

University of Pennsylvania Scholarly Commons

Operations, Information and Decisions Papers

Wharton Faculty Research

12-2007

Moniker Maladies When Names Sabotage Success

Leif D. Nelson

Joseph P. Simmons University of Pennsylvania

Follow this and additional works at: http://repository.upenn.edu/oid papers

Part of the <u>Applied Behavior Analysis Commons</u>, <u>Experimental Analysis of Behavior Commons</u>, <u>Other Psychology Commons</u>, and the <u>School Psychology Commons</u>

Recommended Citation

Nelson, L. D., & Simmons, J. P. (2007). Moniker Maladies When Names Sabotage Success. Psychological Science, 18 (12), 1106-1112. http://dx.doi.org/10.1111/j.1467-9280.2007.02032.x

This paper is posted at Scholarly Commons. $http://repository.upenn.edu/oid_papers/16 \\ For more information, please contact repository@pobox.upenn.edu.$

Moniker Maladies When Names Sabotage Success

Abstract

In five studies, we found that people like their names enough to unconsciously pursue consciously avoided outcomes that resemble their names. Baseball players avoid strikeouts, but players whose names begin with the strikeout-signifying letter K strike out more than others (Study 1). All students want As, but students whose names begin with letters associated with poorer performance (C and D) achieve lower grade point averages (GPAs) than do students whose names begin with A and B (Study 2), especially if they like their initials (Study 3). Because lower GPAs lead to lesser graduate schools, students whose names begin with the letters C and D attend lower-ranked law schools than students whose names begin with A and B (Study 4). Finally, in an experimental study, we manipulated congruence between participants' initials and the labels of prizes and found that participants solve fewer anagrams when a consolation prize shares their first initial than when it does not (Study 5). These findings provide striking evidence that unconsciously desiring negative name-resembling performance outcomes can insidiously undermine the more conscious pursuit of positive outcomes.

Disciplines

Applied Behavior Analysis | Experimental Analysis of Behavior | Other Psychology | School Psychology

Moniker Maladies: When Names Sabotage Success

Leif D. Nelson New York University Joseph P. Simmons Yale University

WORD COUNT: 3,254

Leif D. Nelson Department of Marketing Stern School of Business 40 West 4th St. New York University New York, NY 10012 leifnelson@stern.nyu.edu

Abstract

People like their names enough to unconsciously approach consciously-avoided nameresembling outcomes. Baseball players avoid strikeouts, but players with strikeout-signifying Kinitials strike out more than others (Study 1). All students want A's, but C- and D-initialed
students find initial-resembling outcomes less aversive and achieve lower GPAs (Study 2),
particularly if they like their initials (Study 3). Because lower GPAs lead to lesser graduate
schools, C- and D-initialed students go to lower ranked law schools than their A- and B-initialed
counterparts (Study 4). Finally, in an experimental design, participants perform worse when a
consolation prize shares their first initial (Study 5). These findings provide striking evidence that
unconscious wants can insidiously undermine conscious pursuits.

People like their names and initials (Nuttin, 1987). In fact, this so-called *name letter effect* (NLE) is influential enough to encourage the pursuit of name-resembling life outcomes and partners. For example, Toby is more likely to buy a Toyota, move to Toronto, and marry Tonya than is Jack, who instead is more likely to buy a Jaguar, move to Jacksonville, and marry Jackie (Brendl, Chattopadhyay, Pelham, & Carvallo, 2005; Jones, Pelham, Carvallo, and Mirenberg, 2004; Pelham, Mirenberg, & Jones, 2002).

Do people consciously or unconsciously pursue name-resembling outcomes? Do a few Jack's deliberately move to Jacksonville for its Jack-resembling appeal, or are they driven by an unconscious desire?

Researchers have certainly argued for the latter. The NLE is described as an indicator of *implicit egotism* (e.g., Koole, Dijksterhuis, & van Knippenberg, 2001; Jones et al., 2004; Pelham, Carvallo, & Jones, 2005; Pelham et al., 2002; Sherman & Kim, 2005), as own-name-liking is thought to indicate unconscious self-liking. Supporting evidence comes in (at least) two forms. First, the NLE correlates more strongly with explicit self-esteem when explicit self-evaluations are made under conditions that deter conscious thinking (Koole et al., 2001). Second, exposure to subliminal (unconscious) pairings of self-relevant and positive words increases the NLE (Dijksterhuis, 2004). Nevertheless, these findings speak more to the origins of the NLE than to the origins of Jack's move to Jacksonville, and it remains possible that Jack explicitly seeks a name-resembling residence.

Demonstrating the pursuit of *negative*, consciously-avoided name-resembling life outcomes would provide strong evidence that the NLE often exerts its effects via an *unconscious* mechanism. In this paper we investigated this possibility. We examined performance domains in which people were consciously motivated to perform well, and in which negative performance

outcomes were represented as single letters. We found that name-liking sabotages success for people whose initials match negative performance labels.

Study 1: Baseball Performance

Method

For over 100 years, major league baseball (MLB) fans have recorded most on-field events, and originally-missed events have since been found and added to a central database (Schwarz, 2004). Although team level features determine the outcomes of games, some individual events can be isolated from team influences. When a player comes to bat, his goal is to avoid making an out. Players can generate an out in many ways, but the strikeout is special in that it can be attributed to the actions of the batter and the opposing pitcher, but not the opposing fielders. For these reasons — available data with relatively independent observations — we investigated the effect of name-resemblance on batter strikeouts.

For scoring clarity, strikeouts have always been recorded using the letter K (Schwarz, 2004), and this fact is well known to most players and fans. Accordingly, we predicted that players with first- or last-initial K would show an increased tendency to strike out. To test this hypothesis, we analyzed MLB batter performance from 1913, the first year for which there are complete data on strikeouts, through 2006. Our analysis used players' career performance as the unit of analysis, and was restricted to players that had at least 100 plate appearances (N = 6397).

Results and Discussion

Across more than 90 years of professional baseball, batters with K initials struck out at a higher rate (in 18.8% of their plate appearances) than the remaining batters (17.2%), t(6395) = 3.08, p = .002. Over the past century of baseball, strikeouts have become increasingly frequent, but the number of K-initialed players has also increased. However, K-initialed players struck out

more even after controlling for players' average year of play (p < .015). In fact, when controlling for average year of play (and excluding the three players with U as a first initial), K was both the first and last initial associated with the highest strikeout rate. Furthermore, the effect appears not to be an ethnic confound, as K-initialed batters were reliably more likely to strikeout when controlling for whether the player is American or foreign born (p = .023) or by controlling for country of origin with dummy variables for each of the 52 countries represented in the sample (p = .045).

Despite a universal desire to avoid striking out, K-initialed players strike out more often. For those players, we argue that the explicitly negative performance outcome may feel implicitly positive. Even Karl "Koley" Kolseth would find a strikeout aversive, but on the whole, he might find it a little less aversive than players who do not share his initials, and avoid it less enthusiastically. In Study 2 we sought to establish the generality of this finding by investigating a different performance domain — academics.

Study 2: Academic Performance

Method

At most age levels, in most schools, and in most disciplines, letter grades are used to measure student performance, with the letters A, B, C, and D used widely to discriminate the best performances from the worst.³ As with baseball, every student wants to succeed, and no one explicitly wants to perform poorly. However, if our hypothesis is correct, then C- and D-initialed students will find lower grades less aversive, and will work less hard to avoid them.

To test this hypothesis we analyzed 15 years of graduating MBA grade point averages (GPAs). For each student, the data set provided their first initial, last initial, gender, ethnicity (coded with six categorical designations: African-American, Caucasian, East Asian, Hispanic,

Indian, and Other), graduating year, and U.S. citizenship.

Results and Discussion

A-, B-, C-, or D-initialed students were identified, those with conflicting first and last initials (e.g., first-initial A and last-initial D) were excluded, and non-A-through-D-initialed students were coded as having "Other" initials.⁴ We conducted a one-way ANCOVA on GPA as a function of initials (A, B, C, D, Other), controlling for demographics and graduating year. As predicted, C- or D-initialed students earned lower GPAs than A- or B-initialed students, F(4, 13532) = 5.26, p < .001.⁵ The "Other"-initial baseline shows that the effect was driven by C- or D-initialed students performing worse, rather than A- or B-initialed students performing better (see Figure 1).

The MBA students in our sample are well aware of a direct connection between academic performance and successful job placement. Nevertheless, despite the pervasive desire to achieve high grades, students with an unconsciously-driven fondness for C's and D's were slightly less successful at achieving their conscious goal.

Interestingly, A- or B-initialed students did not perform better than students whose initials were grade-irrelevant. There are two possible explanations for this. First, students with grade-irrelevant initials may already be maximally motivated to succeed. Second, because performance is determined by motivation *and* ability, any increased motivation to succeed that arises from having initials that match positive performance outcomes may not necessarily translate into increased performance. Essentially, if either author found himself in a Major League Baseball game, infinite unconscious motivation to succeed will not stave off the inevitable disappointment. On the other hand, if either author instead had an unexplained unconscious desire to strike out, this implicit goal would likely be met with resounding success.

Thus, although having initials that match easy-to-achieve negative outcomes may cause a decrement in performance, having initials that match hard-to-achieve positive outcomes may not cause an increase in performance.

The first two studies support our hypotheses in vastly different domains. Nevertheless, archival samples make it difficult to isolate elements in the causal chain. For example, one might argue that these findings reflect not the behavior of the actors, but of their evaluators. Umpires may call more strikes on K-initialed batters, and instructors may assign more C's and D's to a student with those initials. Studies 1 and 2 cannot eliminate that possibility, so in Study 3 we collected data necessary for addressing this question.

Study 3: The Moderating Influence of Initial Liking

Method

Do students achieve initial-congruent grades or do teachers assign initial-congruent grades? If students cause the effect and not their teachers, then students' name-liking should moderate the effect. Although most people like their initials (Nuttin, 1987), those who do not should not be motivated to achieve outcomes that match their initials.

We recruited undergraduates (N = 294) to complete a web-based questionnaire in exchange for a chance to win a \$50 prize. Replicating a procedure used in other research (e.g., DeHart & Pelham, 2007; Dijksterhuis, 2004; Jones, Pelham, Miremberg, & Hetts, 2002), the first part of the questionnaire asked participants to use their "first intuitive reactions" to rate their liking of every letter of the alphabet on a 9-point scale (1 = dislike; 9 = like). In two subsequent sections, participants reported their initials and their GPA. We predicted that initial-liking would moderate the relationship between initials and performance.

Results and Discussion

We computed a measure of initial-liking by calculating the difference between own-initial liking and the sample's liking of that letter (Bosson, Swann, & Pennebaker, 2000). We then analyzed students with initials A through D (eliminating students with conflicting first and last initials), and, based on the results of Study 2, we created A/B and C/D composite groups. We then regressed GPA on initial, initial-liking, their interaction, and gender. As expected, a significant interaction between initial-liking and initial, $\beta = -.46$, p < .02, revealed that initial-liking A's and B's performed better than initial-liking C's and D's, whereas initial-disliking C's and D's performed better than initial-disliking A's and B's (see Figure 2). These findings reflect the operation of student characteristics, therefore eliminating the possibility of instructor biases.

Grades are consequential. Achieving higher grades not only earns praise from professors, family, and peers, but it can also improve post-graduation outcomes through admission to better graduate schools. In Study 4 we investigated this possibility.

Study 4: Graduate School Admission

Method

If A- and B-initialed students earn higher grades than C- and D- initialed students, they should also go on to better graduate schools. To test this hypothesis we sought a sample linking individual names with graduate schools. We found what we were looking for in a dataset previously employed to test a different consequence of name liking (Pelham et al., 2002). The American Bar Association (ABA) maintains a searchable online database for finding a lawyer using a few criteria: type of practice, location, and law school. Access to name and law school information enabled us to test the relationship between these variables.

To examine this relationship we first had to build the dataset. Using US News and World

Reports, we first identified the possible set of law schools. A computer program then ran iterative searches of the ABA web page for every lawyer with A through D as a first, middle, or last initial. Every search requires that at least two letters be specified, so the program separately searched each law school for each of the 676 possible two letter combinations for first initial, and then for last initial. In total the program ran for about three days, recording the number of lawyers returned in each search. In our analysis, we included data from schools yielding at least 100 hits and those for which demographic data were available (see below). Our final sample included 170 law schools and 392,458 lawyers.

To measure law school quality we used *US News and World Reports* rankings from 2003. Given that nearly our entire sample received their degrees prior to the rankings, we were concerned that the rankings would not be completely stable over time, and so we used the somewhat rough (but standard) categorization of schools into four tiers, reasoning that this distinction would be more robust over time than the more continuous and variable ranking system. The same source also provided gender and ethnicity information for each of the schools, which we used as controls in our final analysis.

Results and Discussion

Using law school as the unit of analysis, we regressed school quality (Tier 1 is the best; Tier 4 is the worst) on the proportion of A- and B-initialed lawyers (relative to C- and D-initialed lawyers). In this analysis, we controlled for the percentage of women, Asian-Americans, African-Americans, Hispanic-Americans, Indian-Americans, Mexican-Americans, Puerto Rican-Americans, and International students, as indicated by *U.S. News and World Report's* 2003 survey. The results revealed the predicted effect of initial on law school quality, $\beta = -.17$, p = .036. As schools worsened, the proportion of A- and B-initialed lawyers relative to C- and D-

initialed lawyers decreased. Consistent with our hypothesis, then, it seems that Adlai and Bill tend to go to better law schools than Chester and Dwight.

Study 5: Experimental Performance

The first four studies provide impressive support for the hypothesis that people perform worse when their initials match objectively undesirable performance outcomes. Moreover, these studies demonstrate this effect in real-world situations that have important consequences: Indeed, strikeouts, grades, and graduate schools can affect salaries, status, and careers.

However, despite the real-world import of these findings, archival studies – by their very nature – leave open the possibility for alternative explanations. Furthermore, archival data has been particularly challenged in the investigation of the NLE (Gallucci, 2003; though see Pelham, Carvallo, DeHart, & Jones, 2003 for a response). Definitively demonstrating the causal influence of initials on performance requires an experiment that randomly assigns people to initial-matching vs. initial-irrelevant performance outcomes. In Study 5, that is what we did.

Method

Participants (N = 284) completed an online experiment for a chance to win a \$50 lottery and an opportunity to win approximately \$100 more. The participants all lived in the United States, were predominantly female (83%), and ranged in age from 18 to 67 (M = 33 years old).

Participants began by answering many unrelated demographic questions, during which they indicated their first and last initials. Then, the instructions informed participants about an upcoming anagram task, which involved unscrambling sets of letters in order to form English words. Once participants acknowledged that they understood the task, they were asked to solve four relatively easy practice anagrams and told to complete as many as possible before clicking to go to the next screen. The program recorded their answers.

The next page presented the critical task of the experiment. Participants were asked to solve ten difficult anagrams (taken from Finkel et al., 2006), including two that were unsolvable, and they were told to take as much time to complete the task as they wanted. The instructions further indicated that if participants solved all ten problems correctly they would be entered into a raffle for a prize "worth more than \$100." If they could not answer all of the anagrams and wanted to give up, they were told that they would be entered into a raffle for a prize "worth less than \$100." The ten anagrams were presented in the middle of the screen, and at the bottom of the page there were two buttons to click when they were done solving anagrams: one button for people who believed they had solved all of the anagrams correctly, and one button for people who did not believe they had solved all of the anagrams correctly.

Our critical manipulation was contained in the labels for those two buttons. For participants in the *Name Incongruent* condition, the buttons displayed randomly assigned – initial-irrelevant – prize labels (e.g., "Prize X" and "Prize Y"). For participants in the *Positive Name Congruent* condition, the "over \$100" button displayed the participant's first initial, and the "under \$100" displayed a random letter. For participants in the *Negative Name Congruent* condition, the "over \$100" button displayed a random letter, and the "under \$100" button displayed the participant's first initial (see Figure 3 for a representation of the stimuli).

Results and Discussion

Consistent with the previous studies, we expected participants whose initial matched the prize for failure to solve the fewest anagrams. Consistent with Study 2, we expected participants whose initial matched the prize for success to perform no better than participants whose initials matched none of the prizes.

Before analyzing success on the anagram task, we eliminated two types of participants.

First, we removed participants who did not correctly answer any of the anagrams (approximately 6% of participants) and therefore seemed to have abandoned the experiment. Second, we eliminated participants who claimed to have answered all of the anagrams correctly, because that was impossible (approximately 13% of participants). This left us with a final sample of 225 participants.

As predicted, prize labels significantly influenced performance on the anagram task. A one-way analysis of covariance (with the score on the practice anagrams entered as a covariate) revealed an overall effect of condition, F(2, 221) = 3.54, p = .031: Participants in the Negative Name Congruent condition performed worse than did participants in either the Positive Name Congruent condition, F(1, 144) = 5.36, p = .022, or the Name Incongruent condition, F(1, 155) = 5.26, p = .023 (see Figure 3). Consistent with Study 2, there was no difference between the Positive Name Congruent and the Name Incongruent conditions, F < 1.

As predicted, when the prize for failure matched participants' first initial, participants performed especially poorly on the anagram task. This supports our contention that the conscious pursuit of desirable performance outcomes (i.e., the goal to solve all the anagrams) can be undermined by the unconscious pursuit of undesirable name-resembling outcomes. As in Study 2, there was no boost in participants' performance when the prize for success matched participants' first initial. Again, this null result may be explained by ability constraints on performance: Though a name-congruent positive outcome may increase the *desire* to succeed, this increased desire may not translate into increased performance. Indeed, performing well is often difficult; performing poorly is often all too easy.

In sum, using an experimental design, Study 5 confirmed the results of the first four archival studies. When people's initials match negative performance outcomes, performance

suffers.

General Discussion

Together, these five studies demonstrate that name-liking guides the pursuit of initial-resembling performance outcomes, even when those outcomes are explicitly negative. Baseball players with initials representing strikeouts (K's) were more likely to strikeout (Study 1). MBAs with initials resembling poor grades (C's and D's) "earned" lower GPAs (Study 2), an effect that we subsequently attributed to the students and not their evaluators (Study 3). Lawyers with initials resembling poor grades went to worse law schools than their A- and B-initialed peers (Study 4). Finally, a laboratory experiment showed that people solve fewer anagrams when the consolation prize for performance is labeled with their first initial (Study 5).

This research extends the already-striking name-liking literature into the performance domain. More importantly, though, demonstrating these effects on *negative* performance outcomes strongly suggests that name-liking affects life outcomes via an implicit, unconscious process. Indeed, as has been persuasively argued in the past, the best way to demonstrate the independence of unconscious thought is to put it in direct competition with conscious goals (e.g., Jacoby, Toth, & Yonelinas, 1993). It is difficult to imagine a major league baseball player explicitly adopting a strikeout-often strategy simply because he wants to achieve an initial-congruent outcome. Rather, Koley would no doubt always consciously prefer a hit to a strikeout, and David would no doubt consciously rather earn A's than D's. Our results suggest that, to a limited extent at least, those conscious goals are sometimes subservient to an unconscious preference for the alternative.

References

- Bosson, J. K., Swann, W. B. Jr., & Pennebaker, J. W. (2000). Stalking the perfect measure of implicit self-esteem: The blind men and the elephant revisited. *Journal of Personality and Social Psychology*, 79, 631-643.
- Brendl, C. M., Chattopadhyay, A., Pelham, B. W., & Carvallo, M. (2005). Name letter branding: Valence transfers when product specific needs are active. *Journal of Consumer Research*, 32, 405-415.
- DeHart, T. & Pelham, B. W. (2007). Fluctuations in state implicit self-esteem in response to daily negative events. *Journal of Experimental Social Psychology*, 43, 157-165.
- Dijksterhuis, A. (2004). I like myself but I don't know why: Enhancing implicit self-esteem by subliminal evaluative conditioning. *Journal of Personality and Social Psychology*, 86, 345-355.
- Finkel, E. J., Campbell, W. K., Brunell, A. B., Dalton, A. N., Scarbeck, S. J., & Chartrand, T. L. (2006). High-maintenance interaction: Inefficient social coordination impairs self-regulation. *Journal of Personality and Social Psychology*, *91*, 456-475.
- Gallucci, M. (2003). I sell seashells by the seashore and my name is Jack: Comment on Pelham, Mirenberg, & Jones (2002). *Journal of Personality and Social Psychology*, 85, 789-799.
- Jacoby, L. L., Toth, J. P., & Yonelinas, A. P. (1993). Automatic versus intentional uses of memory: Measuring recollection. *Journal of Experimental Psychology: General*, 122, 139-154.
- Jones, J. T., Pelham, B. W., Carvallo, M., & Mirenberg, M. C. (2004). How do I love thee? Let me count the Js: Implicit egotism and interpersonal attraction. *Journal of Personality and Social Psychology*, 87, 665-683.

- Jones, J. T., Pelham, B. W., Mirenberg, M. C., & Hetts, J. J. (2002). Name-letter preferences are not merely mere exposure: Implicit egotism as self-regulation. *Journal of Experimental Social Psychology*, 38, 170-177.
- Koole, S. L., Dijksterhuis, A., & van Knippenberg, A. (2001). What's in a name? Implicit self-esteem and the automatic self. *Journal of Personality and Social Psychology*, 80, 669-685.
- Nuttin, J. M. (1987). Affective consequences of mere ownership: The name-letter effect in twelve European languages. *European Journal of Social Psychology*, *15*, 381-402.
- Oppenheimer, D. M., Meyvis, T., & Davidenko, N. (2006). *Instructional manipulation checks:*Detecting satisficing to increase statistical power. Manuscript in preparation.
- Pelham, B. W., Carvallo, M., DeHart, T., & Jones, J. T. (2003). Assessing the validity of implicit egotism: A reply to Gallucci (2003). *Journal of Personality and Social Psychology*, 85, 800-807.
- Pelham, B. W., Carvallo, M. & Jones, J. T. (2005). Implicit egotism. *Current Directions in Psychological Science*, 14, 106-110.
- Pelham, B. W., Mirenberg, M. C., & Jones, J. T. (2002). Why Susie sells seashells by the seashore: Implicit egotism and major life decisions. *Journal of Personality and Social Psychology*, 82, 469-487.
- Schwarz, A. (2004). *The numbers game: Baseball's long fascination with statistics*. New York: St. Martin's Press.
- Sherman, D. K. & Kim, H. S. (2005). Is there an "I" in "Team"? The role of the self in group-serving judgments. *Journal of Personality and Social Psychology*, 88, 108-120.
- Simmons, J. P., & Nelson, L. D. (2006). Intuitive confidence: Choosing between intuitive and

nonintuitive alternatives. Journal of Experimental Psychology: General, 135, 409-428.

Author Note

Author order was determined alphabetically. Leif D. Nelson, Leonard N. Stern School of Business; Joseph P. Simmons, Yale School of Management. We are indebted to Jeff Galak for assisting with Study 5, Gabriel Lenz for assisting with Study 4, and George Wu for his insights on Study 1. Address correspondence to leifnelson@stern.nyu.edu and joseph.simmons@yale.edu.

Footnotes

- 1. The baseball data was retrieved from http://www.baseball-databank.org/.
- 2. This restriction is sensible but somewhat arbitrary. Nevertheless, if we impose no restriction, or set a cut-off at a higher value, the effect remains reliable. We define a "plate appearance" as any at bat or walk.
- 3. Students with F initials were excluded from Studies 3-5 for two reasons. First, unlike A-through-D, F is much less universally associated with an academic performance outcome. Second, people unmotivated to avoid *failing* grades are particularly unlikely to be included in our high-achieving academic samples.
- 4. We replicated the findings of Studies 3 and 4 in regressions treating initial as a continuous variable, where A = 1, B = 2, C = 3, D = 4.
- 5. For simplicity we combine first and last initial categories as described, but it is worth noting that there are independent effects of first initial and last initial (p's < .04), and that both effects disappear if the other initial is relevant and incongruent (p's > .40). This independence would strongly suggest that, beyond the controls for ethnic background reported in the study, the effects are unlikely to emerge from some other ethnic confound.
- 6. We included middle initial out of necessity. On the ABA website, searches for first-initial A's output lawyers with first- and middle-initial A's.
- 7. There were two disadvantages to collecting the data this way. First, it precluded the ability to remove lawyers with conflicting initial combinations (e.g., Alan Dershowitz). Second, lawyers with multiple practices were counted multiple times. Both of these disadvantages should merely add noise to our analysis, as they do not tip the scales in favor of our hypothesis.

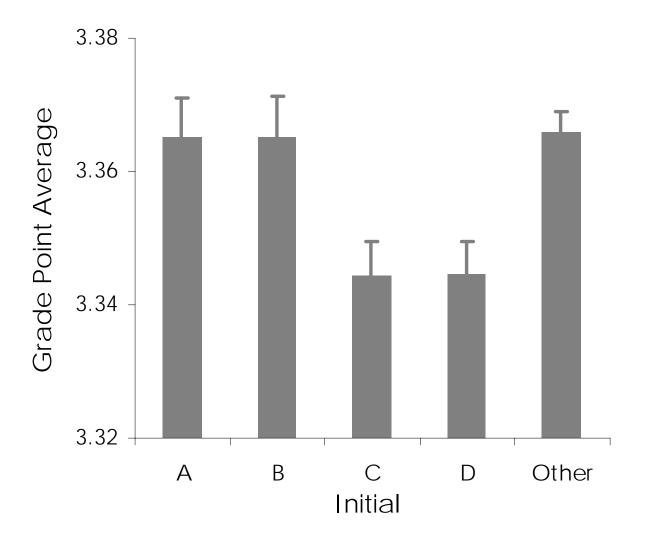
- 8. Because of factors identified in Footnotes 6 and 7, this overestimates the number of A through D lawyers in actuality (but there are still a lot of lawyers in the United States). The lawyer search engine did not discriminate between Rutgers University of Newark and Rutgers University of New Brunswick. Thus, these two schools and their demographic information were combined in the analysis.
- 9. The inclusion of unsolvable anagrams allowed us to eliminate participants who later claimed to have solved all of the anagrams, and who were therefore not fully attending to the task (cf. Oppenheimer, Meyvis, & Davidenko, 2006; Simmons & Nelson, 2006).

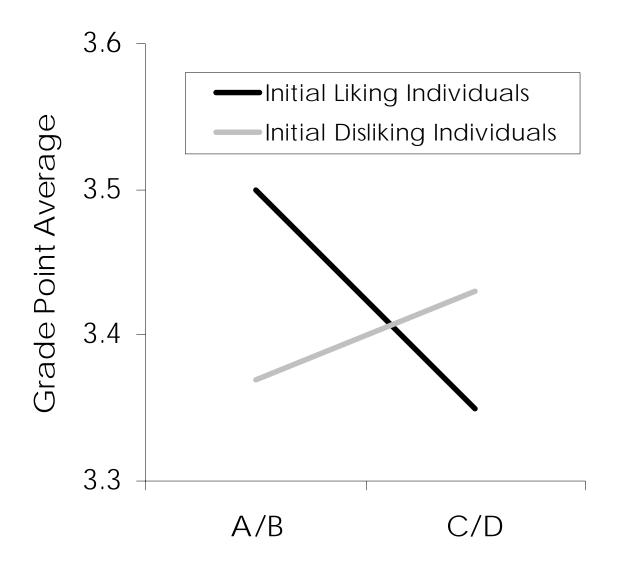
Figure Captions

Figure 1: Study 2 – GPA as a function of initial.

Figure 2: Study 3 – GPA as a function of initial (A/B vs. C/D) and initial liking for students one standard deviation above and below the mean on initial liking.

Figure 3: Study 5 – The response options seen by the hypothetical participant "Toby" in each of the three conditions, and the mean number of anagrams solved (out of 8 possible).







Click here if you cannot solve all of the anagrams. Worth less than \$100

Prize Y

Click here if you correctly solved all of the anagrams. Worth more than \$100

Initial

Incongruent

Positive Initial Congruent

Prize X

Click here if you cannot solve all of the anagrams. Worth *less* than \$100

Click here if you correctly solved all of the anagrams. Worth more than \$100

Prize T

Negative Initial Congruent

Prize T

Click here if you cannot solve all of the anagrams. Worth less than \$100

Prize X

Click here if you correctly solved all of the anagrams. Worth more than \$100

