Predicting Course Grades: Accurate for Others But Biased for Self

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People often are overly optimistic about their outcomes. To test such biases, students made judgments about their classmates' and their own likely performances in a course. Students estimated the grade distribution for the entire class by assigning a percentage to each possible grade and then estimated their own grades. I compared these predicted grade distributions with the actual grade distributions of past students. The grade distributions estimated for the class matched the actual grade distribution, but the distributions for the self were more optimistic. I have used the results to facilitate a class discussion of judgment biases and positive illusions.

For students, the beginning of a new semester means that, irrespective of their previous semester grades, they can believe they are going to be successful this semester. Several years ago, I began collecting data to see if my students were optimistic about everyone's grades or only their grades. Although Prohaska (1994) found clear evidence that students do overestimate their likely grades, he did not compare these predictions to the expectations for other students. The question here is whether students have an accurate or a biased understanding of the likely class grade distribution when they make their projections about their own grades.

In another classroom demonstration of optimistic bias (Snyder, 1997, 1999), students were optimistically biased in estimating their ages of death when given base rate information about cohorts. In this regard, research consistently demonstrates that people do not consider externally provided base rates especially useful in making judgments (Kahneman & Tversky, 1973). On the other hand, base rates generated by the students themselves may provide a more meaningful comparison for determining the degree to which self estimates are biased. This demonstration provides this comparison.

Biases in social judgments are widespread in social cognitive processes (see Gilovich, Griffin, & Kahneman, 2002). Initially, my goal was to use the grade estimation data when discussing optimistic thinking (Armor & Taylor, 2002; Prohaska, 1994; Weinstein, 1980) and self-serving biases (Dunn, 1989; Dunning, Meyerowitz, & Holzberg, 2002), but I also have found that the data are appropriate in discussions of positive illusions (Taylor, 1989), the planning fallacy (Buehler, Griffin, & Ross, 2002), actor–observer biases (Gordon & Kaplar, 2002; Jones & Nisbett, 1972), self-enhancement (Alicke, 1985; Brown, 1986), and self-presentation (Baumeister & Twenge, 2003; Schlenker, 2003). I now have a database spanning several semesters showing the reliable biases of students when making predictions about personal outcomes in my courses, despite the fact that these same students have a realistic set of expectations when predicting outcomes for other students.

Method

Data Collection

Students ($N = 744$) enrolled in sections of an undergraduate social psychology class at a state-supported university in the Southeastern United States participated in the activity. There have been 21 sections of this course (enrollments of 13 to 75 students) from the Fall 1991 semester through the Fall 2003 semester. A subsample ($n = 99$) of these students also completed an evaluation of the grade estimation activity.

On the first day of the semester, after discussing the course syllabus, the testing procedures, and the grading scale (90% + = A, 80% to 89% = B, etc.), students responded to the following prompt: "What do you think the distribution of grades will be in this class? Indicate the percentage of students you think will get each of the following grades. Be sure that your percentages add to 100." Under the prompt, the grades A, B, C, D, and F appeared on separate lines. After completing this task, I also asked the students to indicate the grades they would receive in the course. Thus, students were not aware that they would predict their own grades when they estimated the grade distribution for the class.

Evaluation of the Activity

The students ($n = 99$) enrolled in the three most recent classes completed evaluations of the activity during the next class meeting after the discussion of the results. The sample included only those students who made predictions and were present on the discussion days. Using 9-point scales (with higher scores indicating greater enjoyment or understanding) students indicated how much they enjoyed the exercise and how much the exercise helped them to understand the relevant social judgment processes.

Results

Predictions Versus the Actual Grade Distribution

Table 1 contains the accumulated data for the entire sample. A comparison of the grade distribution predicted for the class as a whole with the actual grade distribution based on past students' performance revealed no significant difference, $\chi^2(4, N = 744) = 1.17, p > .05$. The distribution generated by the accumulated predictions for self, however, differed reliably from both of these distributions: predictions for others, $\chi^2(4, N = 744) = 60.13, p < .05$, and actual performance, $\chi^2(4, N = 744) = 66.73, p < .05$. Predictions for self were clearly more optimistic than those for others or for actual performance. For example, although students predicted that about 18% of other students would get Ds or Fs, no students ever have predicted Ds or Fs for themselves.

Evaluation of the Activity

On both measures used to evaluate the effectiveness of the class activity, the students rated the exercise positively (enjoyment M = 7.10, *SD* = 1.67; understanding M = 7.00, *SD*

Table 1. Predicted Grade Distributions and Actual Grade Distribution

	Actual Grades[a]	Prediction for Self[b]	Prediction for Others[c]
Grade			
A	14.1	45.1	17.9
B	31.7	51.8	31.4
C	32.1	3.1	32.9
D	13.2	0.0	11.9
F	8.9	0.0	5.9
GPA	2.3	3.4	2.4

Note. Grades are reported as percentages and GPA represents the summary for each set of grades. GPA = grade point average. [a]$n = 1{,}653$. [b]$n = 743$. [c]$n = 744$.

= 1.63). In fact, for both measures the modal rating was a 9, the highest rating possible.

Discussion

Students are accurate when estimating how others will perform, but overly optimistic when predicting grades for themselves. For the classroom discussion, I present the data generated by that particular class, so that they can see their predictions, but I also provide the accumulated data for all classes to show them that their responses are quite typical. We discuss the data at the end of the course material on social cognition. I begin by posing the question, "How well can you predict your own behavior?" I remind them of the data they provided on the first day of the semester and suggest we look at their predictions as an example. I present their predictions for the class grade distribution first, followed by the distribution of actual grades from the course. They usually are quite pleased to see that they are reasonably accurate in their predictions. After discussing their success briefly, I return to the issue of predicting one's own behavior as opposed to the behavior of others.

At this point, I present the distribution that would result based on the predictions of their own grades. The dramatic differences between the "self" distribution and the first two presented usually evoke much embarrassed laughter and surprise. As we attempt to understand the differences, I am able to introduce a number of social judgment biases into the discussion. For example, we discuss optimism and consider how unrealistic optimism might sometimes be a good bias that prevents decreased motivation. We discuss self-presentation issues to acknowledge that the predictions might be intentionally biased to make a good impression or they might be the result of less conscious biased thinking. We also discuss the planning fallacy, a tendency most students acknowledge, and we discuss why, due to self-serving biases, this fallacy might tend to recur despite a general pattern of failing to meet deadlines. The belief that past failures have been due to external causes (they can usually provide many personal examples of failures that were not their fault) allows them provide an excuse for their current failure (Snyder, Higgins, & Stucky, 1983) and to believe that their good intentions will not be thwarted the next time.

In my course, the discussion takes place just before the first examination. So, as the discussion winds down, I point out to the students that they clearly appreciate what the grade distribution for their class will probably look like, because they accurately predicted how the class as a whole would perform relative to past students. I suggest to them that they can prove that their self-predictions were not simply biased judgments by outperforming past students and producing their predicted distribution. So far no class has been able to perform at the level of their self predictions, but I hope the discussion encourages them to prepare for the exam with a reasonable amount of (unrealistic) optimism, but a strong dose of realism.

Obviously, the degree to which the demonstration can provide clear evidence of bias in predicted grades for self relative to others and actual grades depends on there being a possibility for self predictions to show optimism. The grades for my course, and for similar courses in my department, average in the C range, so there is opportunity for students to show bias for themselves by predicting As or Bs. In a course where the average grades were much higher than mine, there would be less room to show bias.

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