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# Motivated Underpinnings of the Impact Bias in Affective Forecasts

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Affective forecasters often exhibit an impact bias, overestimating the intensity and duration of their emotional reaction to future events. Researchers have long wondered whether the impact bias might confer some benefit. We suggest that affective forecasters may strategically overestimate the hedonic impact of events to motivate their production. We report the results of four experiments providing the first support for this hypothesis. The impact bias was greater for forecasters who had chosen which of two events to attempt to produce than for forecasters who had yet to choose (Experiment 1). The impact bias was greater when forecasts were made while forecasters could (or perceived they could) influence whether an event was produced than when its production had been determined but was unknown (Experiments 2A and 2B). Finally, experimentally manipulating the extremity of affective forecasts for an event influenced the amount of effort that forecasters expended to produce it (Experiment 3). The results suggest that the impact bias may not be solely cognitive in origin, but may also have motivated underpinnings.

*Keywords:* affective forecasting, motivation, motivated reasoning, happiness, impact bias

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It is generally assumed that people base decisions on the anticipated pleasure that they imagine alternatives to yield and that errors in affective forecasting yield suboptimal outcomes (Gilbert & Wilson, 2007; Hsee & Hastie, 2006). One of the most widely observed biases in affective forecasting is the impact bias, whereby forecasters overestimate the intensity of their hedonic response to future events (Gilbert, Pinel, Wilson, Blumberg, & Wheatley, 1998; Gilbert & Wilson, 2007). The impact bias has been shown to occur unintentionally, resulting from biases in attention and memory (Meyvis, Ratner, & Levav, 2010; Morewedge, Gilbert, & Wilson, 2005; Schkade & Kahneman, 1998; Wilson, Wheatley, Meyers, Gilbert, & Axsom, 2000), a failure to correctly anticipate the threshold at which they will experience a hedonic response (Morewedge, Gilbert, Keysar, Berkovits, & Wilson, 2007), and erroneous lay theories about which features of events matter most (Gilbert & Ebert, 2002; Hsee & Zhang, 2004; Kahneman & Snell, 1992). It is a robust bias. People not only overestimate the hedonic impact of events experienced once (Wilson, Meyers, & Gilbert, 2001), they also overestimate the hedonic impact of events they have experienced repeatedly (Meyvis et al., 2010; Gilbert, Lieberman, Morewedge, & Wilson, 2004).

The resistance of forecasters to feedback appears to be, in part, due to poor memory for their affective forecasts (Meyvis et al., 2010). It is also worth examining whether the impact bias perseveres because it might confer some benefit. As decisions are based on the anticipated hedonic impact of future events and anticipated affect directs how people expend their limited cognitive and physical resources (Baumeister, Vohs, DeWall, & Zhang, 2007; Hsee & Hastie, 2006; Mellers, 2000), the impact bias may exist to motivate future behavior. We suggest that affective forecasters may overestimate the hedonic impact of future events, in part, to motivate themselves to produce the forecasted events.

Motivated reasoning influences evaluations of the past, present, and future so that they support a desired conclusion or lead to the implementation of a desired outcome (Kunda, 1990). Attention is first drawn to features of stimuli that imply future reward (Balcetis & Dunning, 2006), for example, and all kinds of information, from medical test results to dream content, is believed to be more true and important when that information reflects favorably on the self (Ditto & Lopez, 1992; Morewedge & Norton, 2009). Motivated reasoning is not only used to interpret information in a favorable light, it can confer functional benefits. People strategically skew their perceptions of the probability of an event in order to increase their efforts to avoid or produce it (Norem & Cantor, 1986; Zhang & Fischbach, 2010). Motivated reasoning can also help people resist temptations by making temptations appear less attractive when they are presently available than when they are unavailable (Myrseth, Fishbach, & Trope, 2009).

We propose that the robust nature of the impact bias may, in part, be explained by motivated reasoning. As anticipated affect is a potent source of motivation (Baumeister et al., 2007; Hsee & Hastie, 2006; Loewenstein & Lerner, 2003), affective forecasters may strategically overestimate the hedonic impact of future events to motivate their production. It is important to stress that it is unnecessary for such a strategic tendency to be conscious or

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explicit. Conscious and unconscious reward primes, for example, can similarly influence the allocation of resources expended in the pursuit of those rewards (Aarts, Custers, & Marien, 2008; Balcetis & Dunning, 2010; Bijleveld, Custers, & Aarts, 2009, 2010; Pessiglione et al., 2007).

We test three key predictions of our theory of a motivated impact bias in affective forecasting. First, we predict that forecasters should be less likely to exhibit an impact bias for a future event they have not committed to produce than the same event if they committed to produce it. When deciding which event(s) to produce, forecasters should be in a deliberative mindset that fosters an impartial analysis of the costs and benefits of each course of action. Once forecasters have committed to producing a particular event, however, they should transition to an implemental mindset that motivates perception and action toward goal attainment (Gollwitzer & Bayer, 1999; Taylor & Gollwitzer, 1995). Participants made affective forecasts before or after choosing which event to produce in Experiment 1. We predicted that affective forecasts made after choosing which event to produce would be more likely to exhibit an impact bias than affective forecasts made before choosing which event to produce, relative to experiencer reports.

Second, affective forecasters should be more likely to exhibit an impact bias when they believe they can influence if an event is produced than when they believe they cannot influence it. If there is no action to motivate, there is no reason to change perception to motivate action. We tested this prediction in Experiments 2A and 2B. In each experiment, participants made an affective forecast or reported their hedonic experience. Affective forecasts were either made while participants could (or perceived they could) or could not (or perceived they could not) influence whether the event was produced. (Of course, we did not reveal if the event had been produced until after participants made their forecasts.) We predicted that affective forecasts made when forecasters perceived that they could control an event would be more likely to exhibit an impact bias than forecasts made when forecasters perceived that they could not control an event.

Third, affective forecasts should influence the effort expended to produce the forecasted event. This assumption seems noncontroversial, as the magnitude of reward associated with a stimulus influences the resources expended to produce it (e.g., Balcetis & Dunning, 2010; Bijleveld et al., 2009, 2010; Custers & Aarts, 2010; Pessiglione et al., 2007). Yet, in over a decade of affective forecasting research, no study has conclusively demonstrated that affective forecasts motivate the production of desirable events, nor have affective forecasts been shown to be directly related to the effort expended to produce the forecasted events (Gilbert & Wilson, 2007; Hsee & Hastie, 2006). Although many researchers have assumed such a connection (e.g., Baumeister et al., 2007; Wilson & Gilbert, 2003), it is possible that the link between affective forecasts and the effort expended to produce forecasted events may be weaker than one might assume, as is the link between attitudes and behavior (Ajzen & Fishbein, 1977), or such a link may simply not exist. A single study showed a modest correlation between the severity of negative affect that forecasters anticipated if they were romantically rejected and the dosage of a mood enhancing drug that they said they would subsequently take (Wilson, Wheatley, Kurtz, Dunn, & Gilbert, 2004). The relationship between these self-reports was correlational, however, and other studies have found no direct relationship between the extremity of affective forecasts and subsequent behavior (Ku, 2008).

We directly tested the link between experimentally manipulated affective forecasts for an event and the effort expended to produce that event in Experiment 3. Participants first forecasted how happy they would be if they experienced a superior or inferior event to induce a contrast effect in their subsequent affective forecast for a target event (Sherif, Taub, & Hovland, 1958). We predicted that the difference in their affective forecasts for the target event would lead to differences in the effort that they expended to produce it.

## Experiment 1: Pre- and Postdecisional Forecasts

In Experiment 1, students chose one of two professors to challenge in a motor skill task. Predecisional forecasters predicted how happy they would be if they beat each of the two professors before choosing which professor to challenge. Postdecisional forecasters predicted how happy they would be if they beat each of the two professors after choosing which professor to challenge. This order manipulation was used to instantiate deliberative and implemental mindsets, respectively (Gollwitzer & Bayer, 1999; Taylor & Gollwitzer, 1995). A group of experiencers chose which of the two professors to challenge and performed the task, were told they beat the professor that they chose, and then reported their happiness. According to the first prediction of our hypothesis, postdecisional forecasters should be more likely to exhibit an impact bias than predecisional forecasters.

### Method

**Participants.** One hundred seventy-nine pedestrians in Pittsburgh, Pennsylvania (69 women, $M_{age}$ = 31.46, $SD$ = 15.31) received a snack for participating in the experiment.

**Procedure.** Participants completed a motor skill task on a laboratory computer. In an instructional practice round, all participants typed a two-letter sequence (K→L) as many times as they could in 30 s. Participants were then shown the photographs of two professors and were informed that they would compete against one of the two in a second test round, in which they would press the two-letter sequence (Z→X) as many times as they could in 60 s. If they typed more pairs than the professor had been able to, they would win the task. Participants were not informed of the number of pairs typed by either professor at this point in the experiment.

Postdecisional forecasters chose one professor to challenge and then forecasted how happy they would be if they beat each of the two professors on an 11-point scale with endpoints, *Very unhappy* (1) and *Very happy* (11). Predecisional forecasters predicted how happy they would be if they beat each of the two professors and then chose which professor to challenge. All forecasters then completed the test round and were told that they beat the professor.

Experiencers chose one of the two professor to challenge, were told that they beat that professor after they completed the test round, and then reported their happiness on the same scale as used by forecasters. Assignment to condition was random in this, and all subsequent experiments reported in this article.

### Results and Discussion

Nineteen participants who reported that they participated in a similar version of this motor-skill task were excluded from the

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analyses (i.e., the experiments are not presented in chronological order). No other participants were excluded from the experiment.

We examined forecasted and reported happiness in an ANOVA with condition (predecisional forecasters, postdecisional forecasters, experiencers) as a between-subjects factor, which yielded a significant main effect, $F(2, 157) = 2.96$, $p = .05$, $\eta_p^2 = .04$. As suggested by Rosenthal and Rosnow (1991), we used a planned contrast with weights in parentheses to compare differences between the three conditions. As predicted, postdecisional forecasters (+2) predicted that they would be happier if they beat the professor they chose ($M = 8.01$, $SD = 1.78$) than did predecisional forecasters (−1; $M = 7.24$, $SD = 1.77$) and experiencers (−1; $M = 7.50$, $SD = 2.30$), $t(157) = 3.34$, $p = .02$.[1] Supporting our first prediction, postdecisional forecasters were more likely to exhibit an impact bias than predecisional forecasters. In other words, forecasters were more likely to exhibit an impact bias after they had committed to producing the forecasted event (when in an implemental mindset) than before they had committed to producing the forecasted event (when in a deliberative mindset).

## Experiments 2A and 2B: Actual and Perceived Control

Experiments 2A and 2B tested the second prediction of our theory. If affective forecasts are exaggerated to motivate subsequent behavior, affective forecasters should be less likely to exhibit an impact bias when forecasters believe they can no longer control the production of the forecasted event than when forecasters believe they can control the production of the forecasted event. We tested our second prediction by manipulating whether or not forecasters actually could control the production of the event in Experiment 2A and whether or not forecasters perceived that they could control the production of the event in Experiment 2B.

### Experiment 2A: Actual Control

In Experiment 2A, we manipulated whether forecasters had the ability to influence the production of the forecasted event after making their forecast or whether the production of the event had been determined before they made their forecast. Affective forecasters in Experiment 2A forecasted how happy they would be if they beat a professor in a motor skill task (there was no choice of professor to challenge in Experiment 2A). Half the forecasters made their forecasts before performing that motor skill task, while they still could influence whether or not they beat the professor. The other half of forecasters made their forecasts after they had performed the motor skill task but before they learned whether or not they beat the professor. Experiencers reported how happy they were upon learning that they beat the professor in the motor skill task (i.e., the game was rigged). We predicted that forecasters would be more likely to exhibit an impact bias when their forecasts were made before performing the motor skill task than when their forecasts were made after performing it. In other words, we predicted that forecasters would be more likely to exhibit an impact bias when they could still influence the outcome than when they could no longer influence the outcome.

**Method.**

***Participants.*** One hundred forty-nine pedestrians in Pittsburgh, Pennsylvania (79 women, $M_{age} = 26.40$, $SD = 10.30$) received a snack for participating in the experiment.

***Procedure.*** Participants completed the motor skill task used in Study 1 on a laboratory computer. After the instructional practice round, participants were shown a photograph of the first author and informed that they would compete against this professor in a second test round, in which they would press the two-letter sequence (Z→X) as frequently as they could in 60 s. The score of the professor was set at 148 pairs, which was picked on the basis of Study 1, in which more than 90% of participants had a score greater than or equal to 148. Participants were not informed of the number of pairs generated by the professor at this point in the experiment.

In the forecast-before condition, participants forecasted how happy they would be if they beat the professor on an 11-point scale with endpoints, *Very unhappy* (1) and *Very happy* (11). After completing the test round, they learned that they beat the professor. In the forecast-after condition, participants completed the test round and then forecasted how happy they would if they beat the professor. After making their forecast, they learned that they beat the professor. Experiencers completed the test round and then reported their happiness after learning that they beat the professor. Their happiness reports were made on the same scale as used by forecasters.

***Results and discussion.*** Three participants (in the experiencer condition) who did not beat the professor were excluded from all subsequent analyses. No other participants were excluded from the experiment.

We examined happiness ratings in an ANOVA with condition (forecast before, forecast after, experiencer) as a between-subjects factor, which yielded a significant main effect, $F(2, 143) = 4.03$, $p = .02$, $\eta_p^2 = .03$. As suggested by Rosenthal and Rosnow (1991), we used a planned contrast with weights in parentheses to compare differences between the three conditions. As predicted, participants who (+2) made forecasts before the test round predicted they would feel happier if they beat the professor ($M = 8.39$, $SD = 1.87$) than did participants who made their forecasts after the test round (−1; $M = 7.38$, $SD = 1.74$) and experiencers (−1; $M = 7.74$, $SD = 1.83$), $t(143) = 2.63$, $p = .009$.[2] Supporting our second prediction, affective forecasters were more likely to exhibit an impact bias when they could still influence the production of the forecasted event than when they could no longer influence it.

### Experiment 2B: Perceived Control

Experiment 2B extended the investigation by testing within a different paradigm whether forecasters are more likely to exhibit the impact bias when they merely perceive that they have greater control over the production of an event, while holding actual control constant between forecaster conditions. Forecasters in Experiment 2B predicted how happy they would be if they won $5 in a die-roll before rolling the die or after rolling the die while they

[1] Differences between conditions with two-tailed post hoc tests (Fisher's LSD) in Experiment 1: predecisional forecasters versus postdecisional forecasters, $p = .006$; predecisional forecasters versus experiencers, $p = .085$; postdecisional forecasters versus experiencers, $p = .35$.

[2] Differences between conditions with two-tailed post hoc tests (Fisher's LSD) in Experiment 2A: forecaster before versus forecast after, $p = .019$; forecast before versus experiencers, $p = .097$; forecast after versus experiencers, $p = .55$.

did not know its outcome. Experiencers rolled a die and reported how happy they were that they won. We chose this design because people believe they can exert greater influence over a chance event if it has yet to occur than if it has already been determined (Strickland, Lewicki, & Katz, 1966; Rothbart & Snyder, 1970; Thompson, Armstrong, & Thomas, 1998), as illustrated by a preference for predicting and betting on events that have not already occurred rather than on events that have already occurred for which the outcome is still unknown (Strickland et al., 1966; Brun & Teigen, 1990). As in Experiment 2A, we predicted that forecasters would be more likely to exhibit an impact bias when forecasts were made while forecasters perceived having greater influence over the gamble (before rolling the die) than when they perceived having less influence over the gamble (after rolling the die).

**Method.**

***Participants.*** One hundred sixty-three students at Carnegie Mellon University recruited in the campus center (51 women, $M_{age}$ = 20.17, $SD$ = 3.47) participated in exchange for a 50% chance to win $5. Participant payment was determined by the outcome of the gamble.

***Procedure.*** Participants rolled a six-sided die with a 50% chance to win $5. Before rolling, participants selected three numbers as their "lucky" numbers. If they rolled one of their "lucky" numbers, they won the $5. If not, they did not win anything. Participants randomly assigned to the forecast-before condition predicted how happy they would feel if they rolled one of their lucky numbers before they rolled the die by drawing an *X* through a 13-cm line with endpoints, *Very unhappy* (0) and *Very happy* (13). They also answered a question about whether they thought they would win the gamble by indicating "yes" or "no." They then rolled the die into a covered box with an opening on one side, which the experimenter lifted to reveal their outcome. Participants randomly assigned to the forecast-after condition rolled the die into the box and made their prediction before the experimenter lifted the box to reveal their outcome.

In addition to the forecasting conditions, an experiencer condition was collected on a different day. Experiencers also selected three lucky numbers, rolled a die into a black box, and then reported their happiness after winning or losing on the scale forecasters used to predict their happiness. Experiencers were run in the same week and location with the same stimuli as forecasters, and the demographics of the populations did not differ by age or gender, $t(160)_{age}$ = .41, $p$ = .69 and $\chi^2_{sex}$ (1) = .023, $p$ = .88, respectively.

**Results.** Thirty-eight experiencers lost the die roll, and one participant's forecast was more than 3 standard deviations from the mean. These participants were excluded from further analyses. No other participants were excluded from the analyses.

We examined forecasted and experienced happiness in an ANOVA with condition (forecast before, forecast after, experiencer) as a between-subjects factor, which yielded a significant main effect, $F(2, 122) = 3.38$, $p = .03$, $\eta_p^2 = .05$. As suggested by Rosenthal and Rosnow (1991), we used a planned contrast with weights in parentheses to compare differences between the three conditions. As predicted, participants who forecasted before rolling the die predicted they would feel happier if they won (+2; $M$ = 11.59, $SD$ = 1.52) than did participants who forecasted after rolling the die (−1; $M$ = 10.60, $SD$ = 2.33) or experiencers (−1; $M$ = 10.42, $SD$ = 2.57), $t(122) = 2.55$, $p = .01$, $r = .22$.[3] Affective forecasters were thus more likely to exhibit an impact bias when they perceived that they could still influence the production of the forecasted event than when forecasters perceived that they could no longer influence it.

**Discussion.** Affective forecasters in Experiments 2A and 2B were more likely to exhibit an impact bias when their affective forecast could (or might be perceived to) motivate the production of the forecasted event than when their forecast could not (nor appear to) motivate the production of that event. The results provide further evidence that motivation plays a role in the impact bias in affective forecasting, as forecasters only exhibited an impact bias when their affective forecast could still motivate their behavior. Forecasters showed no evidence of an impact bias when their affective forecast could no longer motivate (or be perceived to motivate) their behavior.

## Experiment 3: Motivating Forecasts and Behavior

We tested the third prediction of our motivated forecasting hypothesis in Experiment 3—that affective forecasts directly influence the effort that forecasters expend to produce the forecasted event. We experimentally manipulated affective forecasts for winning $5 for passing a memory test by having participants first forecast how happy they would be if they won $2 or $1,000,000 in the lottery. We expected that this manipulation would produce a hedonic contrast effect (Tversky & Griffin, 1991), such that participants who first forecasted how happy they would be if they won $2 should forecast that they would be happier if they won $5 for passing the test than should participants who first forecasted how happy they would be if they won $1,000,000. More important, we predicted that the differences in their affective forecasts would lead participants who first made forecasts for winning $2 to expend greater effort to pass the test and win $5 than would participants who first made forecasts for winning $1,000,000. We also measured Need for Achievement, because we thought it would be likely to influence the amount of time participants spent studying independent of the contrast manipulation. No other personality variables were measured.

### Method

**Participants.** Ninety-three residents of Boston, Massachusetts who completed a battery of computer tasks (48 women, $M_{age}$ = 23.10, $SD$ = 5.30) participated in the experiment.

**Procedure.** Participants first completed a 22-item measure of their Need for Achievement (McClelland, 1958) on a computer by rating their agreement with each item on 9-point scales marked with endpoints, *Very strongly disagree* (1) and *Very strongly agree* (9). No other personality variables or covariates were measured or tested in this experiment.

In an ostensibly unrelated task (presented as a new task with a different color scheme and font), each participant made two affective forecasts. Participants in an inferior standard condition first

[3] Differences between conditions with two-tailed post hoc tests (Fisher's LSD) in Experiment 2B: forecast before versus forecast after, $p$ = .055; forecast before versus experiencers, $p$ = .015; forecast after versus experiencers, $p$ = .61.

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forecasted how happy they would feel if they won $2 in a lottery on a 9-point scale with endpoints, *Very unhappy* (1) and *Very happy* (9). Participants in a superior standard condition first forecasted how happy they would feel if they won $1,000,000 in a lottery on an identical scale.

Both groups of participants then forecasted how happy they would feel if they received $5 for passing a memory test on a scale identical to the scale used to forecast their happiness winning the standard prize. In the subsequent study phase of the memory test, participants memorized the location of 10 pairs of playing cards sharing the same rank (e.g., "Ace") in a 4 × 5 array of 20 cards. Participants were given as much study time as desired, which served as our main dependent variable. When they had finished studying, participants were shown one card and quizzed about the location of the other member of its pair (e.g., "Where is the other Ace?"). If its location was correctly identified from the five options with which they were presented, they won $5. If not, they won $0.

## Results

Study time was log-transformed to adjust for skewness. A Need for Achievement score was calculated by averaging the 22 items (Cronbach's alpha = .83). Because Need for Achievement significantly influenced participants' forecasted happiness if they won, $\beta = .28$, $t(91) = 2.77$, $p = .007$, it was included as a covariate in all subsequent analyses. No other covariates were included or tested.

**Affective forecasts.** As a manipulation check, participants considered winning the inferior standard ($2; $M = 5.88$, $SD = 1.72$) to be hedonically inferior to winning the superior standard ($1,000,000; $M = 8.42$, $SD = 1.33$), $F(1, 90) = 64.47$, $p < .001$, $r = .65$. More important, an ANCOVA revealed that participants in the inferior standard condition forecasted that they would be happier if they won the target prize ($M = 7.91$, $SD = 1.04$) than did participants in the superior standard condition ($M = 7.42$, $SD = 1.73$), $F(1, 90) = 5.03$, $p = .03$, $r = .20$.

**Mental effort.** An ANCOVA revealed that participants in the inferior standard condition spent more time studying for the memory test ($M = 200.27$s, $SD = 125.50$) than did participants in the superior standard condition ($M = 159.09$s, $SD = 110.06$), $F(1, 90) = 4.28$, $p = .04$, $r = .21$.

**Analysis of mediation.** To test whether affective forecasts influenced the amount of time participants spent studying, we conducted an analysis of mediation with Need for Achievement as a covariate, using the bootstrapping procedure developed and recommended by Preacher and Hayes (2004). Participants in the inferior standard condition forecasted that they would be happier if they won the prize than did participants in the superior standard condition, $b = .55$, $t(91) = 2.24$, $p = .03$, and exerted greater mental effort to win it, $b = .35$, $t(91) = 2.06$, $p = .04$. (Need for Achievement did not affect effort expended, $b = .012$, $t(91) = .13$, $p = .90$.) When affective forecasts were included in the model, the contrast manipulation induced by the standard prize no longer significantly predicted the amount of effort expended, $b = .27$, $t(91) = 1.58$, $p = .12$, but affective forecasts did, $b = .142$, $t(91) = 2.02$, $p = .05$ (see Figure 1). The mediating effect of extremity of forecast on effort expended was significantly different from zero, $b = .0752$, lower 95% confidence limit = .0008.

## Discussion

The results suggest that experimentally manipulated affective forecasts can influence the effort that people are wiling to expend to produce the forecasted event.

Participants in the inferior standard prize condition forecasted that they would enjoy winning the target prize more than did participants in the superior standard prize condition. Consequently, the former group of participants expended more effort to produce it than did the latter group of participants. Indeed, the extremity of experimentally manipulated affective forecasts mediated the influence of the contrast manipulation on how much effort was expended.

# General Discussion

Anticipation alone can be pleasurable (Loewenstein, 1987), but people often want to experience the events they anticipate. The foregoing experiments suggest that anticipated emotions are sometimes exaggerated to motivate forecasters to turn their imagination into experience. Affective forecasters were more likely to exhibit the impact bias when forecasts were made after they committed to producing the forecasted event than before they committed to producing it (Experiment 1). Forecasters were more likely to exhibit the impact bias when forecasters believed that they could influence the production of the event than when they could no longer influence its production (Experiments 2A and 2B). Furthermore, the extremity of experimentally manipulated affective forecasts determined the effort expended to produce the forecasted event (Experiments 3). In short, the results suggest that affective forecasts may be strategically exaggerated to motivate forecasters to produce the events that they forecast. We believe these findings provide three important new insights for affective forecasting research.

First, the impact bias in affective forecasting has previously been found to arise from a number of familiar cognitive biases (e.g., Ayton, Pott, & Elwakili, 2007; Ditto et al., 2005; Hsee & Zhang, 2004; Kahneman & Snell, 1992; Morewedge et al., 2005; 2007; Schkade & Kahneman, 1998; Van Boven, Loewenstein, &

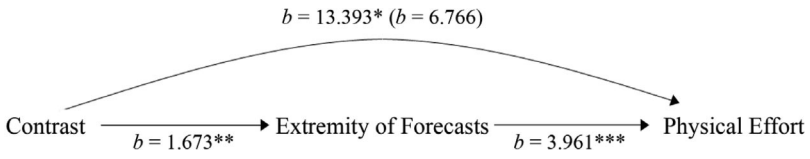


*Figure 1.* Extremity of affective forecasts mediated the influence of a contrast manipulation on physical effort exerted to win a prize in Experiment 3; * $p < .05$; ** $p < .01$; *** $p < .001$.

Dunning, 2003; Wilson et al., 2000) and erroneous lay theories about when people are able to and do rationalize negative experiences (e.g., Gilbert et al., 1998; Gilbert, Lieberman, et al., 2004; Gilbert, Morewedge, Risen, & Wilson, 2004). The present research is the first to show that motivated reasoning plays a role in the extremity of affective forecasts.

Second, this is the first research we know of demonstrating that (experimentally manipulated) affective forecasts can directly influence the effort that forecasters expend to produce an outcome. To date, only one correlation between two self-report measures has examined and found such a relationship (Wilson & Gilbert, 2003). The designs used in the present research suggest ways to examine this relationship further in future research, such as testing whether affective forecasters similarly skew forecasts for negative events to avoid their production.

Finally, and perhaps most important, errors in affective forecasting are usually considered to be costly. They may lead patients to make medical decisions based on erroneous predictions of the impact that declines in their health will bring (Walsh & Ayton, 2009), consumers to overpay for return policies that make them less satisfied with their purchases (Gilbert & Ebert, 2002), they may elicit partisanship among voters who overestimate the ineptitude of their opposing parties (Gilbert et al., 1998), and so on. The present research provides the first evidence to suggest that the impact bias confers some benefit. It is questionable whether people would exercise, mend broken relationships, or spend late nights in the office if they accurately forecasted how easily they would adapt to sickness, solitude, and a higher salary (Ditto et al., 2005; Frederick & Loewenstein, 1999; Gilbert et al., 1998; Morewedge et al., 2007; Riis et al., 2005). Overestimating the pleasure derived from such experiences may not only prove costly. Our findings suggest that the impact bias may serve a functional purpose as well.

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