Making the Hypothetical Seem Real: Performance Predictions of Imagined Events

Aaron M. Sackett and David A. Armor
Yale University

A common finding in prediction research is that people tend to make unrealistically optimistic predictions for future events (e.g., Weinstein, 1980). The apparent prevalence of this optimistic bias may give the impression that people are indiscriminately optimistic and are generally poor at predicting future performance. However, a growing body of research suggests that the expression of unrealistic optimism may be moderated by situational factors (Armor & Taylor, 2002). In studies presented by Sackett and Armor (2003), for example, participants who had been led to expect that they would complete a task subsequently made predictions that were less unrealistically optimistic than predictions made by participants who were left to assume they would not complete the task.

The two studies reported here were designed with two questions in mind: First, can overly optimistic predictions be reduced even when the considered task is understood to be purely hypothetical? And second, are there systematic differences in the manner in which people reason about real versus hypothetical events that can account for this reduction in optimism? In Study 1, participants were presented with a test that they knew they would not complete and were asked to imagine that they would complete it either in the near or distant future. Following research by Gilovich, Kerr, and Medvec (1993), we predicted that participants would be more optimistic about their performance on a temporally distant task than on a temporally proximate task. In Study 2, we manipulated whether participants imagined the test as real and imminent or as hypothetical. Insofar as hypothetical events can be considered infinitely distant, and following the results of Sackett and Armor (2003), we predicted that participants would be more optimistic about their performance on the truly hypothetical task than on the imagined imminent task.

In both studies, we assessed the kinds of information participants considered when making predictions. In Study 1, participants were asked to evaluate the extent to which each of six different factors would influence their performance. In Study 2, participants were asked to generate their own list of performance-influencing factors. Drawing from temporal construal theory (Trope & Liberman, 2003), we expected that when the imagined task seemed more distant, participants would focus more on prototypic factors (e.g., general ability) and less on peripheral variables (e.g., fleeting personal states).

Study 1: Temporal Proximity

Method

Participants (N = 63) were asked to imagine that they would take a 20-item test from the verbal section of the Graduate Record Exam (GRE). We manipulated the temporal proximity of imagined test: Participants were either instructed to imagine that they would be taking the test "today" or "at this time next semester." Participants then predicted their performance on the imagined test and made predictions about four other performance-related variables. Additionally, participants rated their current or expected standing on six commonly-perceived performance influences (e.g., sleep, weather) and how each factor would influence their performance on the test.

Results

Overall, participants who imagined test performance in the Temporally Proximate condition made less optimistic predictions than participants in the Temporally Distant condition did, $F(6,56) = 2.52$, $p < .05$ (Table 1). There were no systematic differences between conditions in participants' ratings of the potential influences on performance, suggesting that evaluations of our externally provided influences may not have been an appropriate measure of what people spontaneously consider when making predictions. To determine whether a similar measure might better detect the kinds of information participants spontaneously consider when making predictions, Study 2 asked participants to generate a list of variables that they thought might influence their performance.

Table 1.

Mean predictions as a function of the temporal proximity of the imagined test (Study 1).

	Proximity Condition	
	Today	Next Semester
Predictions		
Specific (how many?)	13.25	15.90
General (how well?)	4.33	5.34
Other Measures		
Task Easiness	3.45	4.39
Ability to Concentrate	4.13	4.61
Anticipated Enjoyment	3.03	3.10
Performance Motivation	4.72	4.84

Note. Multivariate $F(6,56) = 2.52$, $p < .05$.

Study 2: Imagined Real vs. True Hypothetical

Method

Participants (N = 102) engaged in a procedure similar to that of Study 1, with two important modifications: (a) The real versus hypothetical nature of the imagined test was manipulated by instructing participants either to imagine that they would be taking the test "today" or at some unspecified time, and (b) Participants were asked to generate a list of the factors that they thought would influence their performance if they were to complete the imagined test; they were also asked to state the anticipated effect (facilitating or impeding) of each factor they listed.

Results

Participants in the Imagined Real condition were less optimistic than participants in the True Hypothetical condition, $F(6,94) = 5.65$, $p < .001$ (Table 2). However, compared to participants in the Imagined Real condition, participants in the True Hypothetical condition listed a greater proportion of stable self characteristics (e.g., "my vocabulary," "I generally like these type of tests") as influences, *M*s = 18% vs. 8%; $t(99) = 2.34$, $p < .05$. Additionally, participants in the True Hypothetical condition listed a smaller proportion of negative influences (e.g., "distracting noises could hurt my performance"; *M*s = 21% vs. 41%; $t(99) = 3.38$, $p < .01$) but a greater proportion of influences with uncertain effects (e.g., "the weather might influence my performance," "how I feel"; *M*s = 61% vs. 45%; $t(99) = 2.31$, $p < .05$) than did participants in the Imagined Real condition.

Table 2.

Mean predictions as a function of the real or hypothetical nature of the imagined test (Study 2).

	Condition	
	Imagined Real	True Hypothetical
Predictions		
Specific (how many?)	13.65	14.94
General (how well?)	4.78	5.54
Other Measures		
Task Easiness	3.72	3.84
Ability to Concentrate	3.57	5.25
Anticipated Enjoyment	3.02	3.90
Performance Motivation	4.32	5.59

Note. Multivariate $F(6,94) = 5.65$, $p < .001$.

Summary of Results and Conclusions

The tendency for people to make optimistic predictions about their performance on hypothetical tasks may be reduced merely by asking participants to imagine that they would perform the task "today." Moreover, when predicting performance on temporally distant or hypothetical tasks, people appear to rely more on their general, personal qualities than on other factors, the effects of which may be hard to anticipate. People also appear to focus less on potential negative influences on performance when thinking about tasks as hypothetical or distant rather than real or imminent.

While past research has demonstrated that people make less optimistic and more accurate predictions for real events than for hypothetical ones, a reduction in optimism can be induced merely by asking people to imagine the hypothetical task as real and imminent. Results of Study 2 provide initial indications of why this may be the case: When participants consider truly hypothetical tasks, they may consider a long list of potential causal factors, but the effects of these factors remains unknown. Additional analysis of the factor lists suggests that people may resolve this greater uncertainty by assuming that fewer negative factors will be present and by relying more on a general sense of one's own skills and abilities.

References

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For more information, please contact:

Aaron M. Sackett
Yale University
Department of Psychology
P.O. Box 208205
New Haven, CT 06520

Phone: (203) 436-1551
E-mail: aaron.sackett@yale.edu
http://pantheon.yale.edu/~as472/main.html