optimism, exceeded expectations, and differential upper bounds untenable as interpretations of any preferences observed, we assessed participants' *current* feelings about (i.e., liking for) the art and artists rather than their future predictions or performance or outcome expectations. In accord with our uncertainty and processing account, but inconsistent with the future-focus and optimism accounts, we hypothesized that we would observe the preference for potential despite these changes. By asking participants to report their liking of the artwork itself, we also extended the range of objects to which the preference for potential applies. In this case, the predicted finding would suggest that even *static objects* that cannot change or improve over time can be preferred when they are associated with potential rather than achievement.

Finally, in Experiment 4 we assessed whether potential is perceived to be less certain than achievement, as hypothesized, and we assessed possible a boundary condition on the effect. Each of our first few experiments has shown that potential can outweigh achievement when the level of expected and observed performance is equated. We suspect that it is under these conditions that the uncertainty elicited by potential can have a positive effect. When potential is both lower and less certain than achievement, we would not expect the preference for potential to emerge. Particularly in a joint evaluation task in which participants have all of the information available about both individuals, we expect potential to have limits. In essence, the potential to

be good is unlikely to be evaluated more favorably than actually being great. To explore this possible boundary, we included two conditions in Experiment 4: one in which the choice was between an artist who had the potential to win one award versus an artist who actually had won that award, and another in which the choice was between an artist who had the potential to win one award versus an artist who actually had won *four* awards. We expected to observe the preference for potential in the 1:1 comparison condition—as in the previous experiments—but predicted that this preference would attenuate in the 1:4 comparison condition.

Method

Ninety-two participants, recruited through a nationwide database for an online experiment, were informed that they would be asked to look at two paintings, read some information about the artists (whose identities were anonymized), and then answer some questions. Participants then clicked "continue" and viewed 2 paintings presented side by side on the computer screen. The painting on the left, associated with potential, had the following caption: "Painter Name: Artist M. Painter Age: 31. The painting above was completed in 2011, and many critics felt that the artist had the potential to win a major award in the art community – the Freddleston Prize – in 2012." The painting on the right was associated with achievement. In the *one-award* condition, its caption read: "Painter Name: Artist N. Painter Age: 30. The painting above was completed in 2010, and won a major award in the art community – the Freddleston Prize – in 2011." In the *four-awards* condition, the caption was identical, with the addition of one sentence: "Artist N also won three previous Freddleston Prizes."

Immediately after viewing the paintings, participants answered three forced-choice questions assessing their general preference for one painting/artist or the other: Which painting do you like better, the one by Artist M (on the left) or the one by Artist N (on the right)? Which

do you think you would like more, other paintings by Artist M, or other paintings by Artist N? Who do you have a more favorable gut reaction to, Artist M or Artist N? Participants responded to each question by clicking either Artist M (potential) or Artist N (achievement).[3]

Following these general preference items, participants reported uncertainty (Which artist do you feel more uncertain about?) and indicated which artist had a more objectively impressive resume (At present, who has the more objectively impressive resume?), in each case by clicking on either Artist M or Artist N. The uncertainty and "objectively impressive" measures essentially served as manipulation checks—allowing us to test the proposition that despite recognizing that a resume with achievement is objectively more impressive at present (and less uncertain) than one with mere potential, people still gravitate toward potential in assessing and expressing their preferences. Finally, to further eliminate perceived age as an alternative account, participants were asked to indicate the age of each artist in an open-ended free response format.

Results and Discussion

To create a composite index of participants' preferences, we tallied the number of times each participant chose the painting/artist with potential as opposed to achievement. We then classified each participant as having a preference for potential or achievement based on whether he or she showed a tendency to choose the painting/artist with potential or achievement a majority of the time. In short, if a given participant selected the artist/painting with potential on 2 or 3 of the general preference items, he or she was categorized as favoring potential. If, on the other hand, a participant selected the artist/painting with *achievement* on 2 or 3 of the general preference items, he or she was categorized as favoring achievement. As hypothesized, we found a general preference for potential across conditions: Overall, 56 participants (61% of the sample) favored potential more often than achievement, whereas 36 participants (39% of the sample)

favored achievement more often than potential, χ^2 (1) = 4.35, $p < .04$. This effect held in the one-award condition—in which 30 participants (65%) favored potential and 16 (35%) favored achievement, χ^2 (1) = 4.26, $p < .04$—but was attenuated in the four-award condition, in which 26 (57%) favored potential and 20 (43%) favored achievement, χ^2 (1) = .78, $p > .37$.

In contrast to the preference items, the uncertainty and impressive-resume items showed robust effects that did not attenuate in the four-award condition. Overall, participants felt more uncertain about the artist with potential rather than achievement, χ^2 (1) = 12.57, $p < .001$. Specifically, 63 participants (68%) indicated that they felt more uncertain about the artist with potential, whereas 29 participants (32%) felt more uncertain about the artist with achievement. This effect held in both the one-award condition—in which 31 participants (67%) chose potential and 15 (33%) chose achievement, χ^2 (1) = 5.57, $p < .02$—and the four-award condition, in which 32 (70%) favored potential and 14 (30%) chose achievement, χ^2 (1) = 7.04, $p < .01$. Conversely, on the resume item, there was an overwhelming tendency across conditions to find achievement (71 participants, or 78%) more objectively impressive than potential (20 participants, or 22%; note that 1 participant did not complete this item so the total sample size is reduced by 1 here), χ^2 (1) = 28.58, $p < .001$. Not surprisingly, this tendency was observed in the one-award condition (11 [24%] chose potential, 35 [76%] chose achievement, χ^2 [1] = 12.52, $p < .001$) and slightly strengthened in the four-award condition (9 [20%] chose potential, 36 [80%] chose achievement, χ^2 [1] = 16.20, $p < .001$).

Finally, because we had continuous measures of perceived artist age, we submitted these estimates to a 2 (Artist: M [potential] or N [achievement]) × 2 (Awards: one award or four awards) mixed ANOVA, with artist and awards condition as within- and between-participant factors, respectively. Unsurprisingly given that we gave participants age information for each

artist, this analysis revealed no difference in the perceived age of the artist with potential (M = 29.79, SD = 6.51) versus achievement (M = 30.86, SD = 7.54), F (1, 90) = 2.37, p = .127, and no effects involving the number of awards won by the high achievement artist, Fs < 1.

In short, using a joint evaluation paradigm with a forced choice measure, we found that participants preferred an artist and painting (e.g., liked them more) when they were associated with potential rather than achievement. This preference coincided with feelings of uncertainty about the artist with potential, and emerged despite the overwhelming perception that the artist with achievement had a more objectively impressive resume at present. Importantly, however, the preference for potential was not so powerful that it overcame substantially better achievement. When the high achievement artist had won four awards, the preference for potential was reduced. Interestingly, it did not reverse in this study (the tendency was still in the direction of the preference for potential), suggesting that there might have been competing influences at work: the interest generated by uncertain potential on the one hand and overwhelmingly greater accomplishment on the other.

In any case, the null effect in the four-award condition is important in speaking to another possible account for the preference for potential. Based on most of our findings to this point, it is reasonable to ask whether our effects are domain specific—for example, occurring only when people want to "get in on the ground floor," be "in the know," or have (or discover or hire) the "hot new thing." Although in theory this motive could contribute to a preference for potential, and would be interesting in its own right given the operationalizations of potential in our studies, it is unclear why the effect would disappear in the four-award condition if participants simply were gravitating toward the undiscovered, niche, or obscure yet "cool" option. In fact, it seems

plausible that the effect would be even stronger in the four-award condition if it were driven by this desire.

Experiment 5

In Experiment 5, we aimed to provide further evidence for the robustness of the preference for potential and initial evidence for the notion that potential can pique greater interest than achievement. To accomplish these goals, we conducted a field experiment using real advertisements in Facebook, a popular social networking website. More specifically, we ran ads in Facebook promoting a real comedian, framed those ads in potential or achievement terms, and tracked ad engagement. As background, when a Facebook user is logged into the website, ads appear on the right side of the screen. At the time of our study, there were two actions Facebook users could take in response to an individual ad: they could click on the ad to visit another page and receive more information, or they could "fan" it, suggesting that they like the ad or the advertised item. In essence, clicks and fans map onto interest and liking: two key metrics of ad engagement (Cho, 2003) and two central constructs in the current research. We predicted that ads framed in potential terms would generate more clicks and fans than otherwise equivalent ads framed in achievement terms.

Method

We ran our ad campaign in Facebook for a period of 8 days. Participants were Facebook users over the age of 18 and living in California. During the course of our experiment, we ran ads each day and recorded the number of impressions (total number of times each ad was shown), clicks, and fans that each ad received. This allowed us to compute click-rates (clicks/impressions) and fan-rates (fans/impressions). Our advertisements promoted a real comedian named Kevin Shea who was growing in popularity at the time of our study and who

had just launched a fan page on Facebook. They included the heading "Kevin Shea FanPage," a picture of the comedian, and a tagline that contained our manipulation (see Appendix B for sample ads from our study). Clicking on any part of the ad constituted a "click" and directed an individual to the fan page. To become a fan, an individual had to click directly on a link labeled "become a fan" beneath the ad.

In creating our ads, we adapted two well-known persuasion strategies: appeals to source credibility and appeals to social proof (Cialdini, 2009; Goldstein, Cialdini, & Griskevicius, 2008; Petty & Wegener, 1998). Within each strategy we ran one ad with a potential frame and another with an achievement frame, resulting in a 2 (appeal type: source credibility or social proof) × 2 (frame: potential or achievement) design. In the source credibility appeal, the tagline was either "Critics say he has become the next big thing" (achievement frame) or "Critics say he could become the next big thing" (potential frame). In the social proof appeal, the tagline was either "Everyone is talking about Kevin Shea" (achievement frame) or "By this time next year, everyone could be talking about Kevin Shea" (potential frame). Although we were unable to control the number of times each ad was shown (or whether any recipients saw more than one of the ads), by the end of the study we had an adequate number of total impressions from which to compute click- and fan-rates. Specifically, we had 1,037,091 total ad impressions with the following breakdown: credibility/achievement = 322,424, credibility/potential = 275,601, social proof/achievement = 8,425, social proof/potential = 430,631.

Results and Discussion

Because we ran 4 different ads on each of 8 days, we had 32 total observations, where each observation provided both a click-rate and a fan-rate. Thus, we submitted these indices to separate 2 × 2 ANOVAs, controlling for day (1-8) as a random factor. Analysis of the *click-rate*

data revealed two significant effects, shown in Figure 1 (top panel). Most importantly, potential framing (M = .049%) generated a higher click-rate than achievement framing (M = .015%; F [1, 7.22] = 59.18, $p < .0001$). Source credibility appeals also produced higher click-rates (M = .045%) than social proof appeals (M = .019%; F [1, 9.55] = 384.66, $p < .0001$), but we caution against interpreting this effect as it is based on two very different instantiations of these kinds of appeals. Of greater interest, there was no interaction, $F < 1$, suggesting that potential-framing outperformed achievement-framing for both appeal types. The *fan-rate* data (Figure 1, bottom panel) revealed only a main effect of frame. For both source credibility and social proof appeals, potential framing produced higher fan-rates (M = .016%) than achievement framing (M = .003%; F [1, 7.29] = 11.27, $p < .02$). In this case, there were no effects involving appeal type, Fs < 1.[4]

By conducting this study in a real advertising context and assessing both ad interest (click-rate) and liking (fan-rate), Experiment 5 showed that the preference for potential has implications for real-world behavior. Indeed, both source credibility appeals and social proof appeals—two standard tools in a would-be persuader's toolkit—were more effective at engaging actual Facebook users when they were framed in potential rather than achievement terms. In fact, on average potential frames produced 3.27 times the click-rate and 5.33 times the fan-rate of achievement frames.

As one caveat to interpreting these findings as evidence for the preference for potential, it could be argued that if participants had not heard of the target comedian (Kevin Shea), they found the achievement-focused ad claims (e.g., that everyone was talking about him) to be unbelievable and, thus, avoided clicking on them. This tendency, if true, could create the observed difference in click- and fan-rates for reasons that have nothing to do with an actual preference for potential. Though provocative, we do not find this alternative account to be

particularly compelling. Indeed, it is based on the premise that our participants (California-based Facebook users over the age of 18) were unwilling to believe that an unfamiliar comedian might be extremely popular. Because we did not target Facebook users who had an expressed interest in comedy, it seems unlikely that our sample happened to include people who would be skeptical of the achievement focused claims. Nevertheless, to address this issue empirically, we conducted a follow-up study in which we presented participants with one of the 4 ads used in our Facebook experiment and directly assessed participants' perceptions of the ad claims.

Experiment 6

Experiment 6 was designed to address the possibility that the ads employed in our Facebook study might have differed in believablity and that the observed preference for potential was contingent upon these differences. More specifically, we presented participants with the ads from our Facebook study and measured their perceived believability and credibility. To provide a direct assessment of the preference for potential, we also asked participants to report their interest in the ads and their evaluations of the comedian himself.

Method

One hundred sixty participants, recruited through a nationwide database for an online experiment, were told that we were conducting consumer research and seeking feedback on a number of ads before launching them online. Participants were told that they would view one ad and then answer a series of questions about it. Following these opening instructions, participants were presented with one of the four ads used in Experiment 5. The ads were exact replications of those used in Experiment 5, creating a 2 × 2 design with appeal type (source credibility or social proof) and frame (potential or achievement) as between-participant variables.

After viewing their randomly assigned ad and reading the ad claim (i.e., the tagline), participants answered the following questions: Compared to other ads you have seen, how believable is this ad (1 [not believable at all] – 9 [very believable])? How credible would you guess the above statement is (1 [not credible at all] – 9 [very credible])? If you were to see this advertisement on a website, how interested would you be in clicking on it (1 [not interested at all] – 9 [very interested])? How likely do you think it is that Kevin Shea is a good comedian (1 [not likely at all] – 9 [very likely])? Because of their conceptual overlap, we averaged the first 2 items to form a composite index of ad believability ($r = .44$, $p < .001$).

Results and Discussion

We began by submitting believability ratings to a 2 × 2 ANOVA. As shown in Table 1, this analysis uncovered a marginal main effect for appeal type, $F(1, 156) = 3.22$, $p < .08$. In general, ad believability tended to be higher in the source credibility rather than social proof condition. More germane to our primary concerns, there was no effect of potential versus achievement framing and no interaction between appeal type and frame, Fs < 1. In short, we found no evidence to support the contention that the achievement and potential frames in our Facebook study differed in perceived believability or credibility.

As hypothesized, however, the other data revealed a preference for potential. First, consider participants' self-reported interest in clicking on the target ads. Replicating the actual click-rate results from Experiment 5, we found a main effect of ad frame; participants reported greater interest in clicking on the ad in the potential rather than achievement frame condition, $F(1, 156) = 5.33$, $p < .03$. There were no effects involving appeal type on this item, Fs < 1. We also observed the preference for potential on perceptions of Kevin Shea himself. Participants reported that it was more likely that Kevin Shea was a good comedian in the potential rather than

achievement condition, F (1, 156) = 16.63, $p < .001$. Less central to our hypothesis, and in contrast to the main effect of appeal type in Experiment 5, participants also reported more favorable impressions of Kevin Shea in the social proof rather than source credibility condition, F (1, 156) = 13.68, $p < .001$, though again we caution against interpreting this effect. Finally, we found an interaction between appeal type and frame, F (1, 156) = 6.35, $p < .02$, suggesting that appeal type influenced perceptions of Kevin Shea in the achievement condition, F (1, 156) = 19.33, $p < .001$, but not the potential condition, $F < 1$, where ratings were generally higher.

In summary, presenting participants with the exact same ads used in our Facebook study, we found no differences in ad believability yet replicated the key effect of potential versus achievement framing on two different metrics: interest in clicking on the ad and perceptions that the target comedian was likely to be a good one, which acted as an index of persuasion in this study. Experiment 6 thus yielded further evidence of the preference for potential and eliminated another alternative account for it.

Experiment 7

Experiment 7 had two primary aims. The first was to provide evidence that the preference for potential in driven by differences in extent of processing. We have already shown that potential is associated with greater uncertainty (Experiment 4) and that it can induce greater interest (Experiments 5 and 6). In Experiment 7, we explored the role of processing differences, relying on the well-established finding that when people receive persuasive messages, they show greater discrimination between strong and weak arguments under conditions of heightened interest and information processing (Petty & Cacioppo, 1986). When arguments are strong, this can lead to increased persuasion by producing greater elaboration on strong arguments. Experiment 7 applied this logic to the preference for potential. All participants received a

persuasive message—specifically, a recommendation letter endorsing an applicant to graduate school. We framed this letter in potential or achievement terms and then manipulated argument quality by providing strong or weak support for the initial endorsement. We hypothesized that we would observe greater differentiation between strong and weak letters following potential rather than achievement framing, reflecting greater attention and processing in the potential rather than achievement condition.

Also important, the argument strength manipulation allowed us to test an additional boundary on the preference for potential. The art evaluation study (Experiment 4) indicated that potential to win a single award did not significantly outperform actually winning several awards. Similarly, based on our processing account, we would not expect the preference for potential to emerge when people receive weak arguments to support the high potential claim. Indeed, if potential stimulates processing, as we have postulated, its positive effect should be limited to strong argument conditions. When arguments are weak, the effect should be attenuated or reversed as increased processing of weak arguments highlights those arguments' inherent speciousness.

Method

Seventy participants, recruited through a nationwide database for an online experiment, were told we were studying evaluations of recent applicants to Ph.D. programs in business. All participants reviewed a one-page letter of recommendation ostensibly written for a particular applicant by one of his college professors. In the opening paragraph, we manipulated potential or achievement framing as follows (manipulated words are shown in parentheses):

> Dear Admissions Committee,
>
> Mark K. is a student of great achievement (potential). He has asked me to write a letter on his behalf for admission into your program, and it is my pleasure to do so. I feel that I am in a good position to evaluate Mark's achievements (potential) as he has taken

> two classes with me, worked on an undergraduate thesis under my supervision, and generally spent considerable time in my office discussing classes, research, and his career. Having had all of these observations, I can say that of all the students I have known, Mark is very easily near the top of this group in his academic and professional achievement (potential).

Following this paragraph, the letter provided a detailed account of the applicant's qualifications, interests, and talents. As noted, we manipulated the strength of this account to permit a test of processing differences. In the *strong letter condition*, the professor offered compelling support for his endorsement (e.g., noting that the applicant graduated in the top 5% of his class, was learning three new languages, and wrote a thesis that he had already submitted for publication in a top-tier academic journal). In the *weak letter condition*, the professor offered less compelling support (e.g., noting that that the applicant graduated in the top 30% of his class, was learning one new language, and wrote a thesis that he had already submitted for publication in a campus magazine). Importantly, though, the opening endorsement and overall tone of the letter were very favorable in each condition; we manipulated only the cogency of support that followed.

After reading the letter, participants reported how promising they thought the applicant was (1 [not promising at all] – 9 [very promising]); how likely they would be to admit him if it were up to them (1 [not likely at all] – 9 [very likely]); how successful they believed he would be in graduate school (1 [not successful at all] – 9 [very successful]); and how talented they thought he was (1 [not talented at all] – 9 [very talented]). Responses were averaged to form a general index of performance expectations ($\alpha = .95$).

Results and Discussion

We submitted performance expectations to a 2 (message frame: potential or achievement) × 2 (message strength: strong or weak letter) ANOVA. This analysis revealed a main effect for

message strength, F (1, 66) = 18.89, $p < .001$, but not message frame, $F < 1$. Most importantly, we observed the predicted interaction between these variables, F (1, 66) = 4.34, $p < .05$. As illustrated in Figure 2, message strength influenced performance expectations in the potential frame condition, F (1, 66) = 20.66, $p < .001$, but not in the achievement frame condition, F (1, 66) = 2.56, $p < .12$. Viewing the interaction differently, we also found that the preference for potential emerged in the strong, F (1, 66) = 3.83, $p = .055$, but not weak, $F < 1$, message condition. Thus, referencing potential promoted greater processing than referencing achievement, suggesting that potential framing can be a means of drawing people into one's message. When that message is strong, the result is greater persuasion. When the message is weak, however, potential appears to offer no advantage over achievement and theoretically could even backfire, though we did not observe that effect here.

In addition to providing process insight into the preference for potential, this pattern of results highlights a key boundary on the effect. Specifically, because potential stimulates processing, it does not promote persuasion when the evidence or support for it is weak. In Experiments 1 through 6, the NBA player, job applicants, comedian, and artist were all presented as "strong": the NBA player was very good, the job applicants scored highly on a leadership test, the comedian supposedly was the next big thing, and the artist was in the running for a prestigious award. Experiment 7 builds on those studies by showing that the preference for potential is less likely to emerge when the available evidence is less compelling. Just like being compared to a substantially better competitor (i.e., an artist with many more awards) reduced the effect in Experiment 4, being supported by weak arguments reduced it in Experiment 7.

Experiment 8

The final experiment was designed to replicate the findings of Experiment 7 in a different context. In this study, participants read a restaurant review that was very favorable toward the restaurant and its head chef, and then reported their impressions of both the target restaurant and the chef. To again test our hypothesis that references to potential stimulate greater processing than references to achievement, we opened the review with a reference to potential or achievement and then manipulated message strength. Following these manipulations, we measured participants' current perceptions of (or attitudes and intentions toward) the restaurant and its head chef, along with their assessment of how exciting they found the review itself to be. We expected to replicate the interaction from Experiment 7 on each of these measures.

Method

Eighty-four participants, recruited through a nationwide database for an online experiment, were told that we were conducting "information mapping" research to assess how different types of information influence judgment accuracy. All participants read that for the purpose of our study, they should imagine that they were considering making a dinner reservation for a special occasion and were reading restaurant reviews online when they came across an article reviewing a new restaurant named Bianco, owned by a chef named John Delacroix. When participants continued to the next screen, they saw a one-page article under the heading "Restaurant Bianco by Chef Delacroix (story by Scott Wilson)." The article provided an unambiguously favorable review and concluded with the line: "I left the restaurant with a smile on my face, and I'm sure you will too. Two thumbs up!" Thus, across conditions the article offered the same highly favorable endorsement of the restaurant.

Importantly, however, we manipulated achievement versus potential framing and message strength. First, in the opening paragraph, the review described the restaurant and head chef in terms of high achievement or high potential as follows (manipulated words in parentheses):

> John Delacroix is a chef of great achievement (potential). He recently opened Restaurant Bianco, a bistro style restaurant serving a fusion of traditional Italian and modern Californian cuisine. After visiting Bianco on a recent Saturday evening, it became clear to me that it has become (could become) a top dining fixture in the area. Critics have already noted that Chef Delacroix himself is the next big thing (could become the next big thing) and, after sampling his culinary artistry myself, I agree that his new restaurant is a shining achievement (has shining potential).

Following this paragraph, the review detailed Bianco's many attributes, focusing on the restaurant's menu, ambience, and service. To permit a test of processing differences, we manipulated message strength by making the review's core points more or less cogent (adapted from Karmarkar & Tormala, 2010). In the *strong argument condition*, the author offered compelling support for his endorsement of Bianco, describing its excellent food and ambience and knowledgeable and attentive servers. In the *weak argument condition*, the author offered less compelling support, focusing here on idiosyncratic elements that had little to do with the inherent quality of the restaurant itself (e.g., noting that it had a colorful menu with interesting dish names, and describing a funny conversation during the meal). Again, though, the level of endorsement and overall tone were equally favorable across conditions.

Dependent Measures

After reading the review, participants completed a series of dependent measures assessing their perceptions of the restaurant, the head chef, and the review itself.

Restaurant perceptions. First, we assessed attitudes and intentions toward Restaurant Bianco by asking participants how much they thought they would like the restaurant (1 [not at

all] – 9 [very much]); how they would rate their feelings about the restaurant (1 [very negative] – 9 [very positive]); how interested they would be in having a meal at the restaurant (1 [not at all] – 9 [very interested]); and how much they would like to try the restaurant (1 [not at all] – 9 [very much]). Responses to these questions were averaged to form a composite index of restaurant perceptions ($\alpha = .97$).

Chef perceptions. Following the restaurant measures, we assessed reactions to the chef featured in the article. Specifically, participants reported how interested they would be in trying other restaurants opened by Chef Delacroix (1 [not at all interested] – 9 [very interested]) and how interested they would be in watching a TV show featuring Chef Delacroix (1 [not at all interested] – 9 [very interested]). Responses to these measures were averaged to form a combined index ($r = .62$, $p < .001$).

Excitement. Finally, we assessed participants' feelings of excitement about the review itself using the following question: "How exciting was the review about Chef Delacroix and Restaurant Bianco?" Participants responded on a scale ranging from 1 (not exciting at all) to 9 (very exciting).

Results and Discussion

We submitted each index to a 2 (message frame: potential or achievement) × 2 (message strength: strong or weak review) ANOVA. Means and standard errors for each index are presented in Table 2. First, we examined perceptions of the restaurant—that is, participants' attitudes and intentions toward Restaurant Bianco. This analysis revealed a main effect of message strength, $F(1, 80) = 8.77$, $p < .005$, but not message frame, $F < 1$. In addition, we found the predicted interaction between these variables, $F(1, 80) = 4.33$, $p < .05$. As hypothesized, and replicating the pattern of results from Experiment 5, message strength had a

significant effect on restaurant perceptions in the potential condition, F (1, 80) = 12.55, $p < .001$, but not in the achievement condition, $F < 1$. Viewed differently, there was a nonsignificant tendency toward a preference for potential in the strong message condition, F (1, 80) = 1.83, $p = .18$, that directionally reversed under weak argument conditions, F (1, 80) = 2.55, $p < .12$.

Next, we analyzed perceptions of Chef John Delacroix, the owner of Restaurant Bianco. On this index, we found main effects for neither message strength, F (1, 80) = 2.46, $p > .12$, nor message frame, $F < 1$, but we did obtain the predicted interaction, F (1, 80) = 4.04, $p < .05$. Replicating the restaurant perception results, the interaction involved a significant effect of message strength in the potential condition, F (1, 80) = 6.32, $p < .02$, but not the achievement condition, $F < 1$. Viewed differently, we found evidence for the preference for potential under strong, F (1, 80) = 3.59, $p = .062$, but not weak, $F < 1$, argument conditions.

Finally, the excitement data revealed a main effect of message strength, F (1, 80) = 18.42, $p < .001$, but not message frame, $F < 1$. Most germane to our primary concerns, we found the predicted interaction, F (1, 80) = 6.95, $p = .01$, suggesting that message strength affected excitement under potential conditions, F (1, 80) = 23.69, $p < .001$, but not achievement conditions, F (1, 80) = 1.39, $p > .24$. Viewing this interaction differently, it reflected a nonsignificant trend toward the preference for potential under strong argument conditions, F (1, 80) = 1.31, $p < .26$, that reversed under weak argument conditions, F (1, 80) = 6.86, $p < .02$.

In short, the predicted interaction pattern was observed on measures of restaurant perceptions, chef perceptions, and review excitement. Most germane to our primary concerns, we found evidence of greater processing—that is, increased message strength effects—under potential rather than achievement conditions. Moreover, speaking to the boundaries on the preference for potential, we found that it tended to emerge under strong but not weak message

conditions. Although there were measure to measure differences in which simple effects were reliable, on each index potential tended to outperform achievement when strong but not weak arguments had been provided. In fact, combining all 7 items from Experiment 8 into a single aggregate index assessing participants' global reactions to the restaurant, chef, and review (α = .93), we found a marginally significant effect favoring potential (M = 7.51, SD = 1.17) over achievement (M = 6.63, SD =1.76), t (38) = 1.89, p = .067, in the strong message condition.

To further establish the robustness of this effect—that is, the advantage of potential over achievement under strong argument conditions—we pooled the data from Experiments 7 and 8 (N = 154) to create one overall composite index of evaluation (reflecting performance expectations in Experiment 7 and restaurant, chef, and review assessments in Experiment 8) and we tested the message frame × message strength interaction across studies. We also included a "study" factor in this analysis, creating a 2 (potential or achievement frame) × 2 (strong or weak message) × 2 (Experiment 7 or 8) design and allowing us to determine whether the interaction differed across these experiments. As expected, this analysis revealed a significant interaction between message frame and message strength, F (1, 146) = 9.88, p < .003, that did not differ across experiments (F < 1 for the three-way interaction). Most germane to the current concerns, the message frame × message strength interaction involved a significant preference for potential under strong argument conditions, F (1, 146) = 6.38, p < .02, that was marginally reversed under weak argument conditions, F (1, 146) = 3.66, p < .06.

This result suggests that when strong argumentation or evidence is available to support a high potential claim, potential can be more impactful and persuasive than achievement, because it increases processing of compelling information. When only weak argumentation or evidence is available, however, highlighting potential might backfire by increasing processing of that weak

information. In essence, a "high potential" claim supported by compelling arguments appears to produce a winning combination and greater persuasion—observed here as more favorable impressions of the attitude object.

General Discussion

Eight studies documented a general preference for potential. Using lab and field settings, a variety of content domains, and a range of measures including salary allocations, performance assessments, hiring and admissions decisions, perceptions of artistic talent, ad clicks, fandom, and intentions to try a restaurant, we found that high potential can be more interesting and alluring than equally high achievement. In fact, despite recognizing that achievement is more objectively impressive on a resume, whereas potential is more uncertain, participants consistently displayed more favorable assessments of individuals with potential than of individuals with achievement on measures of preference, interest, and liking.

As described earlier, we submit that potential is more interesting than achievement precisely because it is imbued with uncertainty: the target might achieve greatness, but also might not. This uncertainty appears to be more cognitively engaging than reflecting on what is already known to be true. This is not to say that people explicitly endorse the notion that uncertain potential is better than certain achievement (e.g., that potential to be good in the NBA is better than actually being good in the NBA). In fact, the "objectively impressive resume" data from Experiments 3 and 4 suggest that they do not. Rather, the uncertainty surrounding potential stimulates interest and processing, which attunes people to the information available and gives it more impact. When that information is compelling (e.g., an attractive painting, good NBA statistics, high leadership score, or strong arguments in a persuasive message), the result is a more favorable attitude or impression.

Alternative Accounts

Across studies, we obtained convergent evidence for at least one process driving the preference for potential—that is, that potential is uncertain, raises interest, and increases processing. We also made an effort to eliminate several competing explanations of the effect. For example, we ruled out a pro-youth bias, an extremity effect, and believability or credibility perceptions as viable alternative accounts for our findings. We also addressed the possibility that the preference for potential is restricted to contexts in which individuals make future predictions, hold differential upper bound assumptions (e.g., assume that high expectations will be exceeded in the potential but not achievement case), or generally feel optimistic.

We acknowledge that these factors might sometimes contribute to or strengthen the preference for potential, but our results suggest that they alone cannot account for the effect. In Experiment 4, for example, participants reported greater *current liking* of a painting when it was associated with potential rather than achievement, even though that painting was a static, or fixed, object with essentially zero probability of future change or variance. Also important, it is unclear how optimistic biases would explain the message strength effects in Experiments 7 and 8. In these studies, the preference for potential manifested as greater attunement to the merits of the case, not simply more favorable attitudes overall, which is the outcome an optimistic bias might predict. Taken together, our findings are more consistent with the uncertainty and processing account. Ultimately, though, there are likely to be multiple manifestations of the preference for potential and multiple mechanisms contributing to the effect. Follow-up studies exploring this possibility are needed to further delineate the preference for potential.

Boundary Conditions and Moderators

Our focus in the current studies has been on documenting the preference for potential in a variety of domains and providing initial evidence for an underlying process. Going forward, it would be reasonable to ask whether the preference for potential might be more constrained than our studies suggest. Although we have shown that this preference can emerge in diverse settings, there are likely to be numerous boundaries on and/or moderators of the effect. We identified two in the current studies. Specifically, people do not appear to weight potential more heavily than achievement when the level of achievement under consideration is far superior to the level of potential (Experiment 4), or when the evidence supporting a high potential claim is specious (Experiments 7 and 8). We now turn our attention to other possible moderators.

A sweet spot? First, it is worth considering the possibility that the preference for potential rests at a talent "sweet spot." Indeed, participants in our studies evaluated target individuals who were at worst moderately successful and at best very successful. It could be that although having potential to be moderately or very good in some domain can be viewed as better (or more interesting) than actually being moderately or very good in that domain, the effect changes as the level of performance or talent under consideration shifts. For example, we suspect that the preference for potential would be reduced when a person's current objective merits are unambiguously bad. Having a horrible performance history but good potential, for instance, is unlikely to outweigh having a good performance history. In fact, our processing account suggests that the uncertainty of potential might increase elaboration on this high potential target's horrible performance history, which could nullify or even reverse the effect.

We also surmise that the preference for potential over achievement might reverse when a target person's merits are truly amazing. That is, actually accomplishing an amazing outcome (e.g., 8 gold medals in the Olympics) should be preferred over having potential to do so.

Experiment 4, the art study, revealed a null effect in a 1 potential award versus 4 achieved awards comparison, but we assume the scale tips at some point when achievement becomes simply outstanding. Indeed, the novelty or low probability ascribed to such outcomes should make them feel unexpected when they occur, and unexpectedness can stimulate processing and even favorable reactions (e.g., Karmarkar & Tormala, 2010). In any case, it is possible that the preference for potential is confined to contexts in which the target individual is in the moderately to very successful range.

Negative potential. Related to this discussion, it is also worth exploring whether the preference for potential would emerge in the context of negative information—for example, when a person's performance has potential to be quite poor. How do people assess talent when the potential or achievement in question is negative? Imagine a movie review that opened with an unfavorable description of the plot and acting, and which stated that the movie had the potential to be one of the biggest flops in history. Or consider a letter of reference stating that a particular job candidate looks fine now but has potential to be a very bad hire, and then explaining the various ways in which the candidate could fail. Although we have yet to explore this possibility, we suspect that the preference for potential would disappear in the context of negative information. Again, to the extent that potential stimulates processing, as shown in the current studies, highlighting negative potential might accentuate negative reactions by promoting processing of negative information.

The weak message conditions in Experiments 7 and 8 hint at such a reversal, but a full test of a possible backfire effect would require framing unambiguously negative information about a target in either potential or achievement terms. Investigating this issue could have important implications for our understanding of potential. If potential is inherently interesting

and exciting, any reference to it might have positive consequences on impressions of talent and promise. If potential stimulates processing more generally, however, it should act as an amplifier of positive and negative information effects. In other words, it should intensify reactions to the information available. We posit that the latter effect is more likely, but follow-up experiments are needed to examine this question.

Temporal focus. Another interesting direction for future research would be to further consider the role of time perspective, or temporal focus. As noted, the current studies suggest that the preference for potential is not *contingent* upon measuring future-oriented perceptions (i.e., predictions of future outcomes): Participants in Experiment 4 reported greater current liking of a painting when it was associated with potential rather than achievement. Nevertheless, it seems plausible that having a future focus could *accentuate* the effect of potential, whereas having a past focus might sometimes dampen or reverse it. Indeed, considerable research suggests that people relate to the future and past differently, with recent studies indicating that thinking about the future can be more emotionally intense and can elicit more extreme evaluations than thinking about the past (e.g., Caruso, Gilbert, & Wilson, 2008; Van Boven & Ashworth, 2007). This effect appears to stem at least partly from the tendency of future events to elicit more extensive mental simulation and processing (e.g., Grant & Tybout, 2008; Van Boven & Ashworth, 2007), which is generally consonant with our view of the current effects.

To reiterate, we do not believe that the preference for potential is an artifact of having a future focus. Nevertheless, it is worth exploring the factors that prompt future versus past foci to determine if they also foster relatively greater preference for potential or, alternatively, sometimes produce a preference for achievement. Interestingly, there might be both situational and individual difference triggers of these foci. For instance, perhaps some judgment targets

(e.g., job applicants, new candidates for political office) tend to elicit a future focus, whereas others (e.g., existing employees up for renewal, political incumbents) tend to elicit a past focus. In each case, it seems plausible that perceivers' evaluations might be based more heavily on assessments of future and past outcomes, respectively. If true, we might expect to observe shifts in the preference for potential versus achievement across these types of targets.

Another important factor could be age. Consider age of the target. Although we found no evidence to support perceived age differences as an alternative account for our findings, it could be that when individuals evaluate two targets of vastly different ages, they assume different temporal perspectives. For example, perhaps a young target evokes a future focus (What could this person accomplish in his or her career?), whereas an older target evokes a past focus (What has this person accomplished in his or her career?). If so, we might observe a preference for potential in the former case, but a preference for achievement in the latter case. Similarly, age of the *perceiver* might moderate these effects. For instance, younger individuals may be more future-focused across contexts, whereas older individuals are more past-focused. Following the same logic as above, such a difference could be expected to promote a relative preference for potential or achievement, respectively. The role of temporal focus offers an interesting and important direction for future research.

Self versus other. It could also be interesting to examine the possible role of self versus other focus. For example, does it matter whether individuals are evaluating themselves or others? Although the current studies revealed a robust preference for potential in people's evaluations of others, recent research suggests that people might give even more weight to potential when they evaluate *themselves* (Williams, Gilovich, & Dunning, 2011). Williams et al. proposed two possible mechanisms for this effect: a self-serving bias one whereby individuals

want to see themselves as more talented than others and give special weight to their own potential as a means of doing so, and a cognitive bias whereby individuals simply have more tangible evidence of their own compared to other people's potential. As it happens, our studies were unlikely to invoke either bias. In none of the experiments did participants have a personal stake in seeing themselves as more talented than the target person. Moreover, in each study they had tangible and highly salient information available describing the target person's potential. In fact, participants in at least some of our studies might have had a specific interest in thinking about the true potential of the target person given that they were asked to assume the role of a decision maker (e.g., a manager making a hiring decision, an admissions officer considering a graduate school applicant, a consumer considering dining at a restaurant) or were considering whether they would personally enjoy the target person's talent (e.g., the artist or comedian). Exploring the importance of these differences could be a useful next step in this domain.

A related question is whether the preference for potential would emerge (in interpersonal assessments like those studied here) when people endorse or emphasize their own potential as a means of impressing others. We opened with examples—and our studies tested instances—in which the potential or achievement of an individual was stressed not by that target him- or herself, but by someone else. What happens when people highlight their own potential rather than achievement? Perhaps perceivers interpret high potential claims made by the targets themselves as defensive or as masking some crucial deficiency. If so, we would not expect to replicate the current findings in the context of self-endorsements. Future research is needed on this form of self-other difference as well.

Individual differences. Another interesting direction for future research would be to examine individual difference variables that moderate the preference for potential versus

achievement. As one example, if the preference for potential is contingent upon uncertainty being interesting or engaging, it might disappear or flip among perceivers who find uncertainty aversive. For instance, perhaps individuals high in need for closure (Webster & Kruglanski, 1994) would be more likely to show an achievement preference as they seek to avoid uncertain or ambiguous outcomes. Alternatively, perhaps the preference for potential or achievement would be moderated by individual differences in theories of change (e.g., incremental versus entity theories; see Dweck, Hong, & Chiu, 1993), such that individuals who see people and talent as malleable or fixed would show a preference for potential or achievement, respectively. If true, there would be reason to suspect that other psychological factors, in addition to uncertainty as outlined in our research, can contribute to this preference for potential versus achievement. We can only speculate for now, but exploring individual differences in cognitive and motivational orientations could be an important next step in this line of inquiry.

Practical Implications

Finally, it is worth considering the practical implications of our findings. Most obviously, our findings have implications for understanding how people assess talent and value in others—a topic that has begun to receive more attention in the literature (e.g., Tsay & Banaji, 2011). Our studies suggest that people can be more excited by as yet untapped potential than by otherwise equivalent achievement. When endorsing individuals for jobs, promotions, or graduate school, then, it seems prudent to highlight their potential as a means of engaging recruiters', employers', and university admissions officers' interest. More generally, the current research suggests that potential framing can be an effective means of persuasion. Framing one's support for a target (e.g., a person, a restaurant, a painting, or a cause) in terms of potential as opposed to achievement offers a means for making that support more engaging and persuasive.

Shifting from persuasion to policy, the current findings could also be relevant to academic testing and placement. Consider the SAT, which remains the gold standard for high school students applying to college. Originally, the acronym SAT stood for *Scholastic Aptitude Test*. In 1990, this was changed to *Scholastic Assessment Test* before being changed again in 1993 to *SAT I: Reasoning Test* (In this latter instantiation the letters no longer stood for anything!). Our findings suggest that these name changes, from measuring potential ("scholastic aptitude") to measuring achievement ("scholastic assessment"), could influence the way college admissions officers view high or low scores, and ultimately shape admissions decisions. In particular, Experiments 2 and 3 suggest that minor name changes in testing can have important implications for test score interpretations. As one possible generalization, perhaps a high score is more exciting or compelling when that score reflects potential rather than achievement, while a low score is more damning as an indictment of potential rather than achievement. Understanding the impact on test names on evaluations of test takers is both an important policy issue and a novel direction for future study.

Footnotes

1. Because we set this study in a professional basketball context, participants were screened to ensure that they had at least some knowledge about the NBA. Specifically, an initial pool of undergraduates were asked to report how much they knew about NBA basketball on a scale ranging from 1-7 with scale points labeled as follows: 1 = absolutely nothing, 2 = not much, 3 = a little, 4 = moderate amount, 5 = good amount, 6 = a lot, 7 = almost everything. Any participant reporting a 3 or higher was retained for the study.

2. Note that the df are slightly reduced for the scoring analysis. On the scoring index, two participants failed to complete the measure and we removed an additional two participants for entering a scoring average beyond that which has ever been attained by an individual player in the NBA. These two participants estimated 65 and 116 points-per-game in the target player's sixth season. Both participants were in the potential condition, however, so including them in the final analysis actually strengthens the effect ($M_{potential}$ = 22.16 and $M_{\text{achievement}}$ = 16.18; t [71] = 1.96, p = .054).

3. The paintings used in Experiment 4 were pretested to ensure that they did not differ along any of the focal dimensions when presented on their own with no caption or description of potential versus achievement. In this pilot study, we showed the exact same paintings side by side to 29 participants recruited through a nationwide database for an online study. The painting on the left (right) was the painting associated potential (achievement) in the main study. Participants rated both paintings along 3 dimensions: how much they liked each one, how favorable their gut reaction to each painting was, and how much they thought they would like other paintings by the same artist. Participants gave separate ratings for the painting on the left and the painting on the right, using scales ranging from 1 to 7 and scored such that higher values indicated more favorable reactions. Responses were highly consistent for both the painting on the

left ($\alpha = .91$) and the painting on the right ($\alpha = .94$), so we averaged them to form composite assessments of each. As intended, there were no differences in perceptions of the paintings ($M_{left} = 5.10$, $SD_{left} = 1.32$; $M_{right} = 5.02$, $SD_{right} = 1.44$), $F < 1$. Similarly, on two subsequent forced-choice measures, asking participants to indicate which painting they liked better and which painting gave them a more favorable gut reaction, there were no differences. In each instance, 15 participants chose the painting on the left and 14 participants chose the painting on the right, $\chi^2 (1) = .03$, $p > .85$. Thus, any differences in preferences in the main study can be attributed to the potential versus achievement manipulation rather than pre-existing preferences for one painting over the other.

4. Although the absolute click- and fan-rates were low, this is not unique to our experiment. Facebook does not publish normative data regarding these rates, but in general static online display ads show a click-rate of approximately .10% across all ad sizes, with smaller ads receiving lower rates than larger ads (Double Click, 2009; Eyeblaster, 2009). Because ads in Facebook are smaller than most online display ads, a lower click rate would generally be expected in this context.

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Appendix A:

Stimuli in Experiment 3

Applicant A Sex: Male Birthday: 09/21/1982	**Applicant B** Sex: Male Birthday: 05/13/1983
Educational Background: B.A., 2004, Cornell University Major: Accounting, GPA: 3.82 M.B.A., 2008, New York University	**Educational Background:** B.A., 2005, University of California, Berkeley Major: Finance, GPA: 3.90 M.S., 2008, Management Science, UCLA
Internships: Ernst & Young Morgan Stanley	**Internships:** Morgan Stanley Fidelity Investments
Job Testing: 83/100 on the Leadership Achievement Inventory (LAI) • *The LAI gauges leadership achievement, defined as an individual's observed (i.e., actual) leadership performance at the current stage in his or her career. An achievement score of 83 places this applicant in the top 17% of people who have been assessed.* 96/100 on the Assessment of Leadership Potential (ALP) • *The ALP gauges leadership potential, defined as the employee's predicted leadership performance in the near future. A score of 96 indicates that this applicant predicted future leadership performance is estimated to be in the top 4% of people who have been assessed.*	**Job Testing:** 96/100 on the Leadership Achievement Inventory (LAI) • *The LAI gauges leadership achievement, defined as an individual's observed (i.e., actual) leadership performance at the current stage in his or her career. An achievement score of 96 places this applicant in the top 4% of people who have been assessed.* 83/100 on the Assessment of Leadership Potential (ALP) • *The ALP gauges leadership potential, defined as the employee's predicted leadership performance in the near future. A score of 83 indicates that this applicant predicted future leadership performance is estimated to be in the top 17% of people who have been assessed.*

Note: date of birth, educational background, and internships were counterbalanced across conditions.

Appendix B:

Sample Ads Used in Experiment 5

Note: Potential (left) and achievement (right) ads within the credibility condition.

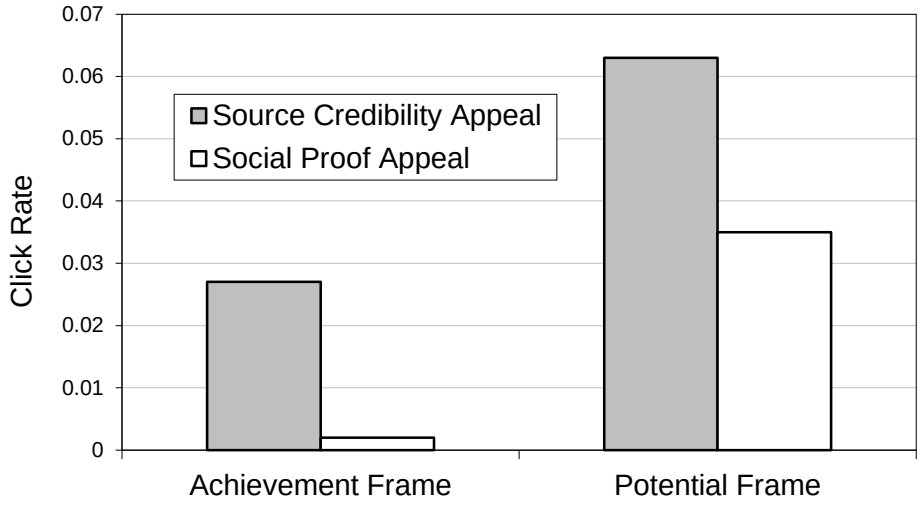
Table 1. Dependent measures as a function of potential versus achievement framing and appeal type in Experiment 6.

	Credibility Appeal		Social Proof Appeal	
	Frame			
Dependent Measure	Achievement	Potential	Achievement	Potential
Ad Believability				
M	3.93	3.90	3.51	3.40
SE	.25	.26	.25	.25
Interest in Clicking				
M	2.50	3.51	2.53	3.00
SE	.32	.33	.32	.32
Good Comedian				
M	3.08	4.67	4.58	4.95
SE	.24	.24	.24	.24

Table 2. Dependent measures as a function of potential versus achievement framing and message strength in Experiment 8.

	Achievement Frame		Potential Frame	
	Message Strength			
Dependent Measure	Weak	Strong	Weak	Strong
Restaurant Perceptions				
M	6.71	7.06	5.84	7.82
SE	.36	.42	.41	.38
Chef Perceptions				
M	6.08	5.89	5.53	7.07
SE	.39	.46	.45	.42
Excitement				
M	5.64	6.39	4.00	7.14
SE	.41	.49	.47	.44

Figure 1. Ad click rate (top panel) and fan rate (bottom panel) as a function of appeal type and potential versus achievement frame in Experiment 5.



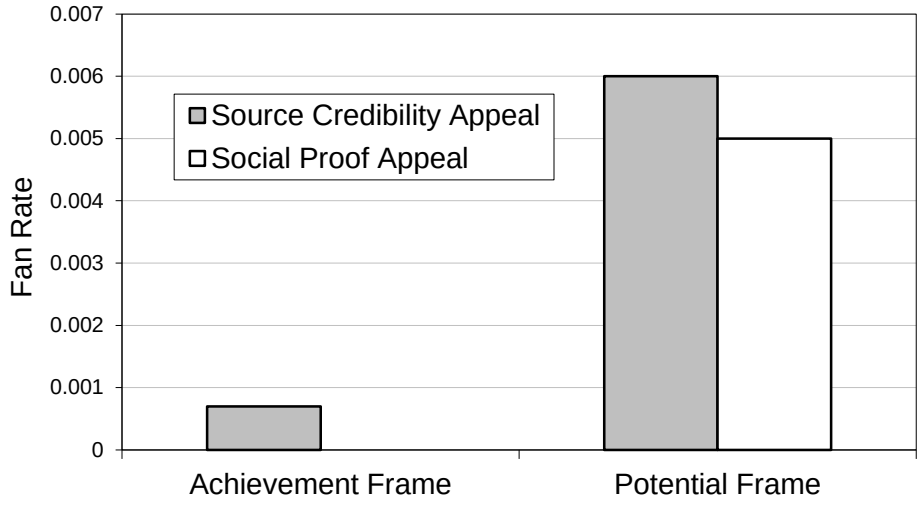


Figure 2. Performance expectations as a function of potential versus achievement framing and letter strength in Experiment 7. Error bars represent standard errors.